Use these links to rapidly review the document
TABLE OF CONTENTS
PART IV

Table of Contents

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

FORM 10-K

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

For the Fiscal Year Ended December 31, 2008

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)

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

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $0.01 Par Value Per Share Rights to Purchase Series A Junior Participating Preferred Stock	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Exchange Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No ☒

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

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

Large accelerated filer ☒	Accelerated filer 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 ☒

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate) based on the last reported sale price of the common stock on June 30, 2008 (the last trading day of the registrant's second fiscal quarter of 2008) was $3.1 billion.

As of February 10, 2009, the registrant had 152,189,782 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement for the 2009 Annual Meeting of Stockholders to be held on May 14, 2009 are incorporated by reference into Part III of this Annual Report on Form 10-K.

VERTEX PHARMACEUTICALS INCORPORATED

ANNUAL REPORT ON FORM 10-K

TABLE OF CONTENTS

"We," "us," "Vertex" and the "Company" as used in this Annual Report on Form 10-K, 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 Annual Report are the property of their respective owners.

PART I

ITEM 1. BUSINESS

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 an oral hepatitis C protease inhibitor and one of the most advanced of a new class of antiviral treatments in clinical development that targets hepatitis C virus, or HCV, infection. Telaprevir is being evaluated in a fully-enrolled registration program focused on treatment-naïve and treatment-experienced patients with genotype 1 HCV. We currently intend to file a new drug application, or NDA, for telaprevir in the United States in the second half of 2010, assuming the successful completion of our ongoing registration program. We also are developing, among other compounds, VX-770, a drug candidate for the treatment of patients with cystic fibrosis, or CF. In the first half of 2009, we expect to begin a registration program for VX-770 that focuses on CF patients with the G551D mutation in the gene responsible for CF.

HCV infection is a life-threatening disease that affects approximately 3.2 million people in the United States and causes inflammation of the liver, significantly increasing the risk that a patient will develop liver failure or liver cancer. Genotype 1 HCV is the most prevalent HCV genotype in North America, the European Union and Japan. Our Phase 3 clinical trial ADVANCE is designed to evaluate telaprevir in treatment-naïve patients with genotype 1 HCV, with the goal of supporting registration of telaprevir by establishing that telaprevir-based treatment regimens can significantly improve sustained viral response, or SVR, rates while decreasing the total treatment duration for most patients from 48 weeks to 24 weeks. Our Phase 3 clinical trial REALIZE is designed to evaluate a telaprevir-based treatment regimen in each major category of patients with genotype 1 HCV who have failed to achieve an SVR with prior treatment with pegylated-interferon, or peg-IFN, and ribavirin, or RBV. We designed our registration program based on data from our Phase 2b clinical trials, including data from our PROVE 1 and PROVE 2 clinical trials in treatment-naïve patients, in which the SVR rates in the 24-week telaprevir-based treatment arms were 61% and 69% compared to 41% and 46% in the control arms, respectively. Our registration program also is based on promising interim data from our Phase 2b clinical trial in treatment-experienced patients. Safety data from our Phase 2 clinical trials indicated that the most common adverse events, regardless of treatment assignment, were fatigue, rash, headache and nausea. Gastrointestinal disorders, skin adverse events, including rash and pruritus, and anemia were more frequent, and the rash more frequently severe, in the telaprevir arms than in the control arms over the dosing period. We are collaborating on the global clinical development program for telaprevir with Janssen Pharmaceutica, N.V., a Johnson & Johnson company, and Mitsubishi Tanabe Pharma Corporation. We have retained exclusive commercial rights to telaprevir in North America.

Cystic fibrosis is an inherited disorder that results in a progressive decline in lung function and a significant decrease in the life expectancy of patients with CF. The drug candidates that we are developing for CF are designed to address the underlying cause of CF by partially restoring the function of defective cystic fibrosis transmembrane conductance regulator, or CFTR, proteins in CF patients. In October 2008, we completed a Phase 2a clinical trial of VX-770 in 39 patients with CF who had the G551D mutation that involved dosing VX-770 over 14-day and 28-day periods. The primary endpoint for this clinical trial was safety, and no serious adverse events attributable to VX-770 were observed. Based on the promising lung function data from this clinical trial, as measured by improvements in FEV_1, the lung function test most commonly used to monitor CF disease progression, and based also on observed changes in biomarkers that seek to measure the activity of the CFTR protein, we are working with regulatory authorities in North America and Europe to finalize the design of a registration program for VX-770.

We have built a drug discovery capability that integrates biology, pharmacology, biophysics, chemistry, automation and information technologies in a coordinated manner, with the goal of more efficiently identifying promising drug candidates to address significant unmet medical needs. Using our drug discovery capability we have identified, among other drug candidates: telaprevir; VX-770; VX-813

and VX-985, two additional HCV protease inhibitors; VX-809, a drug candidate designed for patients with CF; and VX-509, a Janus Kinase 3, or JAK3, inhibitor that targets immune-mediated inflammatory diseases, or IMID. We intend to continue to invest in our research programs with the goal of adding promising new compounds to our drug development pipeline. We also co-discovered fosamprenavir calcium, an HIV protease inhibitor that is being marketed by GlaxoSmithKline plc as Lexiva in the United States and Telzir in Europe.

OUR STRATEGY

Our goal is to become a fully integrated biotechnology company with industry-leading capabilities in research, development and commercialization of innovative drugs that provide substantial benefits to patients with serious diseases. The key elements of our strategy are:

Complete development of and successfully commercialize telaprevir. We are investing significant resources in our registration program for telaprevir, which is designed to support registration of telaprevir for treatment-naïve and treatment-experienced patients infected with genotype 1 HCV. We are focused on 24-week response-guided telaprevir-based treatment regimens for treatment-naïve patients and on treating all categories of treatment-experienced patients, including null responders to peg-IFN and RBV, who are the most difficult category of HCV patients to treat successfully. In preparation for the planned launch of telaprevir, we are investing in our marketing organization and beginning a dialogue with commercial health insurers and government organizations regarding the public health risk posed by HCV and the potential for specifically targeted antiviral agents to provide substantial benefits to patients, thereby reducing the burden of HCV infection on the health care system.

Establish a leadership position in the treatment of HCV infection. We believe that if telaprevir is launched on the timeline that is currently anticipated, our most substantial initial competition will be from combination treatment regimens involving protease inhibitors, if any, that are approved on a similar timeline to telaprevir. Over the longer term, we believe that treatment of HCV infection will continue to require combination drug therapies in order to achieve optimal SVR rates, including potentially all-oral drug combinations that would not require or would reduce reliance on interferons, which require weekly injections. We are pursuing business development activities with potentially complimentary therapies including polymerase inhibitors, other direct acting antivirals, and novel interferons, which could be developed in combination with telaprevir or our earlier-stage protease inhibitors.

Develop our CF drug candidates. We believe that we have the potential to develop and commercialize drug candidates that could be used to treat a range of patients with CF. In the first half of 2009, we intend to commence a registration program for VX-770 that will focus on adult and pediatric patients with the G551D mutation. In the first half of 2009 we also are planning to commence a Phase 2a clinical trial of VX-809, a drug candidate targeted at a broader group of patients with CF that have mutations resulting in different defects in the CFTR protein. We believe that drugs that address the underlying causes of CF can provide meaningful benefits to patients.

Invest in research and early development. We intend to continue to invest significant resources in research and early development across a relatively broad array of therapeutic areas due to the relatively high potential for failure of any specific effort. We believe this diversified strategy is essential to the strength of our business as we seek to identify additional promising drug candidates that could populate our future drug development pipeline. We direct our research activities toward therapies designed to address serious diseases because these therapies have the potential to deliver the greatest value for patients, physicians and the health care system.

Capitalize on collaboration arrangements and business development opportunities. Collaborations provide us with financial support and other valuable resources for our development and research programs. We plan to continue to rely on collaborators to support, develop and commercialize some of our drug candidates either worldwide or in markets in which we are not concentrating our resources. We also seek opportunistically to license and acquire technologies, resources and drugs or drug candidates that have the potential to strengthen our drug discovery platform, pipeline and/or commercial opportunities.

PIPELINE

Our pipeline is described in the following table. In addition to those listed below, we are engaging in preclinical activities with respect to several additional drug candidates.

Drug or Drug Candidate	Clinical Indication(s)	Phase	Marketing Rights (Region)
Infectious Diseases			
Lexiva/Telzir	HIV infection	Marketed	GlaxoSmithKline (Worldwide)*
Telaprevir (VX-950)	Chronic HCV infection	Phase 3	Vertex (North America) Mitsubishi Tanabe (Far East) Janssen (Rest of World)
VX-813	Chronic HCV infection	Phase 1a	Vertex (Worldwide)
VX-985	Chronic HCV infection	Preclinical	Vertex (Worldwide)
Cystic Fibrosis			
VX-770	Cystic fibrosis	Phase 2a	Vertex (Worldwide)
VX-809	Cystic fibrosis	Phase 1b	Vertex (Worldwide)
IMID			
VX-509	IMID	Phase 1a	Vertex (Worldwide)
Cancer			
MK-5108 (VX-689)	Cancer	Phase 1	Merck & Co., Inc. (Worldwide)
AVN-944 (VX-944)	Cancer	Phase 2	Avalon Pharmaceuticals, Inc. (Worldwide)

* We sold our rights to future royalties from sales of Lexiva/Telzir in May 2008.

Telaprevir (VX-950) (investigational oral HCV protease inhibitor for the treatment of chronic HCV infection)

Telaprevir, our lead drug candidate, is an orally-administered hepatitis C protease inhibitor. Telaprevir is designed to inhibit the NS3-4A serine protease, an enzyme necessary for HCV replication. The United States Food and Drug Administration, or FDA, has granted "Fast Track" designation to telaprevir. Telaprevir is being investigated in several concurrent late-stage clinical trials, including ADVANCE, a Phase 3 clinical trial in treatment-naïve patients, ILLUMINATE, a clinical trial in treatment-naïve patients, and REALIZE, a Phase 3 clinical trial in treatment-experienced patients. Enrollment in ADVANCE, ILLUMINATE and REALIZE was completed in October 2008, December 2008 and February 2009, respectively. We are planning on submitting an NDA for telaprevir in the second half of 2010, assuming the successful completion of our ongoing registration program.

Under our agreement with Janssen, we have retained exclusive commercial rights to telaprevir in North America and are leading the clinical development program of telaprevir in North America and the Janssen territories. Janssen has the right to market telaprevir in the rest of the world except for Japan and certain Far East countries, where we are collaborating with Mitsubishi Tanabe. Janssen has agreed to be responsible for 50% of drug development costs under the development program for the Vertex and Janssen territories and to make contingent milestone payments based on the successful development, approval and launch of telaprevir. Janssen will be responsible for the commercialization of telaprevir, including the manufacture of its own commercial supply of telaprevir, outside of North America and the Far East. Telaprevir was discovered in our collaboration, now ended, with Eli Lilly and Company. We expect to pay Eli Lilly certain royalties on future sales of telaprevir, if approved.

Background: Prevalence and Treatment of Chronic Hepatitis C Virus Infection

HCV infection causes an inflammation of the liver called chronic hepatitis. This condition can progress to scarring of the liver, called fibrosis, or more advanced scarring, called cirrhosis. Patients with cirrhosis may go on to develop liver failure or the complications of cirrhosis, including liver cancer. The World Health Organization has reported that HCV is responsible for more than 50% of all liver cancer cases and two-thirds of all liver transplants in the developed world.

The World Health Organization has estimated that about 170 million people are chronically infected with HCV worldwide and that an additional 3 million to 4 million people are infected each year. The Centers for Disease Control and Prevention have estimated that approximately 3.2 million people in the United States are chronically infected with HCV.

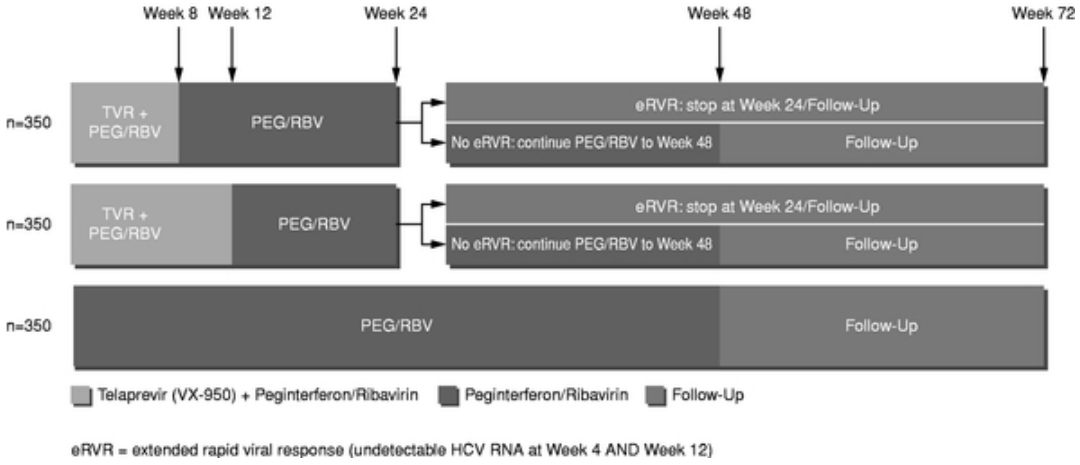
Our clinical development activities related to telaprevir are focused on genotype 1 HCV, which is the most prevalent form of HCV in the United States, the European Union and Japan. We believe that approximately 2.6 million patients in the United States have genotype 1 HCV. We believe that these patients include approximately 750,000 patients who have already been diagnosed with genotype 1 HCV and 1.8 million patients who remain undiagnosed.

In addition to being the most prevalent form of HCV, genotype 1 HCV is currently the most difficult to treat of the primary HCV genotypes. The current standard treatment for infection by genotype 1 HCV, which was first approved in 2001, is a combination of peg-IFN and RBV, generally administered for 48 weeks. This treatment regimen is associated with significant side effects, including fatigue, flu-like symptoms, rash, depression and anemia. Among patients who begin treatment, a significant percentage of patients infected with genotype 1 HCV fail to show a long-term sustained response to therapy. For example, on an intent-to-treat basis, 41% and 46%, respectively, of genotype 1 HCV patients in the control arms of our Phase 2b clinical trials known as PROVE 1 and PROVE 2 achieved an SVR. In another recent clinical trial conducting by another company involving approximately 3,070 treatment-naïve patients in the United States with genotype 1 HCV, between 38% and 41% of patients receiving peg-IFN and RBV achieved an SVR. We believe that over 250,000 patients with genotype 1 HCV in the United States have undergone prior therapy with peg-IFN and RBV, but have failed to achieve an SVR.

Telaprevir Clinical Development

In October 2008, we completed enrollment of ADVANCE, a Phase 3 clinical trial of telaprevir-based treatment regimens in treatment-naïve patients with genotype 1 HCV. The ADVANCE trial is an international 3-arm double-blinded placebo-controlled clinical trial that enrolled approximately 1,050 patients. The clinical trial contains two telaprevir-based treatment arms, one in which patients receive 12 weeks of telaprevir-based triple combination therapy and one in which patients receive 8 weeks of telaprevir-based triple combination therapy, in each case taking peg-IFN and RBV for a subsequent period of time after telaprevir. Patients in both of the telaprevir-based treatment arms who meet extended rapid viral response criteria, or eRVR, will complete all treatment after 24 weeks, while patients who are responding to treatment but do not meet the eRVR criteria will continue receiving peg-IFN and RBV for a total of 48 weeks of therapy. To achieve an eRVR a patient must have undetectable HCV RNA levels at week 4 and week 12 after the start of treatment. In February 2009, we announced that dosing of telaprevir or placebo, 8 or 12 weeks, depending on treatment arm assignment, as part of the combination regimen, is complete in all patients enrolled in the ADVANCE trial. We expect to have SVR data from this clinical trial in the first half of 2010.

ADVANCE Clinical Trial Design

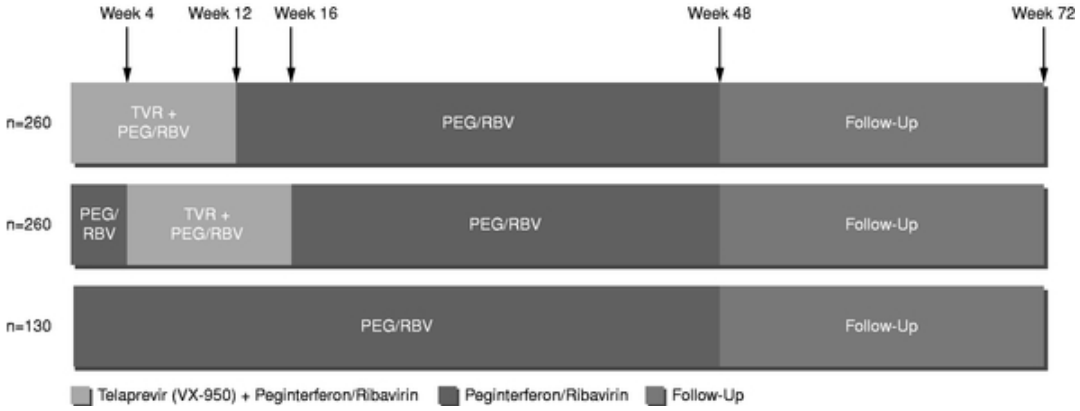


eRVR = extended rapid viral response (undetectable HCV RNA at Week 4 AND Week 12)

In February 2009, our collaborator Tibotec Pharmaceuticals Ltd., which is a Johnson & Johnson company and an affiliate of Janssen, completed enrollment of approximately 650 patients in the Phase 3 clinical trial referred to as the REALIZE trial. The REALIZE trial is an international 3-arm clinical trial of telaprevir-based treatment regimens in patients with genotype 1 HCV who failed to achieve an SVR with previous treatment with peg-IFN and RBV. The REALIZE includes the following patient groups:

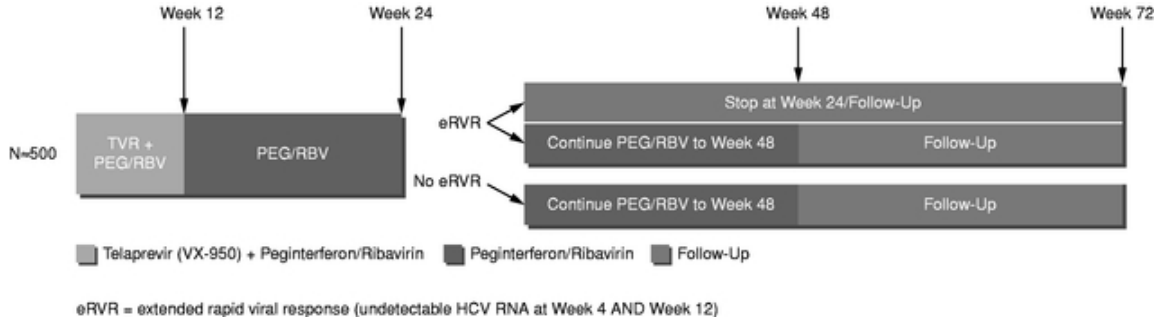
- null responders—those patients who achieved less than a 2 log reduction in HCV RNA levels at week 12 of prior therapy;
- partial responders—those patients who achieved at least a 2 log reduction in HCV RNA levels at week 12, but failed to achieve undetectable HCV RNA levels by week 24 of prior therapy; and
- relapsers—those patients who achieved undetectable HCV RNA levels at the completion of at least 42 weeks of prior treatment, but relapsed after treatment ended.

REALIZE Clinical Trial Design



In December 2008, we completed enrollment of patients in a clinical trial, referred to as the ILLUMINATE clinical trial, which includes evaluation of 24-week and 48-week total treatment durations in treatment-naïve patients infected with genotype 1 HCV who achieve eRVR in response to telaprevir-based treatment regimens. This clinical trial is a randomized, open-label trial that enrolled approximately 500 patients. ILLUMINATE is designed to supplement SVR data obtained from the ADVANCE trial to evaluate the benefit/risk, for patients who achieve an eRVR, of extending treatment with peg-IFN and RBV from 24 to 48 weeks. We expect to have SVR data from this trial in the first half of 2010.

ILLUMINATE Clinical Trial Design



Telaprevir Clinical Data

Treatment-Naïve Patients

We have completed two Phase 2b clinical trials of telaprevir-based combination therapy in patients with genotype 1 HCV, which enrolled an aggregate of approximately 580 treatment-naïve patients and are referred to as PROVE 1 and PROVE 2. On an intent-to-treat basis, in the 24-week telaprevir-based treatment arms of PROVE 1 and PROVE 2, 61% and 69%, respectively, of patients achieved an SVR. The criteria for SVR in PROVE 1 and PROVE 2 required that the patients have undetectable HCV RNA levels—less than 10 IU/mL as measured by the Roche TaqMan® assay—24 weeks post-treatment. On an intent-to-treat basis, 41% and 46%, respectively, of patients in the control arms of PROVE 1 and PROVE 2 achieved an SVR.

An undetectable HCV RNA level measured 24 weeks following completion of therapy is the current method for determining whether a patient has achieved an SVR. For PROVE 1 and PROVE 2, we have SVR data for all of the clinical trial arms. For some of our other clinical trials of telaprevir, we do not yet have final SVR data for all patients in one or more of the clinical trial arms. If SVR data is not available, we may occasionally present information, if we have it, concerning undetectable HCV RNA levels at 12 weeks post-treatment, HCV RNA levels at the end-of-treatment and/or on-treatment HCV RNA levels after patients have completed 4, 12, 24 or 36 weeks of treatment.

SVR has become the accepted measure of response because prior clinical trials and observational studies by third parties suggest that most viral relapse occurs in the first 24 weeks after completion of therapy, with very low rates of relapse more than 24 weeks after completion of treatment. In PROVE 2, we had approximately 118 patients in the telaprevir-based treatment arms who achieved an SVR—undetectable HCV RNA 24 weeks after the end-of-treatment—and who were followed out to 48 weeks after the end-of-treatment. Of these, two patients experienced viral relapse after the 24-week post-treatment SVR assessment. Each of these two late relapsing patients had discontinued treatment after approximately 60 days, and one of them was in the PROVE 2 treatment arm that excluded RBV. In the REALIZE, ADVANCE and ILLUMINATE clinical trials, SVR rates will be measured in each of the telaprevir-based treatment arms and the control arms 72 weeks after treatment commences regardless of the planned duration or actual duration of therapy.

Patients Who Did Not Respond To Prior Therapy

We also have reported results of an interim analysis from PROVE 3, a randomized, double-blind, placebo-controlled Phase 2b clinical trial of telaprevir-based combination therapy in patients with genotype 1 HCV who did not achieve an SVR with a previous treatment with peg-IFN and RBV. The interim analysis included 115 patients who received treatment with a 24-week telaprevir-based regimen—12 weeks of telaprevir-based triple-combination therapy followed by an additional 12 weeks of peg-IFN and RBV treatment. Of the 115 patients in this treatment arm, 66 were prior non-responders, which includes null responders and partial responders; 40 were prior relapsers; and 9 were prior breakthroughs—patients who had viral rebound during prior treatment. The following table summarizes the results of this interim analysis performed 12 weeks after completion of therapy for the patients in this 24-week telaprevir-based treatment arm of PROVE 3. SVR rates for patients in this clinical trial arm are not yet available.

Patient Group	Total Number of Patients	Number of Patients with Undetectable HCV RNA 12 weeks post-treatment	Percentage of Patients with Undetectable HCV RNA 12 weeks post-treatment
Non-responders (includes null and partial responders)	66	27	41%
Relapsers	40	29	73%
Breakthroughs	9	4	44%
Total	115	60	52%

In the control arm of PROVE 3, which is evaluating 48 weeks of peg-IFN and RBV only, data indicated that on an intent-to-treat basis 8% of the 114 patients in the control arm had undetectable HCV RNA at week 12 on-treatment, and 30% had undetectable HCV RNA at week 36. In prior third-party studies of peg-IFN and RBV in treatment-failure patients, the proportion of patients who had undetectable HCV RNA at week 36 on-treatment has been significantly higher than the proportion who ultimately achieved SVR. End-of-treatment and post-treatment data—including SVR rates—are not yet available for the control arm of PROVE 3. Patient dosing has been completed in all arms of PROVE 3 and all patients are now being followed post-treatment.

In addition to the 24-week telaprevir-based regimen that includes RBV described above and the 48-week control arm described above, two other treatment regimens are being evaluated in PROVE 3: a 24-week telaprevir-based treatment arm without RBV, and a 48-week treatment arm that includes 24 weeks of telaprevir dosing in combination with peg-IFN and RBV followed by 24 weeks of peg-IFN and RBV alone. The interim PROVE 3 analysis supports the inclusion of RBV in future clinical trials of telaprevir-based regimens in treatment-failure patients, similar to earlier observations in our clinical trials with treatment-naïve subjects. Available on-treatment results from the PROVE 3 treatment arm in which patients received 24 weeks of treatment with telaprevir suggest that additional dosing of telaprevir beyond 12 weeks does not confer additional benefit to patients.

We also are conducting a clinical trial, referred to as the 107 Study, in patients who did not achieve an SVR in the control arms of the PROVE 1, PROVE 2 or PROVE 3 clinical trials. In this clinical trial, these treatment-experienced patients are being treated with telaprevir triple combination therapy for 12 weeks followed by 12 or 36 weeks of treatment with peg-IFN and RBV alone depending on their prior response to treatment and their response to treatment in the 107 Study. The following table summarizes data from an interim analysis of results from the 107 Study. The interim results include data for patients who have reached the applicable measurement date or would have reached the applicable measurement date, but who discontinued treatment or whose HCV RNA levels became detectable prior to that date.

Patient Group	Total Number of Patients	Percentage of Patients with Undetectable HCV RNA 4 weeks on-treatment	Percentage of Patients with Undetectable HCV RNA 12 weeks on-treatment	Percentage of Patients with Undetectable HCV RNA 24 weeks on-treatment
Null Responders	48	40% (19 of 48)	61% (28 of 46)	43% (18 of 42)
Partial Responders	33	85% (28 of 33)	90% (26 of 29)	82% (18 of 22)
Relapsers	22	91% (20 of 22)	94% (16 of 17)	83% (5 of 6)
Breakthroughs	1	100% (1 of 1)	100% (1 of 1)	0% (0 of 1)

Safety

Our Phase 2 clinical trials enrolled more than 1,000 patients with genotype 1 HCV. The adverse event profile has been generally consistent across these clinical trials. Safety data from our Phase 2 clinical trials indicated that the most common adverse events, regardless of treatment assignment, were fatigue, rash, headache and nausea. The most common adverse events reported more frequently in patients receiving telaprevir have been gastrointestinal events, skin events—rash and pruritus—and anemia. There have been reports of severe rashes in clinical trials involving telaprevir-based treatments. In our Phase 2 clinical trials, the most common adverse event leading to discontinuation among patients receiving a telaprevir-based treatment regimen was rash. In PROVE 1 and PROVE 2 rash resulted in treatment discontinuations in approximately 7% of patients in the telaprevir-based treatment arms. Other adverse events reported in our Phase 2 clinical trials were similar in type and frequency to those seen with peg-IFN and RBV treatment.

Additional Telaprevir Trials

In the PROVE, ADVANCE, REALIZE and ILLUMINATE clinical trials, the patients in the telaprevir-based treatment arms are being dosed with 750 mg of telaprevir three-times daily—every eight hours. In order to explore the safety and antiviral activity of a twice-daily—every twelve hours—dosing regimen of telaprevir, Tibotec is conducting the C208 clinical trial, which enrolled approximately 160 treatment-naïve patients infected with genotype 1 HCV. The purpose of the C208 trial is to compare twice-daily dosing regimens of telaprevir—1,125 mg every 12 hours—in combination with peg-IFN and RBV, with three-times daily dosing regimens—750 mg every 8 hours—in combination with peg-IFN and RBV. Two different types of peg-IFN, known as alfa-2a and alfa-2b, are being used in this clinical trial. The following table summarizes the week 4 and week 12 interim data from the C208 trial.

Telaprevir Dosing	Combination Therapy	Total Number of Patients	Percentage of Patients with Undetectable HCV RNA 4 weeks on-treatment	Percentage of Patients with Undetectable HCV RNA 12 weeks on-treatment
750 mg every 8 hours	alfa-2a (PEGASYS)/RBV	40	80%	93%
750 mg every 8 hours	alfa-2b (PEGINTRON)/RBV	42	69%	93%
1,125 mg every 12 hours	alfa-2a (PEGASYS)/RBV	40	83%	83%
1,125 mg every 12 hours	alfa-2b (PEGINTRON)/RBV	39	67%	85%

In this analysis, in the three-times daily alfa-2a treatment arm and the three-times daily alfa-2b treatment arm four patients and two patients, respectively, discontinued treatment due to adverse events and one patient and three patients, respectively, experienced viral breakthrough. In the twice-daily alfa-2a and twice-daily alfa-2b arms, four patients and three patients, respectively, discontinued treatment due to adverse events, and two patients and three patients, respectively, experienced viral breakthrough. We believe that this interim data support the potential for further evaluation of twice-daily dosing of telaprevir.

Tibotec also is conducting two clinical trials of telaprevir in patients with different HCV genotypes. Tibotec has completed an interim analysis of one of these trials, which we refer to as the C209 clinical trial. C209 is a clinical trial exploring the viral kinetics of telaprevir in approximately 50 patients with genotype 2 or genotype 3 HCV infection. The interim analysis was conducted after all subjects had completed 2 weeks of telaprevir dosing in combination with peg-IFN and RBV. Preliminary viral kinetic results at the end of week 2 of dosing suggest that telaprevir has substantial antiviral activity against genotype 2 HCV. Analyses of viral dynamics are underway to further characterize the antiviral activity of telaprevir against genotype 2 HCV. Preliminary viral kinetic results at the end of week 2 do not support further investigation of telaprevir in patients with genotype 3 HCV infection. In the other of these clinical trials, Tibotec is evaluating telaprevir-based treatment regimens in patients infected with genotype 4 HCV.

We are planning to initiate with Tibotec a Phase 2 clinical trial of telaprevir in patients with HIV/HCV co-infection in the second half 2009.

Mitsubishi Tanabe Clinical Program

Mitsubishi Tanabe has initiated registration trials of telaprevir in Japan focused on evaluation of 24-week telaprevir-based regimens in approximately 300 patients with genotype 1 HCV. These trials include both treatment-naïve patients and treatment-experienced patients. In these clinical trials, telaprevir is being dosed for 12 weeks in combination with peg-IFN and RBV. Mitsubishi Tanabe expects to have SVR data from its Phase 3 clinical trials of telaprevir in mid-2011.

VX-813 and VX-985 (investigational oral HCV protease inhibitors for the treatment of chronic HCV infection)

VX-813 and VX-985 are novel, investigational HCV protease inhibitors we discovered. We have initiated a Phase 1a clinical trial of VX-813 in healthy volunteers and VX-985 is in pre-clinical development. In the first quarter of 2009, we terminated development of VX-500, another protease inhibitor, based on interim results from a Phase 1b clinical trial. We have worldwide development and commercialization rights to VX-813 and VX-985.

Cystic Fibrosis

Cystic fibrosis is a recessive genetic disorder that affects about 30,000 people in the United States and 70,000 worldwide. While CF is a systemic disease, progressive loss of lung function is the primary cause of increased mortality in patients with CF. Abnormally thick mucus in the lungs of patients with CF leads to chronic lung infections, lung inflammation and ultimately progressive decline in lung function. Some patients with CF also experience problems with digestion, due to a lack of CFTR function in the pancreas, resulting in the need for enzyme replacement therapy. According to the Cystic Fibrosis Foundation in 2006, the predicted median age of survival for patients with cystic fibrosis is 37 years. The underlying cause of CF is a genetically inherited deficiency in the production or activity of the CFTR protein. The CFTR protein is involved in controlling the movement of chloride ions into and out of cells in the lung, sweat glands, pancreas and other organs.

CF develops when neither of the two copies of the *CFTR* gene, referred to as alleles, produce sufficient functional CFTR protein. There are numerous mutations in the *CFTR* gene that result in CF, including the G551D mutation and the F508del mutation. The G551D mutation, which is present in approximately 4% of the CF population in the United States, results in a gating defect where the defective CFTR protein reaches the cell surface but does not efficiently transport chloride ions across the cell membrane. The F508del mutation, which is present in approximately 90% of the patients with CF in the United States, results in a trafficking defect where the CFTR protein does not reach the cell surface in sufficient quantities. In addition to the primary trafficking defect, we believe based on *in vitro* studies that the F508del CFTR protein may also have a gating defect that affects the function of any F508del CFTR proteins that do reach the cell surface.

There currently is no available therapy that improves the function of defective CFTR proteins. Instead, available treatments for CF pulmonary disease focus on improving mucus clearance from the lungs as well as treating lung infections and inflammation. Improved mucus clearance is sought through physical therapy, inhalation of a mucus thinning drug such as Pulmozyme, or inhalation of hypertonic saline. Lung infections are treated with inhaled and systemic antibiotics while inflammation is treated with anti-inflammatory agents like ibuprofen. In addition, the majority of CF patients take pancreatic enzyme supplements to assist with food absorption in digestion. FEV_1, a test of the amount of air that an individual can exhale in one second is the lung function test most commonly used to monitor CF disease progression, which is characterized by progressive decreases in FEV_1 values compared to FEV_1 values observed in healthy individuals. In addition to being used to monitor disease progression, the FEV_1 test has been used as an efficacy end-point for the currently approved pulmonary drugs for the treatment of CF. Since CF is a chronic disease, pivotal clinical trials of CF drug candidates have involved the measurement of FEV_1 values over a number of months. Mean increases in predicted FEV_1 of between 5% and 10% over 24-week periods have been observed in the pivotal clinical trials of the mucus thinning drugs and antibiotics most widely used for the management of CF.

We are conducting clinical trials of two drug candidates, VX-770 and VX-809, that were designed to improve the function of defective CFTR proteins in patients with CF. We discovered VX-770 and VX-809 in our research collaboration with Cystic Fibrosis Foundation Therapeutics Incorporated, or CFFT, and with the support and participation of the Cystic Fibrosis Foundation. We hold worldwide development and commercialization rights to VX-770 and VX-809, but we would be required to pay CFFT royalties on any future sales of VX-770 or VX-809, if approved.

VX-770 (investigational oral CFTR potentiator for the treatment of cystic fibrosis)

VX-770 is an investigational drug candidate designed to increase chloride ion transport across cell membranes by partially restoring the activity of defective CFTR proteins. We are working with regulatory authorities in North America and Europe on the design of a registration program for VX-770 and expect to begin this registration program in the first half of 2009. The VX-770 registration program will focus on CF patients who carry the G551D mutation on at least one allele, including both adult and pediatric patients.

Registration Program

The registration program for VX-770 is expected to include three separate clinical trials:

- The first clinical trial in the VX-770 registration program will be an international clinical trial that will enroll patients with CF ages 12 and older with the G551D mutation on at least one of the two alleles. The trial is expected to evaluate VX-770 administered orally twice daily compared to placebo over a period of at least six months. We expect to initiate this trial in the first half of 2009.

- The second clinical trial is expected to be an international clinical trial that will enroll patients with CF ages 6 to 11 with the G551D mutation on at least one allele. This trial is expected to evaluate VX-770 administered orally twice daily compared to placebo. We expect that this clinical trial will involve a smaller group of patients than the first clinical trial.

- The third clinical trial is expected to enroll CF patients with the F508del mutation on both of the two alleles. The trial is expected to evaluate VX-770 when administered orally twice daily. This trial is expected to provide additional safety data for the VX-770 registration program and will be the first clinical trial to evaluate the clinical activity of VX-770 in patients with the F508del mutation on both alleles.

The primary efficacy endpoint of all trials in the VX-770 registration program will be based on FEV_1 measurements, which were used for the currently approved CF pulmonary drugs. Additional secondary endpoints, including sweat chloride, which is described below, will also be measured to determine the effect of VX-770 in helping to restore the function of defective CFTR proteins.

Phase 2a Clinical Trial of VX-770

The Phase 2a clinical trial of VX-770 enrolled 39 patients with the G551D mutation on at least one allele, 20 of whom were enrolled in Part 1 of the clinical trial and 19 of whom were enrolled in Part 2 of the clinical trial. Patients in Part 1 of this clinical trial were dosed with VX-770 or placebo over 14 day periods. In Part 2 of this Phase 2a clinical trial, patients were dosed over 28 days in the following three arms: eight patients received 150 mg of VX-770 twice-daily; seven patients received 250 mg of VX-770 twice-daily; and four patients received a placebo twice-daily.

Safety (primary endpoint)

The primary endpoint of the VX-770 Phase 2a clinical trial was safety. In Part 1, observed adverse events were similar between VX-770 and placebo treatment over the dosing period. Two serious adverse events were observed in one patient in Part 1, but were not attributed to VX-770. In Part 2 of this clinical trial, no serious adverse events were reported and no patients discontinued treatment over the 28-day dosing periods. Also in Part 2, all reported adverse advents were mild or moderate in severity. A detailed safety analysis is ongoing.

Lung Function and CFTR Protein Function (secondary endpoints)

In the VX-770 Phase 2a clinical trial, we measured secondary endpoints of lung function and CFTR protein function. We measured changes in lung function using FEV_1. CFTR activity was

evaluated through measurements of sweat chloride and nasal potential difference, or NPD. Elevated sweat chloride levels—high levels of salt in sweat—occur in CF patients and result directly from defective CFTR activity in epithelial cells in the sweat duct. Patients with CF typically have elevated sweat chloride levels that are in excess of 60 mmol/L, compared to normal values of less than 40 mmol/L. NPD assesses several aspects of ion channel activity by measuring voltage changes across the nasal epithelia and is used as a direct measure of CFTR activity and chloride ion movement in upper airway epithelial cells. Typical assessments of patient NPD show very low CFTR-mediated chloride ion transport in the nasal passage of patients with CF.

In Part 1 of the Phase 2a clinical trial of VX-770, the eight patients who received 150 mg twice-daily over 14 days had a 10.1% improvement in lung function as measured by an increase in FEV_1. In these patients, sweat chloride levels had a mean decrease of 42.3 mmol/L from a mean baseline of 95.5 mmol/L over the 14-day dosing period. The NPD component decreased by 5.4 mV, indicating increased CFTR function. There were no statistically significant changes in any of the efficacy measures in the placebo arms of Part 1. The four patients receiving placebo in Part 1 showed a slight decrease in FEV_1, no notable change in sweat chloride levels and a -1.74 mV change in NPD.

A summary of data regarding lung function and biomarkers of the CFTR protein function, including "p-values" from Part 2 of this Phase 2a clinical trial is set forth in the table below. 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.

Number of Patients	Treatment Arm	FEV_1 Mean Increase from Baseline at day 28 (p-value)	Sweat Chloride Mean Decrease from Baseline at day 28 (p-value)	Sweat Chloride Baseline	NPD Mean Decrease from Baseline at day 28 (p-value)
8	150 mg	11.6% (p<0.01)	-52.8 mmol/L(p<0.01)	102 mmol/L	-4.3 mV (p<0.05)
7	250 mg	7.4% (p<0.05)	-32.4 mmol/L (p<0.05)	94.9 mmol/L	-10.1 mV (p<0.05)
4	Placebo	7.0% (p=0.13)	+4.8 mmol/L (p=0.38)	98.3 mmol/L	+0.3 mV (p=0.88)

The pattern of FEV_1 response in the VX-770 arms was characterized by a rapid and sustained increase in FEV_1 through 28 days. The increase in FEV_1 in the placebo arm was not considered statistically significant.

VX-809 (investigational oral CFTR corrector compound for the treatment of CF)

We are evaluating VX-809, an investigational corrector compound designed to increase the concentration of CFTR proteins on the cell surface in patients with CFTR mutations that result in trafficking defects. We have completed two Phase 1 clinical trials of VX-809 in healthy volunteers. The first clinical trial was a single and multiple-dose trial. The second was a single-dose clinical trial examining the pharmacokinetics and safety of a solid dosage form of VX-809. We have completed an escalating dose pharmacokinetics and safety Phase 1 trial of VX-809 in patients with CF who carry the F508del mutation on at least one of the two alleles. We plan to initiate a Phase 2a, 28-day clinical trial of VX-809 in the first half of 2009. *In vitro*, correctors have shown the ability to restore function of defective F508del CFTR protein, with increased trafficking of F508del CFTR protein to the cell surface and enhanced gating activity of F508del CFTR protein on the cell surface.

Immune-Mediated Inflammatory Disease

VX-509 (oral JAK3 inhibitor for the treatment of IMID)

We believe that JAK3 is a promising target for the design of immunosuppressant drugs. We have completed a Phase 1 clinical trial of VX-509, and anticipate it will be investigated for the treatment of multiple IMID. The Phase 1 clinical trial enrolled three groups of healthy volunteers dosed for 14 days with ascending doses of VX-509. We anticipate that a Phase 2 clinical trial in rheumatoid arthritis will commence in the second half of 2009. Based on *in vitro* data, VX-509 appears to be a potent and selective inhibitor of JAK3. We hold worldwide development and commercial rights to VX-509 and may seek to out-license VX-509.

Cancer

MK-5108 (VX-689): Aurora kinase inhibition for the treatment of cancer (Merck & Co., Inc.)

We are collaborating with Merck & Co., Inc. in the area of Aurora kinase inhibitors, including MK-5108 (VX-689). Aurora kinases are enzymes thought to play multiple roles in the development and progression of cancer, acting as regulators of cell proliferation, transforming normal cells into cancer cells and downregulating p53, one of the body's natural tumor suppressors. We believe that inhibitors of Aurora kinases may be useful as highly targeted treatments for a range of cancer indications. Merck holds worldwide development and commercialization rights to MK-5108 (VX-689) and certain additional compounds identified during our research program with Merck, which has ended. In the second quarter of 2008, Merck initiated a Phase 1 clinical trial of MK-5108 (VX-689), alone and in combination with docetaxel, in patients with advanced and/or refractory tumors. In the third quarter of 2008, Merck selected additional Aurora kinase inhibitors for possible development.

AVN-944 (VX-944): IMPDH inhibition for the treatment of cancer (Avalon Pharmaceuticals, Inc.)

Our collaborator Avalon Pharmaceuticals, Inc. has the right to develop AVN-944 (VX-944), an IMPDH inhibitor, for the treatment of advanced hematological malignancies, such as leukemia, lymphoma or myeloma. Inosine 5-monophosphate dehydrogenase, or IMPDH, is an enzyme thought to be critical for the synthesis of guanosine triphosphate, a molecule required for DNA synthesis and cellular signaling. IMPDH is over-expressed in many cancer cells, especially in hemotological malignancies. Reports in medical literature and presentations at scientific conferences provide a clinical rationale for the development of IMPDH inhibitors for the treatment of hematologic malignancies. Results from certain preclinical studies of AVN-944 (VX-944) indicated that AVN-944 (VX-944) inhibited the *in vitro* proliferation of lymphoid and myeloid cells, the principal cells involved in the most common types of human leukemias. AVN-944 (VX-944) is currently in Phase 2 clinical development. In August 2008, Avalon restructured its operations and indicated that it was evaluating the clinical data from our AVN-944 (VX-944) development program to assess strategies for further development of AVN-944 (VX-944). Avalon holds worldwide development and commercialization rights to AVN-944 (VX-944) in oncology.

RESEARCH PROGRAMS

We believe that our integrated drug design approach has significantly enhanced our ability to discover and develop small molecule drug candidates directed at biologically complex targets associated with serious diseases. Our drug design platform integrates biology, pharmacology, drug metabolism and pharmacokinetics, toxicology, material sciences, biophysics, medicinal chemistry and process chemistry, automation and information technologies in a coordinated and simultaneous fashion throughout the discovery process. We believe that our approach has been validated through our success in moving drug candidates into clinical trials. We recently have decided to focus on several core therapeutic areas, in order to expand and develop our expertise in specific therapeutic areas and to permit a framework for portfolio planning and execution. Currently, the four therapeutic areas of highest priority to us are: infectious diseases, including viral and bacterial infections; IMIDs; cancer; and neurological diseases and disorders, including pain. Driven by the complexity of the therapeutic areas selected, we are

attempting to identify multiple targets within each indication that, either as a stand-alone or in combination, could provide treatment options that are transformational in nature. The objective of this approach is to enable us to eventually provide multiple drugs in each of these therapeutic areas. We selected these therapeutic areas by mapping our research strengths, including expertise in kinases, proteases and membrane proteins, onto therapeutic areas with high unmet need, with an emphasis on indications where we believe we, independently or in collaboration with other pharmaceutical companies, will be able to discover, develop, and commercialize important medicines for serious diseases. Within each therapeutic area, we intend to focus initially on specific indications.

Our past drug discovery efforts have produced a variety of drug candidates that have been commercialized or are currently in preclinical or clinical development. We believe our ongoing research programs continue to create potential value for us by generating new drug candidates in areas of significant unmet medical need. We have commenced preclinical activities for a number of additional investigational compounds one or more of which may enter clinical development in 2009.

In order to obtain advice regarding our research programs, we have invited respected individuals with industry, medical and/or research expertise to participate in advisory boards focused on specific therapeutic areas and discovery approaches. Each of our scientific advisory boards is comprised of individuals with experience in the relevant area who provide input through interaction with our senior executives focused on drug innovation and technologies. The members of our scientific advisory boards are not employees and only are expected to devote a small portion of their time to us.

To augment our internal research programs, we seek to collaborate with leading academic research institutions, government laboratories, foundations and other organizations in order to advance research in our areas of therapeutic interest as well as in areas of basic technological enablement. We have established relationships with organizations and organized consortia of organizations from around the world with expertise in areas of interest to us, and intend to leverage that experience to further our research efforts. For example, in 2008, we entered into a collaboration with CHDI Foundation, Inc., a non-profit foundation committed to accelerating the discovery and development of new drugs that delay the onset or slow the progression of Huntington's disease. This collaboration is aimed at developing assays for use in discovering novel compounds for the treatment of Huntington's disease.

CORPORATE COLLABORATIONS

We have entered into corporate collaborations with pharmaceutical and other companies and organizations that provide financial and other resources, including capabilities in research, development, manufacturing, and sales and marketing, to support our research and development programs.

Janssen Pharmaceutica, N.V.

In June 2006, we entered into a license, development, manufacturing and commercialization agreement with Janssen. Under the collaboration agreement, we will collaborate with Janssen to develop and commercialize telaprevir. Under the terms of the collaboration agreement, we retain exclusive commercial rights to telaprevir in North America and will continue to lead the development plan for telaprevir in North America and the Janssen territories. Janssen received exclusive rights to commercialize telaprevir outside of North America and the Far East. In connection with the execution of the collaboration agreement, we received an up-front payment of $165.0 million in July 2006. In addition, the agreement provided for contingent milestone payments to us, which could total up to $380.0 million if telaprevir is successfully developed, approved and launched. As of December 31, 2008, we had received $100.0 million of these contingent milestone payments. Janssen has agreed to be responsible for 50% of drug development costs under the development program for North America and the Janssen territories. Each of the parties to the collaboration agreement will be responsible for drug supply in their respective territories. The collaboration agreement also includes a tiered royalty averaging in the mid-20% range, as a percentage of net sales in the Janssen territories, depending upon successful commercialization. In addition, Janssen will be responsible for certain third-party royalties in its territories. Janssen may terminate the collaboration agreement upon six months' notice to us. In

such an event, all manufacturing, commercialization and intellectual property rights to telaprevir under the collaboration agreement will revert to us.

As part of the collaboration agreement, following regulatory approval and commercialization of telaprevir in both North America and Janssen's territory, we have agreed to establish a global health initiative with Tibotec, with the goals of advancing the prevention, diagnosis, treatment and cure of HCV infection, which will be principally directed toward developing countries.

Mitsubishi Tanabe Pharma Corporation

In June 2004, we entered into a license, development and commercialization agreement with Mitsubishi Tanabe for the development and commercialization of telaprevir in Japan and certain other Far East countries. Under the terms of the agreement, Mitsubishi Tanabe has the right to develop and commercialize telaprevir in its territory. Under the agreement, we have received payments from Mitsubishi Tanabe for Phase 2 clinical development, including an up-front license fee, development milestone payments and contributions to certain drug development costs incurred by us for telaprevir. We recognized $9.9 million, $4.4 million and $8.6 million in revenues under this agreement in 2008, 2007 and 2006, respectively. Mitsubishi Tanabe has commenced Phase 3 clinical development of telaprevir. We currently are negotiating the extent of Mitsubishi Tanabe's future sharing of our costs beyond Phase 2 clinical development as provided in the agreement. We will also be entitled to royalties on sales of telaprevir, if approved, in Mitsubishi Tanabe's territory. Mitsubishi Tanabe may terminate the agreement at any time without cause upon 60 days' prior written notice.

Cystic Fibrosis Foundation Therapeutics Incorporated

In May 2004, we entered into a collaboration agreement with CFFT pursuant to which CFFT provided us with funding for our CF research and development programs, which funding was completed in 2008. We recognized $0.8 million, $15.9 million and $12.6 million in revenues under this agreement in 2008, 2007 and 2006, respectively. Two drug candidates currently in clinical development, VX-770 and VX-809, were discovered by us under this research collaboration. We retain the right to develop and commercialize any compounds discovered in the course of the research collaboration, including VX-770 and VX-809, and we will pay a royalty to CFFT on the net sales of any approved drugs discovered in the collaboration.

Merck & Co., Inc.

In June 2004, we entered into a global collaboration with Merck to discover, develop and commercialize Aurora kinase inhibitors. Merck made an up-front license payment to us of $20 million in June 2004, and provided research funding of $15.8 million between June 2004 and September 2006. In addition, the agreement provided for as much as $350 million in milestone payments to us. Currently, Merck is developing MK-5108 (VX-689) in a Phase 1 clinical trial involving patients with advanced and/or refractory tumors. In the third quarter of 2008, Merck selected additional Aurora kinase inhibitors for possible development.

Under the agreement, we recognized two milestone payments totaling $19.5 million in 2005, three milestone payments totaling $36.3 million in 2006, one milestone payment of $9.0 million in 2007 and one milestone payment of $6.0 million in 2008. Under the agreement, Merck is responsible for developing and commercializing the drug candidates that result from our collaboration worldwide and will pay us royalties on any product sales. Merck may terminate the agreement at any time without cause upon 90 days' advance written notice, except that a longer notice period is required in certain circumstances.

Avalon Pharmaceuticals, Inc.

In February 2005, we entered into a license agreement with Avalon for the development and commercialization of the IMPDH inhibitor AVN-944 (VX-944) for the treatment of cancer. Under the agreement, Avalon has the exclusive worldwide right and responsibility to develop and commercialize

AVN-944 (VX-944) for the treatment of cancer. Avalon made a $5.0 million up-front license payment to us and has agreed to make additional milestone payments to us for the successful development of AVN-944 (VX-944) in multiple cancer indications. Avalon will pay us royalties on any product sales. The agreement provides us with certain rights to co-promote AVN-944 (VX-944). Neither party has the right to terminate the agreement other than for cause. If the agreement is terminated, we will regain development and commercialization rights to AVN-944 (VX-944).

GlaxoSmithKline plc

In 1993, we entered into a collaboration with GlaxoSmithKline covering the research, development and commercialization of HIV protease inhibitors, including Agenerase (amprenavir) and Lexiva/Telzir (fosamprenavir calcium). The agreement provides that GlaxoSmithKline will pay us a royalty on all net sales of the HIV protease inhibitors covered by the agreement. We began earning a royalty from GlaxoSmithKline in 1999 on net sales of Agenerase, in the fourth quarter of 2003 on net sales of Lexiva, and in the third quarter of 2004 on net sales of Telzir. Lexiva and Telzir have replaced Agenerase in worldwide markets. In May 2008, we sold our right to receive future royalties from GlaxoSmithKline with respect to these HIV protease inhibitors, excluding the amount necessary to pay a third party a subroyalty on these net sales, for a one-time cash payment of $160.0 million.

INTELLECTUAL PROPERTY

We actively seek protection for our products and proprietary information by means of United States and foreign patents, trademarks, and copyrights, as appropriate. In addition, we rely upon trade secret protection and contractual arrangements to protect certain of our proprietary information and products. We have patents and pending patent applications that relate to potential drug targets, compounds we are developing to modulate those targets, methods of making or using those compounds and proprietary elements of our drug discovery platform.

Much of our technology and many of our processes depend upon the knowledge, experience and skills of key scientific and technical personnel. To protect our rights to our proprietary know-how and technology, we require all employees, as well as our consultants and advisors when feasible, to enter into confidentiality agreements that require disclosure and assignment to us of ideas, developments, discoveries and inventions made by these employees, consultants and advisors in the course of their service to us.

We hold issued patents and pending patent applications in the United States, and in foreign countries we deem appropriate, covering intellectual property developed as part of each of our significant research, development and commercial programs. Our intellectual property holdings include but are not limited to:

- United States and foreign patents and patent applications covering telaprevir, VX-813, VX-985 and many other HCV protease inhibitors.
- United States and foreign patent applications covering potentiators and correctors of the CFTR protein, including VX-770 and VX-809 and many other related compounds, and the use of those potentiators and correctors to treat CF.
- United States and foreign patents and patent applications covering inhibitors of a variety of kinase proteins, including VX-509, a JAK3 inhibitor.
- United States and foreign patent applications covering the manufacture, pharmaceutical compositions, related solid forms, formulations, dosing regimens and methods of use of these compounds, including telaprevir and VX-770.

From time to time we enter into non-exclusive license agreements for proprietary third-party technology used in connection with our research activities. These license agreements typically provide for the payment by us of a license fee, but may also include terms providing for milestone payments or royalties for the development and/or commercialization of our drug products arising from the related research.

MANUFACTURING

As we advance our proprietary drug candidates through clinical development toward commercialization, we will continue to build our supply chain resources and maintain our quality assurance resources. We rely on a worldwide network of third parties to manufacture and distribute our drug candidates for clinical trials, and we expect that we will continue to do so to meet our commercial supply needs for those drugs, if they are approved for sale.

Our supply chain for sourcing raw materials and manufacturing drug product ready for distribution is a multi-step international endeavor in which we rely on third-party contract manufacturers in Asia for the supply of raw materials, and in the European Union and the United States for the application of specific manufacturing processes to the conversion of raw materials into drug substance and drug substance into final dosage form. Establishing and managing this global supply chain requires significant financial commitments, experienced personnel and the creation or expansion of numerous third-party contractual relationships.

We require for our own use, and are responsible to Janssen for, a supply of telaprevir for clinical trials in North America and the European Union, respectively. We will require a supply of telaprevir for sale in North America if we are successful in obtaining marketing approval. We have completed the technical development work for our commercial formulation of telaprevir and we are manufacturing telaprevir, through our third-party manufacturer network, to meet our, Janssen and Mitsubishi Tanabe's clinical supply needs. We have established relationships with multiple third-party manufacturers for the manufacture of telaprevir commercial supply and have completed contracts for our primary supply of drug substance and most raw materials. We believe our past and continuing efforts to expand our relationships with third-party manufacturers and oversee their activities will be important to support a timely and effective commercial launch of telaprevir and its consistent supply in subsequent years.

We are completing the transfer of technical information regarding the manufacture of telaprevir to Janssen so that Janssen will be able to manufacture telaprevir, if approved, for sale in Janssen's territories and as a secondary supply source of drug substance for us. While we believe there are multiple third parties capable of providing most of the materials and services we need in order to manufacture and distribute telaprevir, and that supply of materials that cannot be second-sourced can be managed with inventory planning, there is always a risk that we may underestimate demand, and that our manufacturing capacity through third-party manufacturers may not be sufficient. In addition, because of the significant lead times involved in our supply chain for telaprevir, we may have less flexibility to adjust our supply in response to changes in demand than if we had shorter lead times.

We require VX-770 for clinical trials in North America and Europe, and will require a supply of VX-770 for sale in North America and Europe if we obtain marketing approval. We obtain VX-770 to meet our clinical supply needs through a third-party manufacturer network and are focused on completing the technical development work and commercial formulation of VX-770. Over the next several years, we expect to expand our existing relationships with our third-party manufacturers or establish new relationships with third-party manufacturers, in order to establish a supply chain for VX-770 and support the potential commercial launch and subsequent commercial supply of VX-770.

We are focusing resources on the development of systems and processes to track, monitor and oversee our third-party manufacturers' activities. We regularly evaluate the performance of our third-party manufacturers with the objective of confirming their continuing capabilities to meet our needs efficiently and economically. Manufacturing facilities, both foreign and domestic, are subject to inspections by or under the authority of the FDA and by or under the authority of other federal, state, local or foreign authorities. A failure by any of our third-party manufacturers to pass an inspection could adversely affect our ability to launch telaprevir or VX-770 in a timely manner, if we obtain marketing approval, or adversely affect our ability to continue to distribute telaprevir or VX-770 after launch.

We have established a quality assurance program intended to ensure that our third-party manufacturers and service providers produce materials and provide services, when applicable, in accordance with the FDA's current Good Manufacturing Practices, or cGMP, and other applicable regulations.

COMPETITION

The pharmaceutical industry is characterized by extensive research efforts, rapid technological progress and intense competition. There are many public and private companies, including pharmaceutical companies, chemical companies and biotechnology companies, engaged in developing products for the same human therapeutic areas that we are targeting. Many of our competitors have substantially greater financial, technical and human resources than we do and are more experienced in the development of new drugs than we are. In order for us to compete successfully, we may need to demonstrate improved safety, efficacy, ease of manufacturing and market acceptance of our products relative to our competitor's products that have received or will receive regulatory approval for marketing.

We face competition based on the safety and efficacy of our drug candidates, the timing and scope of regulatory approvals, the availability and cost of supply, marketing and sales capabilities, reimbursement coverage, price, patent protection and other factors. Our competitors may develop or commercialize more effective, safer or more affordable products than we are able to develop or commercialize or obtain more effective patent protection. As a result, our competitors may commercialize products more rapidly or effectively than we do, which would adversely affect our competitive position, the likelihood that our drug candidates, if approved, would achieve initial market acceptance and our ability to generate meaningful revenues from those drugs. Even if our drug candidates are approved and achieve initial market acceptance, competitive products may render our drugs obsolete or noncompetitive. If any such drug is rendered obsolete, we may not be able to recover the expenses of developing and commercializing that drug. With respect to all of our drugs and drug candidates, we are aware of existing treatments and numerous drug candidates in development by our competitors.

HCV Infection

A combination of peg-IFN, which requires weekly injections, and RBV administered for 48 weeks is the current standard treatment for genotype 1 HCV infection. This treatment regimen is associated with significant side effects, including fatigue, flu-like symptoms, rash, depression and anemia. A significant portion of patients who begin treatment do not achieve an SVR. Based on discussions with physicians who treat patients with HCV, we believe that there are a significant number of patients with HCV who are waiting to receive treatment until new therapies are developed that are more effective or involve less difficult treatment regimens. In addition, we believe that there are a significant number of patients with HCV who have not achieved SVR with previous interferon-based treatments.

While we are aware of numerous companies that are developing potentially competitive drug candidates, Schering-Plough's protease inhibitor, boceprevir, is the only protease inhibitor that is being developed on a timeline comparable to telaprevir. In November 2008, Schering-Plough completed enrollment in a Phase 3 clinical trial that included approximately 375 treatment-experienced patients but excluded null responders to prior treatment. In January 2009, Schering-Plough completed enrollment of a Phase 3 clinical trial involving approximately 1,080 treatment-naïve patients with genotype 1 HCV. We believe that Schering-Plough may obtain SVR data from these Phase 3 clinical trials in 2010 and, if favorable, that Schering-Plough could file an NDA with the FDA on a timeline comparable to telaprevir. If telaprevir and boceprevir are both approved on a comparable timeline, we believe that the drugs would compete in the marketplace based on, among other things, safety and efficacy data from their respective clinical trials, breadth of approved use, cost, cost of co-therapies and side-effect profile. In addition to boceprevir, we are aware of a number of other companies developing protease inhibitors that are in earlier stages of development. We believe that these earlier-stage drug

candidates, if approved, would be launched several years after telaprevir based on telaprevir's current developmental timeline.

There also are companies developing HCV polymerase inhibitors, a class of compounds distinct from protease inhibitors, for the treatment of HCV infection. The HCV polymerase is responsible for synthesizing viral RNA during HCV replication. We expect that polymerase inhibitors, if successfully developed, may be a component of a combination therapy that includes a protease inhibitor, such as telaprevir, and thus likely would be complementary to and not competitive with our HCV protease inhibitors.

We are aware of numerous other compounds in clinical trials that target HCV through other mechanisms of action that are in clinical trials, and we believe that there are many additional potential HCV treatments in research or early development. We believe that there is a potential for new oral drug candidates, if approved, to be administered together with or without peg-IFN and/or RBV. We expect to explore the potential for other combination therapies, including combinations where all the component drugs would be administered orally. Future competition in the HCV treatment market may result from the administration of a combination of new oral therapies. Oral therapies that previously have been tested in combination with peg-IFN and RBV may have a competitive advantage over those that have not been previously tested in combination.

CF

Several companies are engaged in the process of developing treatments for CF, including a limited number of drug candidates that are designed to improve the function of CFTR proteins, and a number of antibiotics and anti-inflammatories. PTC Therapeutics, Inc. is investigating ataluren, which was formerly known as PTC124, a drug candidate designed to improve the production of CFTR proteins in patients with nonsense genetic mutations that halt the production of CFTR proteins before the protein is fully formed. Inspire Pharmaceuticals Inc. is conducting Phase 3 clinical trials of denufosol tetrasodium, an inhaled molecule designed to stimulate chloride and liquid secretions in the airways of patients with CF.

GOVERNMENT REGULATION

The research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record keeping, promotion, advertising, distribution and marketing of the drug candidates that we are developing are subject to extensive regulation by United States and foreign governmental authorities. In particular, pharmaceutical products are subject to rigorous preclinical, nonclinical and clinical testing and other approval requirements by the FDA in the United States under the Federal Food, Drug and Cosmetic Act, and by comparable agencies in most foreign countries. In addition to prohibiting the sale and distribution of pharmaceutical products prior to regulatory approval, the FDA and comparable agencies in most foreign countries prohibit the pre-approval promotion of investigational drugs. We have summarized the FDA process below, but other countries may have different approval processes with which we or our collaborators will need to comply if we seek to conduct clinical trials or obtain marketing approval in those countries. In addition, even if we ultimately intend to seek initial marketing approval in the United States, we may conduct early clinical trials in other countries, for a variety of reasons, and therefore the submission of our initial investigational new drug, or IND, application in the United States may not occur until after one or more foreign-sited clinical trials have been initiated.

FDA Approval Process

As an initial step in the FDA regulatory review process, toxicity studies in animals and other nonclinical studies typically are conducted to help identify potential safety problems that might be associated with administration of the drug candidate being tested. For certain diseases, animal models exist that are believed to be predictive of efficacy in humans. For such diseases, a drug candidate

typically is tested for efficacy in that animal model. The results of these initial animal safety and disease model studies are submitted to the FDA as a part of the IND submission, prior to commencement of human clinical trials in the United States. For several of our drug candidates, no appropriately predictive animal model exists. As a result, no *in vivo* evidence of efficacy will be available until those drug candidates progress to human clinical trials. A variety of nonclinical studies in a number of animal species, and other nonclinical studies, ordinarily are conducted while human clinical trials are underway, to provide supplemental toxicology and other information. This information as well as the results from the early clinical trials provide a foundation for the design of broader and more lengthy human clinical trials.

Clinical trials typically are conducted in three sequential phases, although the phases may overlap. Phase 1 frequently begins with the initial introduction of the drug candidate into healthy human subjects prior to introduction into patients. The drug candidate may then be tested in a relatively small number of patients for preliminary information, dosage tolerance, absorption, metabolism, excretion, clinical pharmacology and, if possible, for early information on efficacy. Phase 2 typically involves trials in a small sample of the intended patient population to assess the efficacy of the drug for a specific indication, to determine dose tolerance and the optimal dose range and to gather additional information relating to safety and potential adverse effects. Phase 3 trials are undertaken to further evaluate clinical safety and efficacy in an expanded patient population at geographically dispersed trial sites, to obtain information on the overall risk-benefit ratio of the drug candidate and to provide an adequate basis for proposed labeling. Each trial is conducted in accordance with standards set forth in a protocol that details the design and objectives of the trial, the parameters to be used to monitor safety and the efficacy criteria to be evaluated. For clinical trials in the United States, each protocol must be submitted to the FDA to supplement the original IND submission. Further, each clinical trial must be evaluated by an independent Institutional Review Board, or IRB, which evaluates clinical research at or for each institution at which the trial will be conducted. The IRBs will consider, among other things, ethical factors and the safety of human subjects in the proposed trials.

Data from nonclinical testing and all clinical trials, along with descriptions of the manufacturing process, analytical tests, proposed labeling and other relevant information, are submitted to the FDA as part of requesting approval to market the drug in the NDA. The process of completing nonclinical and clinical testing, submitting the NDA and obtaining FDA approval for a new drug is likely to take a number of years and require the expenditure of substantial resources. Preparing an NDA involves extensive data collection, verification, analysis and expense, and there can be no assurance that approval of the drug candidate that is the subject of a particular NDA will be granted on a timely basis, if at all. The FDA reviews all NDAs to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The approval process is affected by a number of factors, including the severity of the targeted disease, the availability of alternative treatments and the risks and benefits demonstrated in clinical trials. The FDA may deny an NDA if applicable regulatory criteria are not satisfied or may require additional testing or information. Among the conditions for marketing approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform to the FDA's cGMP regulations, which must be followed at all times. In complying with standards set forth in these regulations, manufacturers must continue to expend time, money and effort in the area of production and quality control to ensure full compliance. Manufacturing facilities, both foreign and domestic, also are subject to inspections by the FDA and by other federal, state, local agencies or foreign authorities.

Under the FDA Modernization Act of 1997, the FDA may grant "Fast Track" designation to facilitate the development of a drug intended for the treatment of a serious or life-threatening condition if the drug demonstrates, among other things, the potential to address an unmet medical need. The benefits of Fast Track designation include scheduled meetings with the FDA to receive input on development plans, the option of submitting an NDA in sections (rather than submitting all sections simultaneously), and the option of requesting evaluation of trials using surrogate endpoints. Fast Track

designation does not necessarily lead to a priority review or accelerated approval of a drug candidate by the FDA. Telaprevir and VX-770 have received Fast Track designation by the FDA.

Timing to Approval

We estimate that it generally takes 10 to 15 years, or possibly longer, to discover, develop and bring to market a new pharmaceutical product in the United States as outlined below:

Phase:	Objective:	Estimated Duration:
Discovery	Lead identification and target validation	2 to 4 years
Preclinical	Initial toxicology for preliminary identification of risks for humans; gather early pharmacokinetic data	1 to 2 years
Phase 1	Initial evaluation of safety in humans; study how the drug candidate works and is metabolized	1 to 2 years
Phase 2	Gather data on the effectiveness of the drug candidate and its optimal dosage; continue safety evaluation	2 to 4 years
Phase 3	Confirm efficacy, dosage regime and safety profile of the drug candidate; submit NDA	2 to 4 years
FDA approval	Approval by the FDA to sell and market the drug for the approved indication	6 months to 2 years

A drug candidate may fail to progress at any point during this process. Animal and other nonclinical studies typically are conducted during each phase of human clinical trials.

Patent Term Restoration

Pursuant to the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments, some of our patents, under certain conditions, may be eligible for limited patent term extension for a period of up to five years as compensation for patent term lost during drug development and the FDA regulatory review process. However, this extension period cannot be extended beyond 14 years from the drug's approval date. The patent term restoration period is generally one-half the period of time elapsed between the effective date of an IND application and the submission date of an NDA, plus the period of time between the submission date of the NDA and FDA approval. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves applications for any patent term extension or restoration. We intend to seek the benefits of this statute, but there can be no assurance that we will be able to obtain any such benefits.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a "rare disease or condition" that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. If a drug that has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to orphan exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity. Nevertheless, competitors may receive approval of different drugs or biologics for the indications for which the orphan product has exclusivity. VX-770 has been granted orphan drug designation.

Post-approval Studies

Even after FDA approval has been obtained, further studies, including post-approval trials, may be required to provide additional data on safety and will be required to gain approval for the sale of a

drug as a treatment for clinical indications other than those for which the drug initially was approved. Also, the FDA will require post-approval reporting to monitor the side-effects of the drug. Results of post-approval programs may limit or expand the indications for which the drug may be marketed. Further, if there are any requests for modifications to the initial FDA approval for the drug, including changes in indication, manufacturing process, labeling or manufacturing facilities, submission of a supplemental NDA to the FDA may be required.

Reimbursement

Sales of drugs depend in significant part on the availability of third-party reimbursement. Third-party payors include government health administrative authorities, managed care providers, private health insurers and other organizations. We anticipate third-party payors will provide reimbursement for our drugs if we are successful in obtaining marketing approval. However, third-party payors are increasingly challenging pricing, and in some cases, examining the cost-effectiveness of drugs. In the future, we may need to conduct expensive pharmacoeconomic studies for some of our drug candidates in order to demonstrate their cost-effectiveness, if we successfully obtain marketing approval. The process of seeking reimbursement from third-party payors in the future may be time consuming and expensive.

The Medicare Prescription Drug Improvement and Modernization Act of 2003, or the MMA, extended a prescription drug benefit to Medicare beneficiaries and imposed requirements for the distribution and pricing of prescription drugs under Medicare Part D. Unlike other Medicare benefits, the drug benefit available under Part D is not standardized and there is no guarantee that any drug for which we obtain approval will be covered under Part D.

We expect that there may continue to be a number of federal and state proposals to implement governmental pricing controls and limit the growth of health care costs, including the cost of prescription drugs. At the present time, Medicare is prohibited from negotiating directly with pharmaceutical companies for drugs. However, Congress is considering passing legislation that would lift the ban on federal negotiations.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be marketed lawfully. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market.

Foreign Regulation

In addition to regulations in the United States, we and our collaborators will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of drugs. Whether or not we obtain FDA approval for a drug, approval of a drug candidate by the comparable regulatory authorities of foreign countries must be obtained before we or our collaborators can commence clinical trials or marketing of the drug in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, marketing authorization applications may be submitted either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by certain biotechnological processes and optional for those that are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. For drugs without approval in any European Union member state, the decentralized procedure provides for assessment of a marketing application by one member state,

known as the reference member state, and review and possible approval of that assessment by one or more other, or concerned, member states. Under this procedure, an applicant submits an application, or dossier, and related materials—draft summary of product characteristics, draft labeling and package leaflet—to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points may eventually be referred to the European Commission, whose decision is binding on all member states of the European Union.

Other Regulations

Pharmaceutical companies also are subject to various federal and state laws pertaining to health care "fraud and abuse," including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal for any entity or person to solicit, offer, receive, or pay any remuneration in exchange for or to induce the referral of business, including the purchase or prescription of a particular drug. False claims laws prohibit anyone from knowingly and willingly presenting to third-party payors including Medicare and Medicaid, or causing to be presented, for payment claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services.

In addition to the statutes and regulations described above, we also are subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other federal, state, local and foreign regulations, now or hereafter in effect.

OTHER MATTERS

Employees

As of December 31, 2008, we had 1,333 employees (1,310 full-time, 23 part-time). The number of our full-time employees increased by 16% during 2008, from 1,132 on December 31, 2007. We may further increase our headcount in 2009 as we invest in expanding our drug development and commercialization capabilities. Of our employees, 1,043 were based in Cambridge, Massachusetts, 99 were located in Europe and 176 were located at our facility in San Diego, California. Our scientific staff members have diversified experience and expertise in molecular and cell biology, biochemistry, synthetic organic chemistry, protein X-ray crystallography, protein nuclear magnetic resonance spectroscopy, microbiology, computational chemistry, biophysical chemistry, medicinal chemistry, clinical pharmacology and clinical medicine. Our clinical development personnel have extensive expertise in designing and executing clinical trials, and we are building our commercialization organization. Our employees are not covered by a collective bargaining agreement, and we consider our relations with our employees to be good.

Information Available on the Internet

Our internet address is *www.vrtx.com*. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, are available to you free of charge through the "Finances/Investor Info-SEC Filings" section of our website as soon as reasonably practicable after those materials have been electronically filed with, or furnished to, the Securities and Exchange Commission.

Corporate Information

Vertex was incorporated in Massachusetts in 1989, and our principal executive offices are located at 130 Waverly Street, Cambridge, Massachusetts 02139. We have research sites located in San Diego, California, Coralville, Iowa and Milton Park, U.K.

EXECUTIVE OFFICERS AND DIRECTORS

The names, ages and positions held by our executive officers and directors are as follows:

Name	Age	Position
Joshua S. Boger, Ph.D.	57	Chief Executive Officer and Director
Matthew W. Emmens	57	President and Director
Kurt C. Graves	41	Executive Vice President, Chief Commercial Officer and Head, Strategic Development
Freda C. Lewis-Hall, M.D., FAPA	53	Executive Vice President, Medicines Development
Peter Mueller, Ph.D.	52	Executive Vice President, Drug Innovation and Realization, and Chief Scientific Officer
Ian F. Smith, C.P.A., A.C.A.	43	Executive Vice President and Chief Financial Officer
Kenneth S. Boger, M.B.A., J.D.	62	Senior Vice President and General Counsel
Richard C. Garrison	60	Senior Vice President and Catalyst
Lisa Kelly-Croswell	42	Senior Vice President, Human Resources
Amit K. Sachdev, J.D.	41	Senior Vice President, Corporate Affairs and Public Policy
Paul M. Silva	42	Vice President and Corporate Controller
Charles A. Sanders, M.D.	77	Chairman of the Board
Eric K. Brandt	46	Director
Roger W. Brimblecombe, Ph.D., D.Sc.	79	Director
Stuart J.M. Collinson, Ph.D.	49	Director
Eugene H. Cordes, Ph.D.	72	Director
Bruce I. Sachs	49	Director
Elaine S. Ullian	61	Director

Dr. Joshua Boger is the founder of Vertex. He has been our Chief Executive Officer since 1992, and is expected to step down as our Chief Executive Officer in May 2009. He was our Chairman of the Board from 1997 until May 2006 and our President from our inception in 1989 until December 2000, and again from May 2005 through February 2009. He was our Chief Scientific Officer from 1989 until May 1992. Dr. Boger has been a director since Vertex's inception. Prior to founding Vertex in 1989, Dr. Boger held the position of Senior Director of Basic Chemistry at Merck Sharp & Dohme Research Laboratories in Rahway, New Jersey, where he headed both the Department of Medicinal Chemistry of Immunology & Inflammation and the Department of Biophysical Chemistry. Dr. Boger is the current chairman of the Biotechnology Industry Organization (BIO). Dr. Boger holds a B.A. in chemistry and philosophy from Wesleyan University and M.S. and Ph.D. degrees in chemistry from Harvard University. Dr. Boger is the brother of Mr. Kenneth Boger, our Senior Vice President and General Counsel.

Mr. Emmens became our President in February 2009 and has been a member of our Board of Directors since 2004. We have agreed that Mr. Emmens will become our Chairman and Chief Executive Officer on May 23, 2009. Mr. Emmens is the Chairman of the Board of Directors of Shire Pharmaceuticals Group plc. and has been a member of Shire's board since March 2003. From March 2003 to June 2008, Mr. Emmens was also the Chief Executive Officer of Shire Pharmaceuticals Group plc. Before joining Shire in 2003, Mr. Emmens served as president of Merck KGaA's global prescription pharmaceuticals business in Darmstadt, Germany. In 1999, he joined Merck KGaA and established EMD Pharmaceuticals, its United States prescription pharmaceutical business.
Mr. Emmens

held the position of President and Chief Executive Officer at EMD Pharmaceuticals from 1999 to 2001. Prior to this, Mr. Emmens held various positions, including Chief Executive Officer, at Astra Merck, Inc. as well as several positions at Merck & Co., Inc.. Mr. Emmens received a B.S. degree in business management from Farleigh Dickinson University.

Mr. Graves is our Executive Vice President, Chief Commercial Officer and Head, Strategic Development, a position he has held since joining us in July 2007. From 1999 through June 2007, Mr. Graves held various executive positions at Novartis Pharmaceuticals, including Global Head of General Medicines Business Unit & Chief Marketing Officer, Pharmaceuticals from September 2003 through June 2007. Prior to that, Mr. Graves served as Senior Vice President & General Manager—US Pharma & Commercial Operations; Vice President, Head of US Marketing & Primary Care Franchises; and Vice President & Business Unit Head: Respiratory, GI, Dermatology and Bone Franchises. Prior to joining Novartis, Mr. Graves was GI Business Unit Head—US Gastrointestinal Franchise, at Astra Pharmaceuticals, LP from 1997 to 1998. From 1993 to 1997, Mr. Graves served in a variety of roles at Astra Merck Pharmaceuticals including Executive Director, Business Unit Commercialization Leader. He has extensive training in marketing & sales and general management, including training at the University of Michigan Business School, Wharton School of Business and Harvard Business School. Mr. Graves holds a B.S. in Biology from Hillsdale College.

Dr. Lewis-Hall is our Executive Vice President, Medicines Development, a position she has held since June 2008. From 2003 through May 2008, Dr. Lewis-Hall was a Senior Vice President, U.S. Pharmaceuticals, Medical Affairs for Bristol-Myers Squibb Company. Prior to Bristol-Myers Squibb, Dr. Lewis-Hall was Vice President, Research and Development, Product Development for Pharmacia Corporation and served in a number of positions for Eli Lilly and Company from 1994 through 2002. Dr. Lewis-Hall was Vice Chairperson and an Associate Professor in Howard University College of Medicine's Department of Psychiatry from 1988 through 1994. Dr. Lewis-Hall holds a B.A. in natural sciences from Johns Hopkins University and an M.D. from Howard University Hospital and College of Medicine.

Dr. Mueller is our Executive Vice President, Drug Innovation and Realization, and Chief Scientific Officer, a position he has held since February 2006. In this role, Dr. Mueller is responsible for our global research initiatives, pharmaceutical development, pharmaceutical operations as well as quality assurance and control. From July 2003 to February 2006, Dr. Mueller was our Chief Scientific Officer and Senior Vice President, Drug Discovery and Innovation. Prior to joining Vertex, Dr. Mueller was the Senior Vice President, Research and Development, of Boehringer Ingelheim Pharmaceuticals, Inc., with responsibility for the development of all drug candidates in the company's worldwide portfolio in North America. He led research programs in the areas of immunology, inflammatory cardiovascular disease and gene therapy on a global basis. During his time with Boehringer Ingelheim, Dr. Mueller oversaw the discovery of numerous development candidates and held several positions in basic research, medicinal chemistry and management. Dr. Mueller received both an undergraduate degree and a Ph.D. in chemistry at the Albert Einstein University of Ulm, Germany, where he also holds a Professorship in Theoretic Organic Chemistry. He completed fellowships in quantum pharmacology at Oxford University and in biophysics at Rochester University.

Mr. Smith is our Executive Vice President and Chief Financial Officer, a position he has held since February 2006. From November 2003 to February 2006, he was our Senior Vice President and Chief Financial Officer, and from October 2001 to November 2003, he served as our Vice President and Chief Financial Officer. Prior to joining Vertex, Mr. Smith served as a partner in the Life Science and Technology Practice Group of Ernst & Young LLP, an accounting firm, from 1999 to 2001. Mr. Smith initially joined Ernst & Young's U.K. firm in 1987, and then joined its Boston office in 1995. Mr. Smith currently is a member of the Boards of Directors of Acorda Therapeutics, Inc., Epix Pharmaceuticals, Inc., Infinity Pharmaceuticals, Inc. and TolerRx Inc. Mr. Smith holds a B.A. in accounting and finance from Manchester Metropolitan University, U.K., is a member of the American Institute of Certified Public Accountants and is a Chartered Accountant of England and Wales.

Mr. Kenneth Boger is our Senior Vice President and General Counsel, a position he has held since joining us in 2001. He came to Vertex from the law firm of Kirkpatrick & Lockhart LLP, now known as K&L Gates, where he was a partner specializing in business and corporate law and was a member of the firm's Management Committee. Prior to the merger of Kirkpatrick & Lockhart with the Boston law firm of Warner & Stackpole LLP in 1999, Mr. Boger was a partner at Warner & Stackpole, where he served on its Executive Committee from 1988 to 1997. Mr. Boger holds an A.B. in history from Duke University, an M.B.A. from the Graduate School of Business at the University of Chicago, and a J.D. from Boston College Law School. Mr. Boger is the brother of Dr. Joshua Boger, our Chief Executive Officer.

Mr. Garrison is our Senior Vice President and Catalyst, a position he has held since joining us in December 2005. From June 2001 to December 2005, Mr. Garrison was the founder and President of Bink Inc., a strategic consulting firm. Prior to that, Mr. Garrison was, for 18 years, the Chairman and Chief Executive Officer of Ingalls, Quinn & Johnson, one of New England's largest advertising agencies. Mr. Garrison holds a B.A. in English from Princeton University.

Ms. Kelly-Croswell is our Senior Vice President, Human Resources, a position she has held since July 2007. Ms. Kelly-Croswell served as our Vice President, Human Resources from July 2006 to June 2007. From November 2005 through June 2006, Ms. Kelly-Croswell served as Vice President of Human Resources of NitroMed, Inc., a pharmaceutical company. From February 2004 to November 2005, Ms. Kelly-Croswell served as Senior Vice President, Human Resources at CIGNA, an employee benefits company, for the Health Care Division and Service Operations. From September 2001 to February 2004, Ms. Kelly-Croswell served as Vice President of Human Resources for Global Research and Development for the Monsanto Company, an agricultural products and solutions company that she joined in 1998. Ms. Kelly-Croswell holds a B.S. in Finance and an M.A. in Labor and Industrial Relations from the University of Illinois at Urbana-Champaign.

Mr. Sachdev is our Senior Vice President, Corporate Affairs and Public Policy, a position he has held since he joined us in July 2007. Mr. Sachdev served as Executive Vice President, Health of the Biotechnology Industry Organization (BIO) from April 2005 through June 2007. At BIO, he was the senior executive responsible for managing BIO's Health Section, its Governing Board, and for directing all health care policy and execution. Mr. Sachdev was the Deputy Commissioner for Policy at the FDA from April 2004 through April 2005, and held several other senior positions within the FDA from September 2002 through April 2004. From 1998 to 2002, Mr. Sachdev served as Majority Counsel to the Committee on Energy and Commerce in the U.S. House of Representatives, where he was responsible for bioterrorism, food safety and environmental issues. From 1993 to 1997, Mr. Sachdev practiced law, first at the Chemical Manufacturers Association, and then with the law firm of Ropes & Gray. Mr. Sachdev holds a B.S from Carnegie Mellon University, and a J.D. from the Emory University School of Law.

Mr. Silva is our Vice President and Corporate Controller, a position he has held since September 2008. Mr. Silva joined us in August 2007 as Senior Director, Accounting Operations. Prior to joining us, he was the Vice President, Internal Reporting at Iron Mountain Incorporated from July 2006 until August 2007 and a consultant to Iron Mountain's financing department from April 2005 until July 2006. He was the Finance Director of the Bioscience Technologies Division of Thermo Electron Corporation from 2002 to April 2005. Mr. Silva holds a B.S. in accounting from Assumption College.

Dr. Sanders has been a member of our Board of Directors since 1996, served as our lead outside director from 2003 until 2006 and has served as our Chairman since May 2006. In May 2009, he will resume his role as lead outside director upon Mr. Emmen's planned election as Chairman. He retired in 1994 as Chief Executive Officer and in 1995 as Chairman of Glaxo Inc. From 1990 to 1995, he served as a member of the board of Glaxo plc. From 1981 to 1989, Dr. Sanders held a number of positions at Squibb Corporation, including that of Vice Chairman. Dr. Sanders has served in the past on the boards of Merrill Lynch, Reynolds Metals Co., Morton International Inc. and Fisher Scientific

International. He is currently a director of Biodel Inc., Cephalon, Inc., Genentech, Inc. and Icagen, Inc. Dr. Sanders had his undergraduate education at the University of Texas, and earned an M.D. from the University of Texas Southwestern Medical School.

Mr. Brandt has been a member of our Board of Directors since 2003. Mr. Brandt is Senior Vice President and Chief Financial Officer of Broadcom Corporation, which he joined in March 2007. From September 2005 through March 2007, he was the President, Chief Executive Officer and a member of the Board of Directors of Avanir Pharmaceuticals. Prior to joining Avanir, Mr. Brandt held various positions at Allergan Inc. from 1999 to 2005, including Executive Vice President, Finance and Technical Operations and Chief Financial Officer from February 2005 to September 2005, Executive Vice President, Finance, Strategy and Business Development, and Chief Financial Officer from 2003 until February 2005, and Corporate Vice President and Chief Financial Officer from May 1999 to 2003. From January 2001 to January 2002, he also assumed the duties of President, Global Consumer Eye Care Business, at Allergan. Prior to that, he held various positions with the Boston Consulting Group, most recently serving as Vice President and Partner, and a senior member of the BCG Health Care practice. Mr. Brandt also serves as a director of Dentsply International Inc. Mr. Brandt holds a B.S. in chemical engineering from the Massachusetts Institute of Technology and an M.B.A. from Harvard University.

Dr. Brimblecombe has been a member of our Board of Directors since 1993 and a member of the Board of Vertex Pharmaceuticals (Europe) Ltd. since 2005. He served as Chairman of Vanguard Medica plc from 1991 to 2000, of Core Group plc from 1997 to 1999, of Oxford Asymmetry International plc from 1997 to 2000 and pSivida Ltd. from 2002 to 2007. From 1979 to 1990, he held various Vice Presidential posts in SmithKline & French Laboratories' research and development organization, including Vice President R&D for Europe and Japan. He is currently a Partner in MVM Life Science Partners LLP. He holds Ph.D. and D.Sc. degrees in pharmacology from the University of Bristol, England.

Dr. Collinson has been a member of our Board of Directors since July 2001. He currently serves as a Partner at Forward Ventures. Prior to our merger with Aurora Biosciences Corporation in 2001, Dr. Collinson served as the President, Chief Executive Officer and Chairman of the Board of Aurora. Dr. Collinson held senior management positions with Glaxo Wellcome from December 1994 to June 1998, most recently serving as Co-Chairman, Hospital and Critical Care Therapy Management Team and Director of Hospital and Critical Care. Dr. Collinson received his Ph.D. in physical chemistry from the University of Oxford, England and his M.B.A. from Harvard University.

Dr. Cordes has been a member of our Board of Directors since 2005, and a scientific advisor to us since 1996. Dr. Cordes was the Chairman of Vitae Pharmaceuticals, Inc., a position he held from January 2002 to March 2006. Prior to joining Vitae Pharmaceuticals, Dr. Cordes was a professor of pharmacy at the University of Michigan. Dr. Cordes received a B.S. degree in chemistry from the California Institute of Technology and a Ph.D. in biochemistry from Brandeis University.

Mr. Sachs has been a member of our Board of Directors since 1998. He is a General Partner at Charles River Ventures. From 1998 to 1999, he served as Executive Vice President and General Manager of Ascend Communications, Inc. From 1997 until 1998, Mr. Sachs served as President and Chief Executive Officer of Stratus Computer, Inc. From 1995 to 1997, he served as Executive Vice President and General Manager of the Internet Telecom Business Group at Bay Networks, Inc. From 1993 to 1995, he served as President and Chief Executive Officer at Xylogics, Inc. Mr. Sachs also currently serves as a director of BigBand Networks, Inc. Mr. Sachs holds a B.S.E.E. in electrical engineering from Bucknell University, an M.E.E. in electrical engineering from Cornell University, and an M.B.A. from Northeastern University.

Ms. Ullian has been a member of our Board of Directors since 1997. Since 1996, she has served as President and Chief Executive Officer of Boston Medical Center. From 1994 to 1996, she served as President and Chief Executive Officer of Boston University Medical Center Hospital. From 1987 to 1994, Ms. Ullian served as President and Chief Executive Officer of Faulkner Hospital. She also serves as a director of Thermo Fisher Scientific Inc. and Hologic, Inc. Ms. Ullian holds a B.A. in political science from Tufts University and a M.P.H. from the University of Michigan.

ITEM 1A. RISK FACTORS

RISK FACTORS

Investing in our common stock involves a high degree of risk, and you should carefully consider the risks and uncertainties described below in addition to the other information included or incorporated by reference in this Annual Report on Form 10-K. If any of the following risks or uncertainties actually occurs, our business, financial condition or results of operations would likely suffer, possibly materially. In that case, the trading price of our common stock could decline.

WE EXPECT TO INCUR FUTURE LOSSES, AND WE MAY NEVER BECOME PROFITABLE.

We have incurred significant operating losses each year since our inception, including net losses of $459.9 million, $391.3 million and $206.9 million during 2008, 2007 and 2006, respectively, and expect to incur a significant operating loss in 2009. We expect to continue to incur operating losses until we are able to obtain approval for and successfully commercialize telaprevir, because we are continuing to incur significant operating expenses as we continue the late-stage development of our advanced drug candidates, including telaprevir and VX-770, and continue to invest in research activities. As a result, we believe that it is likely that our expenses will exceed our revenues at least until we begin receiving substantial product revenues. There can be no assurance that any of our drug candidates will be approved or, if approved, will be commercially successful. Our net losses have had and will continue to have an adverse effect on, among other things, our stockholders' equity, total assets and working capital. We expect that losses will fluctuate from quarter to quarter and year to year, and that such fluctuations may be substantial. We cannot predict when we will become profitable, if ever.

WE DEPEND HEAVILY ON THE SUCCESS OF OUR LEAD DRUG CANDIDATE, TELAPREVIR, WHICH IS STILL UNDER DEVELOPMENT. IF WE ARE UNABLE TO COMMERCIALIZE TELAPREVIR, OR EXPERIENCE DELAYS IN DOING SO, OUR BUSINESS WILL BE MATERIALLY HARMED.

We are investing a substantial portion of our personnel and financial resources in the development of telaprevir, and we believe that a significant portion of the value of our company relates to the commercial potential of telaprevir. The clinical development and commercial success of telaprevir will depend on several factors, including the following:

- successful completion of clinical trials with favorable outcomes relative to current standards of care and future competitive therapies;
- receipt and timing of marketing approvals for telaprevir from the FDA and similar foreign regulatory authorities;
- receipt and timing of marketing approvals from the FDA and similar foreign regulatory authorities for products being developed for the treatment of HCV by our competitors, including Schering-Plough's boceprevir;
- additional discussions with the FDA and similar foreign authorities regarding the scope and design of our clinical trials, the quality of our manufacturing process for telaprevir and our clinical trial results;
- establishing and maintaining commercial manufacturing arrangements for telaprevir with third-party manufacturers that are subject to extensive regulation by the FDA, and successfully monitoring those manufacturing operations to ensure they meet our standards and those of regulatory authorities, including the FDA, that extensively monitor pharmaceutical manufacturing facilities;
- our ability to establish telaprevir if approved, as a significant component of any oral combination therapies that may be approved as a treatment for HCV;

- launching commercial sales of telaprevir by us and our collaborators;
- the efficacy and other characteristics, including the side effect profile, of telaprevir relative to existing and future treatments for HCV;
- our ability to increase awareness of the benefits of early treatment for HCV if telaprevir is approved, and to increase the rates of diagnosis of currently undiagnosed patients with HCV infection; and
- acceptance of telaprevir by patients, and in the medical community and with third-party payors.

If the data from our ongoing clinical trials or non-clinical studies regarding the safety or efficacy of telaprevir are not favorable, we may be forced to delay or terminate the clinical development of telaprevir, which would materially harm our business. Further, even if we gain marketing approvals from the FDA and comparable foreign regulatory authorities in a timely manner, we cannot be sure that telaprevir will be commercially successful in the pharmaceutical market. If the results of clinical trials of telaprevir, the anticipated or actual timing of marketing approvals for telaprevir, or the market acceptance of telaprevir, if approved, including treatment reimbursement levels agreed to by third-party payors, do not meet the expectations of investors or public market analysts, the market price of our common stock would likely decline.

WE NEED TO RAISE ADDITIONAL CAPITAL THAT MAY NOT BE AVAILABLE.

We expect to incur substantial expenses as we design and develop existing and future compounds, undertake clinical trials of drug candidates resulting from such compounds, and build our drug supply, regulatory, development and commercial capabilities. We also expect to incur substantial administrative and commercialization expenses in the future. In particular, we expect the continuing development and commercialization of telaprevir to require additional capital beyond our current resources. We anticipate that we will finance these substantial cash needs with some combination of:

- public offerings or private placements of our debt or equity securities or other methods of financing;
- cash received from our existing collaborative agreements;
- cash received from future collaborative agreements;
- existing cash reserves, together with interest earned on those reserves; and
- future product sales.

While we believe that our current cash, cash equivalents and marketable securities would be sufficient to fund our operations for the next twelve months, we may raise additional capital in 2009 and thereafter through public offerings or private placements of our debt or equity securities. Any such capital transactions may or may not be similar to transactions that we have completed in the past. Any equity financings could result in dilution to our then-existing security holders. Any debt financing may be on terms that, among other things, restrict our ability to pay interest and dividends—although we do not intend to pay dividends for the foreseeable future. If adequate funds are not available on acceptable terms, or at all, we may be required to curtail significantly or discontinue one or more of our research, drug discovery 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 us to relinquish rights to certain of our technologies, drugs or drug candidates. Based on many factors, including general economic conditions, additional financing may not be available on acceptable terms, if at all.

ALL OF OUR DRUG CANDIDATES REMAIN SUBJECT TO CLINICAL TESTING AND REGULATORY APPROVAL. IF WE ARE UNABLE TO SUCCESSFULLY DEVELOP AND TEST OUR DRUG CANDIDATES, WE WILL NOT BE SUCCESSFUL.

The success of our business depends primarily upon our ability, and our collaborators' ability, to develop and commercialize our drug candidates, including telaprevir, successfully. Due to the development efforts of our competitors, in order to be successful in a therapeutic area it is often necessary to develop follow-on compounds and/or develop new combination therapies. Our drug candidates are in various stages of development and must satisfy rigorous standards of safety and efficacy before they can be approved by the FDA or other regulatory authorities for sale. To satisfy these standards, we and/or our collaborators must allocate our resources among our various development programs and must engage in expensive and lengthy testing of our drug candidates. These discovery and development efforts for a new pharmaceutical product, including follow-on compounds, are resource-intensive, and may take 10 to 15 years or more. Despite our efforts, our drug candidates may not:

- offer therapeutic or other improvement over existing competitive drugs;
- be proven safe and effective in clinical trials;
- meet applicable regulatory standards;
- be capable of being produced in commercial quantities at acceptable costs; or
- if approved for commercial sale, be successfully marketed as pharmaceutical products.

Positive results in preclinical studies of a drug candidate may not be predictive of similar results in humans during clinical trials, and promising results from earlier clinical trials of a drug candidate may not be replicated in later clinical trials. Findings, including toxicology findings, in nonclinical studies conducted concurrently with clinical trials could result in abrupt changes in our development activities, including the possible cessation of development activities associated with a particular drug candidate or program. Furthermore, results from our clinical trials may not meet the level of statistical significance required by the FDA or other regulatory authorities for approval of a drug candidate.

We and many other companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in earlier-stage clinical trials. Accordingly, the results from the completed preclinical studies and clinical trials and ongoing clinical trials for our drug candidates may not be predictive of the results we may obtain in later stage trials, and may not be predictive of the likelihood of approval of a drug candidate for commercial sale. In addition, from time to time, we report interim data from our clinical trials, including with respect to telaprevir data regarding patients' HCV RNA levels during treatment, at the end-of-treatment or 12 weeks after completing treatment. Interim data are subject to change, and there can be no assurances that interim data will be confirmed upon the analysis of final data. In addition, interim data with respect to a patient's HCV RNA levels may not be predictive of the final SVR rates that will be achieved in the clinical trial.

IF WE ARE UNABLE TO OBTAIN UNITED STATES AND/OR FOREIGN REGULATORY APPROVAL, WE WILL BE UNABLE TO COMMERCIALIZE OUR DRUG CANDIDATES.

Our drug candidates are subject to extensive governmental regulations relating to their development, clinical trials, manufacturing and commercialization. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required in the United States and in most other countries prior to the commercial sale of our drug candidates. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. It is possible that none of the drug candidates we are developing independently, or in collaboration with others, will be approved for marketing.

We have limited experience in conducting and managing the late-stage clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to complete clinical trials and to satisfy the FDA and other countries' regulatory review processes is uncertain and typically takes many years. Our analysis of data obtained from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unanticipated delays or increased costs due to government regulation from future legislation or administrative action or changes in FDA policy during the period of drug development, clinical trials and FDA regulatory review.

Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to successfully commercialize any drug candidate. Furthermore, any regulatory approval to market a drug may be subject to limitations that we do not currently expect on the indicated uses for which we may market the drug. Any such limitations could limit the size of the market for the drug.

We are also subject to numerous foreign regulatory requirements governing the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process includes all of the risks associated with the FDA approval process described above, as well as risks attributable to the satisfaction of foreign requirements. Approval by the FDA does not ensure approval by regulatory authorities outside the United States. Foreign jurisdictions may have different approval procedures than those required by the FDA and may impose additional testing requirements for our drug candidates.

WE ARE INVESTING SIGNIFICANT RESOURCES IN OUR DEVELOPMENT PROGRAM FOR VX-770, BASED PRIMARILY ON DATA FROM A RELATIVELY SMALL CLINICAL TRIAL IN WHICH PATIENTS RECEIVED VX-770 OVER A SHORT DURATION. IF WE ARE UNABLE TO SHOW THE SAFETY AND EFFICACY OF VX-770, OR EXPERIENCE DELAYS IN DOING SO, OUR BUSINESS COULD BE MATERIALLY HARMED.

We are increasing the resources that we are investing in the development of VX-770 and expect to begin a registration program for VX-770 focused on CF patients with the G551D mutation in the first half of 2009. We are initiating this registration program based primarily on data from a Phase 2a clinical trial of VX-770 in 39 patients with CF, in which patients received VX-770 over 14-day and 28-day periods. In order to receive approval for VX-770, we will need to show that it is safe and effective in a larger number of patients than were involved in the Phase 2a clinical trial over significantly longer dosing periods. In addition, our registration program for VX-770 will include two pediatric patient populations in which VX-770 has not previously been studied. Since a substantial portion of the CF population is under age 18, VX-770 potential commercial success will be dependent on not only being able to obtain approval for adult patients, but also for pediatric patients. If we are unable to show the safety and efficacy of VX-770, or experience delays in doing so, our business could be materially harmed.

OUR OUTSTANDING INDEBTEDNESS MAY MAKE IT MORE DIFFICULT TO OBTAIN ADDITIONAL FINANCING OR REDUCE OUR FLEXIBILITY TO ACT IN OUR BEST INTERESTS.

As of December 31, 2008, we had outstanding $287.5 million in aggregate principal amount of 4.75% convertible senior subordinated notes due 2013, or 2013 Notes. The level of our indebtedness could affect us by:

- exposing us to fixed rates of interest, which may be in excess of prevailing market rates;
- making it more difficult to obtain additional financing for working capital, capital expenditures, debt service requirements or other purposes;
- constraining our ability to react quickly in an unfavorable economic climate or to changes in our business or the pharmaceutical industry; or

- requiring the dedication of substantial cash to service the semi-annual interest payments on our outstanding debt, thereby reducing the amount of cash available for other purposes.

ISSUANCES OF ADDITIONAL SHARES OF OUR COMMON STOCK COULD CAUSE THE PRICE OF OUR COMMON STOCK TO DECLINE.

Sales of substantial amounts of our common stock in the open market, or the availability of such shares for sale, could adversely affect the price of our common stock. In addition, the issuance of restricted common stock or common stock upon exercise of any outstanding option would be dilutive, and may cause the market price for a share of our common stock to decline. As of December 31, 2008, we had approximately 151.2 million shares of common stock issued and outstanding. We also had outstanding options to purchase approximately 16.5 million shares of common stock with a weighted-average exercise price of $29.16 per share and 12.4 million shares of common stock issuable upon conversion of our outstanding 2013 Notes at a conversion price of approximately $23.14 of aggregate principal amount per share. Outstanding vested options could be exercised if the market price of our common stock exceeds the applicable exercise price. In addition, we may issue additional common stock or restricted securities in the future as part of our financing activities or business development activities and any such issuances may have a dilutive effect on existing shareholders.

THE RESULTS FROM OUR CLINICAL DEVELOPMENT ACTIVITIES AND THE CLINICAL DEVELOPMENT ACTIVITIES OF OUR COMPETITORS ARE RELEASED PERIODICALLY, AND HAVE OFTEN RESULTED IN SIGNIFICANT VOLATILITY IN THE PRICE OF OUR COMMON STOCK.

We, our collaborators and our competitors periodically provide updates regarding drug development programs typically through press releases, conference calls and presentations at medical conferences. These periodic updates often include interim or final results from clinical trials conducted by us, our collaborators or our competitors and/or information about our or our competitor's expectations regarding future clinical development of our drug candidates or potentially competitive drugs or drug candidates. The timing of the release of information by us regarding our drug development programs is often beyond our control and is influenced by when we receive data from our clinical trials and by the general preference among pharmaceutical companies to disclose clinical data during medical conferences. In addition, because clinical trials of drug candidates for the treatment of HCV often occur over two years, the information that we, our collaborators and our competitors disclose is often based on interim data and subject to significant interpretation by investors. Any new information regarding drug candidates or potentially competitive drugs or drug candidates, and in particular any new information regarding telaprevir and potentially competitive HCV drug candidates, can substantially affect investors' perceptions regarding our future prospects.

IF CLINICAL TRIALS FOR OUR DRUG CANDIDATES ARE PROLONGED OR DELAYED, WE MAY BE UNABLE TO COMMERCIALIZE OUR DRUG CANDIDATES ON A TIMELY BASIS, WHICH WOULD REQUIRE US TO INCUR ADDITIONAL COSTS, WOULD DELAY OUR RECEIPT OF ANY PRODUCT REVENUE AND COULD HARM OUR COMPETITIVE POSITION.

We cannot predict whether or not we will encounter problems with any of our completed, ongoing or planned clinical trials that will cause us or regulatory authorities to delay or suspend clinical trials, or delay the analysis of data from our completed or ongoing clinical trials. Any of the following could delay the clinical development of our drug candidates:

- ongoing discussions with the FDA or comparable foreign authorities regarding the scope or design of our clinical trials and the number of clinical trials we must conduct;

- delays in receiving or the inability to obtain required approvals from IRBs at one or more of the institutions at which a clinical trial is conducted or other reviewing entities at clinical sites selected for participation in our clinical trials;

- delays in enrolling volunteers or patients into clinical trials, including as a result of low numbers of patients that meet the eligibility criteria for the trial;
- a lower than anticipated retention rate of volunteers or patients in clinical trials;
- the need to repeat clinical trials as a result of inconclusive results or unforeseen complications in testing;
- inadequate supply or deficient quality of drug candidate materials or other materials necessary for the conduct of our clinical trials;
- unfavorable FDA inspection and review of a manufacturing facility for a drug candidate or its relevant manufacturing records or a clinical trial site or records of any clinical or preclinical investigation;
- serious and unexpected drug-related side effects experienced by participants in our clinical trials; or
- the placement by the FDA of a clinical hold on a trial.

Our ability to enroll patients in our clinical trials in sufficient numbers and on a timely basis will be subject to a number of factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites, the availability of effective treatments for the relevant disease, the number of other clinical trials competing for patients in the same indication and the eligibility criteria for the clinical trial. In addition, subjects may drop out of our clinical trials or may be lost to follow-up medical evaluation after treatment ends, and this could possibly impair the validity or statistical significance of the trials. Delays in patient enrollment or unforeseen drop-out rates may result in increased costs and longer development times. While all or a portion of these additional costs may be covered by payments under our collaborative agreements, we bear all of the costs for our development candidates for which we have no financial support from a collaborator.

We, our collaborators, the FDA or other applicable regulatory authorities may suspend clinical trials of a drug candidate at any time if we or they believe the subjects or patients participating in such clinical trials are being exposed to unacceptable health risks or for other reasons. Any such suspension could materially adversely affect the development of a particular drug candidate and our business.

In addition, it is impossible to predict whether legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be. If we experience any such problems, we may not have the financial resources to continue development of the drug candidate that is affected or the development of any of our other drug candidates. Any delay in the approval of any of our drug candidates, including telaprevir, could have a material adverse impact on our ability to effectively commercialize the drug candidate after approval if one or more of our competitors are able to bring competing therapies to market before or in closer proximity to our drug candidates.

IF WE ARE UNABLE TO DEVELOP EFFECTIVE INDEPENDENT SALES AND MARKETING CAPABILITIES OR ESTABLISH THIRD-PARTY RELATIONSHIPS FOR THE COMMERCIALIZATION OF OUR DRUG CANDIDATES, WE WILL NOT BE ABLE TO SUCCESSFULLY COMMERCIALIZE OUR DRUG CANDIDATES, AND IN PARTICULAR TELAPREVIR, EVEN IF WE ARE ABLE TO OBTAIN REGULATORY APPROVAL.

We currently have limited experience as a company in sales and marketing or with respect to pricing and obtaining adequate third-party reimbursement for drugs. We will need to either develop marketing capabilities and an independent sales force or enter into arrangements with third parties to sell and market our drug candidates, if they are approved for sale by regulatory authorities.

In order to market telaprevir in North America if it is approved, we intend to build a marketing organization and a specialized sales force, which will require substantial efforts and significant

management and financial resources. In addition, if VX-770 is approved, we would also need to establish a small sales force in North America and Europe for VX-770. While we intend to stage our commitments to the extent possible in consideration of the development timelines, in order to support an effective launch of telaprevir, we will need to make significant financial commitments to our marketing organization prior to receiving regulatory approval. We will need to devote significant effort, in particular, to recruiting individuals with experience in the sales and marketing of pharmaceutical products. Competition for personnel with these skills is very high and may be particularly difficult for us since telaprevir is still an investigational drug candidate and we will be competing with companies that are currently marketing successful drugs. As a result, we may not be able to successfully develop our own marketing capabilities or independent sales force for telaprevir in North America in order to support an effective launch of telaprevir if it is approved for sale.

We have granted commercialization rights to other pharmaceutical companies with respect to certain of our drug candidates in specific geographic locations, including telaprevir, Aurora kinase inhibitors and AVN-944 (VX-944). To the extent that our collaborators have commercial rights to our drugs, any revenues we receive from any approved drugs will depend primarily on the sales and marketing efforts of others. We do not know whether we will be able to enter into additional third-party sales and marketing arrangements with respect to any of our other drug candidates on acceptable terms, if at all, or whether we will be able to leverage the sales and marketing capabilities we intend to build for telaprevir in order to market and sell any other drug candidate if it is approved for sale.

IF OUR COMPETITORS BRING SUPERIOR DRUGS TO MARKET OR BRING THEIR DRUGS TO MARKET BEFORE WE DO, WE MAY BE UNABLE TO FIND A MARKET FOR OUR DRUG CANDIDATES.

Our drug candidates in development may not be able to compete effectively with drugs that are currently on the market or new drugs that may be developed by others. No assurances can be given that telaprevir will be approved for marketing prior to competing therapies, including Schering-Plough's boceprevir, or at all. There are many other companies developing drugs for the same indications that we are pursuing in development in particular for the treatment of HCV infection. In order to compete successfully in these areas, we must demonstrate improved safety, efficacy and ease of manufacturing and gain market acceptance over competing drugs that may receive regulatory approval before or after our drug candidates, and over those that currently are marketed. Many of our competitors, including major pharmaceutical companies such as Schering-Plough, GlaxoSmithKline, Wyeth, Pfizer, Roche, Amgen, Novartis and Johnson & Johnson possess substantially greater financial, technical and human resources than we possess. In addition, many of our competitors have significantly greater experience than we have in conducting preclinical and nonclinical testing and human clinical trials of drug candidates, scaling up manufacturing operations and obtaining regulatory approvals of drugs and manufacturing facilities. Accordingly, our competitors may succeed in obtaining regulatory approval for drugs more rapidly than we do. If we obtain regulatory approval and launch commercial sales of our drug candidates, we also will compete with respect to manufacturing efficiency and sales and marketing capabilities, areas in which we currently have limited experience.

We are aware of a number of companies that are developing new treatments for HCV infection including protease inhibitor compounds like telaprevir, such as Schering-Plough's boceprevir, polymerase inhibitor compounds and advanced interferons. Even if we are able to obtain marketing approval for telaprevir, it is possible that one or more of these therapies could be approved prior to or shortly after we obtain such approval for telaprevir, which we believe may negatively impact telaprevir sales.

IF PHYSICIANS, PATIENTS AND THIRD-PARTY PAYORS DO NOT ACCEPT OUR FUTURE DRUGS, WE MAY BE UNABLE TO GENERATE SIGNIFICANT REVENUE, IF ANY.

Even if our drug candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients and health care payors. We believe that effectively marketing telaprevir will

require substantial efforts, both prior to launch and after approval. Physicians may elect not to recommend our drugs for a variety of reasons including:

- the anticipated market introduction of competitive drugs;
- lower demonstrated clinical safety and efficacy compared to other drugs;
- lack of cost-effectiveness;
- lack of availability of reimbursement from third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse side effects;
- other potential advantages of alternative treatment methods; and
- ineffective marketing and distribution support.

If our approved drugs fail to achieve market acceptance, we will not be able to generate significant revenue.

IF THE GOVERNMENT AND OTHER THIRD-PARTY PAYORS FAIL TO PROVIDE COVERAGE AND ADEQUATE PAYMENT RATES FOR OUR FUTURE DRUGS, OUR REVENUE AND PROSPECTS FOR PROFITABILITY WILL BE HARMED.

In both domestic and foreign markets, our sales of any future drugs will depend in part upon the availability of reimbursement from third-party payors. Such third-party payors include government health programs such as Medicare, managed care providers, private health insurers and other organizations. These third-party payors are increasingly attempting to contain health care costs by demanding price discounts or rebates and limiting both the types and variety of drugs that they will cover and the amounts that they will pay for these drugs. As a result, they may not cover or provide adequate payment for our future drugs. We might need to conduct post-marketing studies in order to demonstrate the cost-effectiveness of any future drugs to such payors' satisfaction. Such studies might require us to commit a significant amount of management time and financial and other resources. Our future drugs might not ultimately be considered cost-effective. Adequate third-party reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on investment in product development.

Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that are already reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or imperfections in Medicare or Medicaid data used to calculate these rates. Net prices for drugs may be reduced by mandatory discounts or rebates required by government health care programs. In addition, legislation has been introduced in Congress that, if enacted, would permit more widespread importation of drugs from foreign countries into the United States, which may include importation from countries where the drugs are sold at lower prices than in the United States. Such legislation, or similar regulatory changes or relaxation of laws that restrict imports of drugs from other countries, could reduce the net price we receive for our marketed drugs.

IF OUR PROCESSES AND SYSTEMS ARE NOT COMPLIANT WITH REGULATORY REQUIREMENTS, WE COULD BE SUBJECT TO DELAYS IN FILING NDAs OR RESTRICTIONS ON MARKETING OF DRUGS AFTER THEY HAVE BEEN APPROVED.

We currently are developing drug candidates for regulatory approval for the first time since our inception, and are in the process of implementing regulated processes and systems required to obtain and maintain regulatory approval for our drug candidates. Certain of these processes and systems for conducting clinical trials and manufacturing material must be compliant with regulatory requirements before we can apply for regulatory approval for our drug candidates. These processes and systems will

be subject to continual review and periodic inspection by the FDA and other regulatory bodies. If we are unable to achieve compliance in a timely fashion, or if compliance issues are identified at any point in the development and approval process, we may experience delays in filing for regulatory approval for our drug candidates, or delays in obtaining regulatory approval after filing. In addition, any later discovery of previously unknown problems or safety issues with approved drugs or manufacturing processes, or failure to comply with regulatory requirements, may result in restrictions on such drugs or manufacturing processes, withdrawal of drugs from the market, the imposition of civil or criminal penalties or a refusal by the FDA and/or other regulatory bodies to approve pending applications for marketing approval of new drugs or supplements to approved applications, any of which could have a material adverse effect on our business. In addition, we are a party to agreements that transfer responsibility for complying with specified regulatory requirements, such as filing and maintenance of marketing authorizations and safety reporting or compliance with manufacturing requirements, to our collaborators and third-party manufacturers. If our collaborators or third-party manufacturers do not fulfill these regulatory obligations, any drugs for which we or they obtain approval may be withdrawn from the market, which would have a material adverse effect on our business.

IF WE OBTAIN REGULATORY APPROVALS, OUR DRUG CANDIDATES WILL BE SUBJECT TO ONGOING REGULATORY REVIEW. IF WE FAIL TO COMPLY WITH CONTINUING UNITED STATES AND APPLICABLE FOREIGN REGULATIONS, WE COULD LOSE THOSE APPROVALS, AND OUR BUSINESS WOULD BE SERIOUSLY HARMED.

If we receive regulatory approval of any drug candidates that we are developing, we will be subject to continuing regulatory review, including the review of clinical results that are reported after our drug candidates become commercially available, approved drugs. Drugs are more widely used by patients once approval has been obtained, therefore side effects and other problems may be observed after approval that were not seen or anticipated during pre-approval clinical trials. In addition, the manufacturers and the manufacturing facilities we engage to make any of our drug candidates will also be subject to periodic review and inspection by the FDA. The subsequent discovery of previously unknown problems with the drug, manufacturers or manufacturing facilities may result in restrictions on the drug, manufacturers or manufacturing facilities, including withdrawal of the drug from the market or our inability to use the facilities to make our drug. If we fail to comply with applicable continuing regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approval, product recalls and seizures, operating restrictions and criminal prosecutions.

OUR DRUG DEVELOPMENT EFFORTS ARE DATA-DRIVEN AND THEREFORE POTENTIALLY SUBJECT TO ABRUPT CHANGES IN EXPECTED OUTCOMES.

Small molecule drug discovery and development involve, initially, the identification of chemical compounds that may have promise as treatments for specific diseases. Once identified as drug candidates, compounds are subjected to years of testing in a laboratory setting, in animals and in humans. Our ultimate objective is to determine whether the drug candidates have physical characteristics, both intrinsically and in animal and human systems, and a toxicological profile, that are compatible with clinical and commercial success in treatment of the disease being targeted. Throughout this process, experiments are conducted and data are gathered that could reinforce a decision to move to the next step in the investigation process for a particular drug candidate, could result in uncertainty over the proper course to pursue, or could result in the termination of further drug development efforts with respect to the compound being evaluated. We monitor the results of our discovery research and our nonclinical studies and clinical trials and regularly evaluate and re-evaluate our portfolio investments with the objective of balancing risk and potential return in view of new data and scientific, business and commercial insights. This process can result in relatively abrupt changes in focus and priority as new information comes to light and we gain additional insights into ongoing programs and potential new programs.

WE DEPEND ON OUR COLLABORATORS TO WORK WITH US TO DEVELOP, MANUFACTURE AND COMMERCIALIZE MANY OF OUR DRUG CANDIDATES.

We have granted development and commercialization rights to telaprevir to Janssen (worldwide other than North America and Far East) and to Mitsubishi Tanabe (Far East). We expect to receive significant financial support under our Janssen collaboration agreement, as well as meaningful technical and manufacturing contributions to the telaprevir program. The success of some of our key in-house programs, such as for telaprevir, is dependent upon the continued financial and other support that our collaborators have agreed to provide.

For some drug candidates on which we are not currently focusing our development efforts, we have granted worldwide rights to a collaborator, as in our collaborations with Merck and Avalon.

The success of our collaborations depends on the efforts and activities of our collaborators. Each of our collaborators has significant discretion in determining the efforts and resources that it will apply to the collaboration. Our existing collaborations may not be scientifically or commercially successful, and we may fail in our attempts to establish further collaborations to develop our drug candidates on acceptable terms.

The risks that we face in connection with these existing and any future collaborations include the following:

- Our collaboration agreements are subject to termination under various circumstances, including, as in the case of our agreements with Janssen and Merck, termination without cause. Any such termination could have an adverse material effect on our financial condition and/or delay the development and commercial sale of our drug candidates, including telaprevir.

- Our collaborators may change the focus of their development and commercialization efforts or may have insufficient resources to effectively develop our drug candidates. Pharmaceutical and biotechnology companies historically have re-evaluated their development and commercialization priorities following mergers and consolidations, which have been common in recent years in these industries. The ability of some of our drug candidates to reach their potential could be limited if our collaborators decrease or fail to increase development or commercialization efforts related to those drug candidates.

- Our collaboration agreements may have the effect of limiting the areas of research and development that we may pursue, either alone or in collaboration with third parties.

- Our collaborators may develop and commercialize, either alone or with others, drugs that are similar to or competitive with the drugs or drug candidates that are the subject of the collaboration with us.

IF WE ACQUIRE OR LICENSE TECHNOLOGIES, RESOURCES OR DRUG CANDIDATES, WE WILL INCUR A VARIETY OF COSTS AND MAY NEVER REALIZE BENEFITS FROM THE TRANSACTION.

If appropriate opportunities become available, we might attempt to license or acquire technologies, resources and drugs or drug candidates, including potentially complimentary HCV therapies. The process of negotiating the license or acquisition might result in operating difficulties and expenditures and whether or not any such transaction is ever consummated, might require significant management attention that would otherwise be available for ongoing development of our business. Moreover, even if we complete a license or other transaction, we might never realize the anticipated benefits of the transaction. Future licenses or acquisitions could result in potentially dilutive issuances of equity securities, the incurrence of debt, contingent liabilities, or impairment expenses related to goodwill, and impairment or amortization expenses related to other intangible assets, which could harm our financial condition.

IF WE ARE UNABLE TO ATTRACT AND RETAIN COLLABORATORS FOR THE DEVELOPMENT AND COMMERCIALIZATION OF OUR DRUGS AND DRUG CANDIDATES, WE MAY NOT BE ABLE TO FULLY FUND OUR DEVELOPMENT AND COMMERCIALIZATION ACTIVITIES.

Our collaborators have agreed to fund portions of our pharmaceutical development programs and/or to conduct the development and commercialization of specified drug candidates and, if they are approved, drugs. In exchange, we have given them technology, sales and marketing rights relating to those drugs and drug candidates. Some of our corporate collaborators have rights to control the planning and execution of drug development and clinical programs including for our Aurora kinase inhibitor drug candidates and AVN-944 (VX-944). Our collaborators may exercise their control rights in ways that may negatively affect the timing and success of those programs. Our collaborations are subject to termination rights by the collaborators. If any of our collaborators were to terminate its relationship with us, or fail to meet its contractual obligations, that action could have a material adverse effect on our ability to develop, manufacture and market any drug candidates being developed under the collaboration and could adversely affect our revenues and net loss. As part of our ongoing strategy, we expect to seek additional collaborative arrangements, which may not be available to us on favorable terms, or at all, to develop and commercialize our drug candidates in the future. We plan to seek a collaborator for our JAK3 inhibitors, including VX-509. No assurance can be given that these efforts will be successful. Even if we are able to establish acceptable collaborative arrangements in the future, these collaborations may not be successful.

OUR INVESTMENT IN THE CLINICAL DEVELOPMENT AND MANUFACTURE OF A COMMERCIAL SUPPLY OF TELAPREVIR MAY NOT RESULT IN ANY BENEFIT TO US IF TELAPREVIR IS NOT APPROVED FOR COMMERCIAL SALE.

We are investing significant resources in the clinical development of telaprevir. Telaprevir is the first drug candidate for which we expect to perform all activities related to late-stage development, drug supply, registration and commercialization in a major market. We are planning for and investing significant resources now in preparation for application for marketing approval, commercial supply and sales and marketing. We also are incurring significant costs to obtain telaprevir commercial supply, including $17.4 million in 2008 and $75.4 million in 2007. Our engagement in these resource-intensive activities puts significant investment at risk if we do not obtain regulatory approval and successfully commercialize telaprevir in North America. There is no assurance that our development of telaprevir will lead successfully to regulatory approval, or that obtaining regulatory approval will lead to commercial success. If telaprevir is not approved for commercial sale or if its development is delayed for any reason, our full investment in telaprevir may be at risk, we may face significant costs to dispose of unusable inventory, and our business and financial condition could be materially adversely affected.

WE DEPEND ON THIRD-PARTY MANUFACTURERS, INCLUDING SOLE SOURCE SUPPLIERS, TO MANUFACTURE CLINICAL TRIAL MATERIALS FOR CLINICAL TRIALS AND EXPECT TO CONTINUE TO RELY ON THEM TO MEET OUR COMMERCIAL SUPPLY NEEDS FOR ANY DRUG CANDIDATE THAT IS APPROVED FOR SALE. WE MAY NOT BE ABLE TO ESTABLISH OR MAINTAIN THESE RELATIONSHIPS AND COULD EXPERIENCE SUPPLY DISRUPTIONS OUTSIDE OF OUR CONTROL.

We currently rely on a worldwide network of third-party manufacturers to manufacture and distribute our drug candidates for clinical trials, and we expect that we will continue to do so to meet our commercial supply needs for these drugs, including telaprevir, if they are approved for sale. As a result of our reliance on these third-party manufacturers and suppliers, including sole source suppliers of certain components of our drug candidates and drugs, we may be subject to significant supply disruptions outside of our control. Our supply chain for sourcing raw materials and manufacturing drug product ready for distribution is a multi-step international endeavor in which we rely on third-party contract manufacturers in Asia, for the supply of raw materials, and in the European Union and the United States for the application of specific manufacturing processes for the conversion of raw

materials into drug substance and drug substance into final dosage form. Establishing and managing this global supply chain requires significant financial commitments, experienced personnel and the creation or expansion of numerous third-party contractual relationships. There can be no assurance that we will be able to establish and maintain commercial supply chains on commercially reasonable terms, or at all, in order to support a timely launch of telaprevir or any of our other drug candidates

We currently require for our own use, and are responsible to Janssen and Mitsubishi Tanabe for, a supply of telaprevir for clinical trials in North America and the European Union, respectively. We will require a supply of telaprevir for sale in North America if we are successful in obtaining marketing approval. We are in the process of transferring technical information regarding the manufacture of telaprevir to Janssen so that Janssen will be able to manufacture telaprevir, if approved, for sale in Janssen's territories and as a secondary supply source of drug substance for us. While we believe there are multiple third parties capable of providing most of the materials and services we need in order to manufacture and distribute telaprevir, and supply of materials which cannot be second-sourced can be managed with inventory planning, there is a risk that we may underestimate or overestimate demand, and the manufacturing capacity, for which we planned and contracted with third-party manufacturers, may not be sufficient or may result in more inventory than is necessary. In addition, because of the significant lead times involved in our supply chain for telaprevir, we may have less flexibility to adjust our supply in response to changes in demand than if we had shorter lead times.

We currently require a supply of VX-770 for clinical trials in North America and Europe, and will require a supply of VX-770 for sale in North America and Europe, if we are successful in obtaining marketing approval. We are manufacturing VX-770 through our third-party manufacturer network to meet our clinical supply needs and are focused on completing the technical development work and commercial formulation of VX-770. Over the next several years, we will need to expand our relationships with the third-party manufacturers that comprise our supply chain for telaprevir or establish new relationships with third-party manufacturers in order to establish a supply chain for VX-770 and support the potential commercial launch and subsequent commercial supply of VX-770.

Even if we successfully establish arrangements with third-party manufacturers, supply disruptions may result from a number of factors including shortages in product raw materials, labor or technical difficulties, regulatory inspections or restrictions, shipping or customs delays or any other performance failure by any third-party manufacturer on which we rely.

Any supply disruptions could impact the timing of our clinical trials and the commercial launch of any approved pharmaceutical drugs. Furthermore, we may be required to modify our production methods to permit us to economically manufacture our drugs for commercial launch and sale. These modifications may require us to re-evaluate our resources and the resources of our third-party manufacturers, which could result in abrupt changes in our production methods and supplies. Upon approval of a pharmaceutical drug for sale, if any, we similarly may be at risk of supply chain disruption for our commercial drug supply. In the course of its services, a contract manufacturer may develop process technology related to the manufacture of our drug candidates that the manufacturer owns, either independently or jointly with us. This would increase our reliance on that manufacturer or require us to obtain a license from that manufacturer in order to have our products manufactured by other suppliers utilizing the same process.

WE RELY ON THIRD PARTIES TO CONDUCT OUR CLINICAL TRIALS, AND THOSE THIRD PARTIES MAY NOT PERFORM SATISFACTORILY, INCLUDING FAILING TO MEET ESTABLISHED DEADLINES FOR THE COMPLETION OF SUCH TRIALS.

We do not have the ability to independently conduct clinical trials for our drug candidates, and we rely on third parties such as contract research organizations, to help manage our clinical trial process and on medical institutions and clinical investigators to enroll qualified patients and conduct our clinical trials. Our reliance on these third parties for clinical development activities reduces our control over these activities. Accordingly, these third-party contractors may not complete activities on schedule,

or may not conduct our clinical trials in accordance with regulatory requirements or our trial design. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be required to replace them. Although we believe that there are a number of other third-party contractors we could engage to continue these activities, it may result in a delay of the affected trial. If clinical trials are not conducted in accordance with our contractual expectations or regulatory requirements, action by regulatory authorities might significantly and adversely affect the conduct or progess of these trials. Accordingly, our efforts to obtain regulatory approvals for and commercialize our drug candidates could be delayed.

RISKS ASSOCIATED WITH OUR INTERNATIONAL BUSINESS RELATIONSHIPS COULD MATERIALLY ADVERSELY AFFECT OUR BUSINESS.

We have manufacturing, collaborative and clinical trial relationships, and we and our collaborators are seeking approval for our drug candidates, outside the United States. In addition, we expect that if telaprevir is approved for commercial sale, a significant portion of our commercial supply chain, including sourcing of raw materials and manufacturing, will be located in Asia and the European Union. Consequently, we are, and will continue to be, subject to risks related to operating in foreign countries. Risks associated with conducting operations in foreign countries include:

- differing regulatory requirements for drug approvals in foreign countries;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses or reduced revenues, and other obligations incident to doing business or operating a subsidiary in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations could materially adversely affect our business.

IF WE ARE UNABLE TO REALIZE THE EXPECTED BENEFITS OF OUR DRUG DISCOVERY CAPABILITIES AND OTHER TECHNOLOGIES, WE MAY NOT BE ABLE TO COMPETE IN THE MARKETPLACE.

The pharmaceutical research field is characterized by rapid technological progress and intense competition. As a result, we may not realize the expected benefits from our integrated drug discovery capabilities and technologies. For example, a large pharmaceutical company, with significantly more resources than we have, could pursue a systematic approach to the discovery of drugs based on gene families, using proprietary drug targets, compound libraries, novel chemical approaches, structural protein analysis and information technologies. Such a company might identify broadly applicable compound classes faster and more effectively than we do. Further, we believe that interest in the application of structure-based drug design, parallel drug design and related approaches has accelerated as the strategies have become more widely understood. Businesses, academic institutions, governmental

agencies and other public and private research organizations are conducting research to develop technologies that may compete with those we use. It is possible that our competitors could acquire or develop technologies that would render our technology obsolete or noncompetitive. For example, a competitor could develop information technologies that accelerate the atomic-level analysis of potential compounds that bind to the active site of a drug target, and predict the absorption, toxicity, and relative ease-of-synthesis of candidate compounds. If we were unable to access the same technologies at an acceptable price, or at all, our business could be adversely affected.

IF WE FAIL TO EXPAND OUR HUMAN RESOURCES AND MANAGE OUR GROWTH EFFECTIVELY, OUR BUSINESS MAY SUFFER.

We expect that if our clinical drug candidates continue to progress in development, we continue to build our commercial organization and our drug discovery efforts continue to generate drug candidates, we will require significant additional investment in personnel, management systems and resources. For example, the number of our full-time employees increased by 16% in 2008, and we expect to experience additional growth in 2009. Because our drug discovery and development activities are highly technical in nature, we require the services of highly qualified and trained scientists who have the skills necessary to conduct these activities. In addition, as we attempt to grow our capabilities with respect to clinical development, regulatory affairs, quality control and sales and marketing, we need to attract and retain employees with experience in these fields. We face intense competition for our personnel from our competitors, our collaborators and other companies throughout our industry. Moreover, the growth of local biotechnology companies and the expansion of major pharmaceutical companies into the Boston area have increased competition for the available pool of skilled employees, especially in technical fields, and the high cost of living in the Boston and San Diego areas makes it difficult to attract employees from other parts of the country to these areas. Our ability to commercialize our drug candidates, achieve our research and development objectives, and satisfy our commitments under our collaboration agreements depends on our ability to respond effectively to these demands and expand our internal organization to accommodate additional anticipated growth. If we are unable to manage to hire qualified personnel or manage our growth effectively, there could be a material adverse effect on our business.

THE LOSS OF THE SERVICES OF KEY EMPLOYEES OR THE FAILURE TO EFFECTIVELY INTEGRATE KEY EMPLOYEES COULD NEGATIVELY IMPACT OUR BUSINESS AND FUTURE GROWTH.

Our future success will depend in large part on our ability to retain the services of our key scientific and management personnel and to integrate new scientific and management personnel into our business. As we expand our capabilities in anticipation of the possible launch of commercial products, a loss of key personnel or a failure to properly integrate new personnel could be disruptive. We have entered into employment agreements with some individuals and provide compensation-related benefits to all of our key employees that vest over time and therefore induce them to remain with us. However, the employment agreements can be terminated by the employee on relatively short notice. The value to employees of stock-related benefits that vest over time—such as options and restricted stock—will be significantly affected by movements in our stock price that we cannot control, and may at any point in time be insufficient to counteract more lucrative offers from other companies. A failure to retain, as well as hire, train and effectively integrate into our organization a sufficient number of qualified scientists, professionals, sales personnel and senior management would negatively affect our business and our ability to grow our business.

IF OUR PATENTS DO NOT PROTECT OUR DRUGS, OR OUR DRUGS INFRINGE THIRD-PARTY PATENTS, WE COULD BE SUBJECT TO LITIGATION AND SUBSTANTIAL LIABILITIES.

We have numerous patent applications pending in the United States, as well as foreign counterparts in other countries. Our success will depend, in significant part, on our ability to obtain

and maintain United States and foreign patent protection for our drugs, their uses and our processes, to preserve our trade secrets and to operate without infringing the proprietary rights of third parties. We do not know whether any patents will issue from any of our patent applications or, even if patents issue or have issued, that the issued claims will provide us with any significant protection against competitive products or otherwise be valuable commercially. Legal standards relating to the validity of patents and the proper scope of their claims in the pharmaceutical field are still evolving, and there is no consistent law or policy regarding the valid breadth of claims in biopharmaceutical patents or the effect of prior art on them. If we are not able to obtain adequate patent protection, our ability to prevent competitors from making, using and selling similar drugs will be limited. Furthermore, our activities may infringe the claims of patents held by third parties. Defense and prosecution of infringement or other intellectual property claims, as well as participation in other inter-party proceedings, can be expensive and time-consuming, regardless of whether or not the outcome is favorable to us. If the outcome of any such litigation or proceeding were adverse, we could be subject to significant liabilities to third parties, could be required to obtain licenses from third parties or could be required to cease sales of affected drugs, any of which outcomes could have a material adverse effect on our business.

OUR BUSINESS HAS A SUBSTANTIAL RISK OF PRODUCT LIABILITY CLAIMS. IF WE ARE UNABLE TO OBTAIN APPROPRIATE LEVELS OF INSURANCE, A PRODUCT LIABILITY CLAIM COULD ADVERSELY AFFECT OUR BUSINESS.

Our business exposes us to significant potential product liability risks that are inherent in the development, manufacturing and sales and marketing of human therapeutic products. We currently have clinical trial insurance and will seek to obtain product liability insurance prior to the sales and marketing of any of our drug candidates. However, our insurance may not provide adequate coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to maintain current amounts of insurance coverage or obtain additional or sufficient insurance at a reasonable cost to protect against losses that could have a material adverse effect on us. If a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as uncovered damages awards resulting from a claim brought successfully against us. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct significant financial and managerial resources to such defense, and adverse publicity is likely to result.

IF WE DO NOT COMPLY WITH LAWS REGULATING THE PROTECTION OF THE ENVIRONMENT AND HEALTH AND HUMAN SAFETY, OUR BUSINESS COULD BE ADVERSELY AFFECTED.

Our research and development efforts involve the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Although we maintain workers' compensation insurance to cover us for costs we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. Due to the small amount of hazardous materials that we generate, we have determined that the cost to secure insurance coverage for environmental liability and toxic tort claims far exceeds the benefits. Accordingly, we do not maintain any insurance to cover pollution conditions or other extraordinary or unanticipated events relating to our use and disposal of hazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

WE HAVE ADOPTED ANTI-TAKEOVER PROVISIONS AND ARE SUBJECT TO MASSACHUSETTS CORPORATE LAWS THAT MAY FRUSTRATE ANY ATTEMPT TO REMOVE OR REPLACE OUR CURRENT MANAGEMENT.

Our corporate charter and by-law provisions, Massachusetts state laws, and our stockholder rights plan may discourage certain types of transactions involving an actual or potential change of control of Vertex that might be beneficial to us or our security holders. Our charter provides for staggered terms for the members of the Board of Directors. Our by-laws grant the directors a right to adjourn annual meetings of stockholders, and certain provisions of our by-laws may be amended only with an 80% stockholder vote. Pursuant to our stockholder rights plan, each share of common stock has an associated preferred share purchase right. The rights will not trade separately from the common stock until, and are exercisable only upon, the acquisition or the potential acquisition through tender offer by a person or group of 15% or more of the outstanding common stock. We may issue shares of any class or series of preferred stock in the future without stockholder approval and upon such terms as our Board of Directors may determine. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any class or series of preferred stock that may be issued in the future. Massachusetts state law prohibits us from engaging in specified business combinations, unless the combination is approved or consummated in a prescribed manner, and prohibits voting by any stockholder who acquires 20% or more of our voting stock without stockholder approval. As a result, stockholders or other parties may find it more difficult to remove or replace our current management.

OUR STOCK PRICE MAY FLUCTUATE BASED ON FACTORS BEYOND OUR CONTROL.

Market prices for securities of companies such as Vertex are highly volatile. From January 1, 2007 to December 31, 2008, our common stock traded between $13.84 and $41.42 per share. The market for our stock, like that of other companies in the biotechnology field, has from time to time experienced significant price and volume fluctuations that are unrelated to our operating performance. The future market price of our securities could be significantly and adversely affected by factors such as:

- announcements of results of clinical trials or nonclinical studies relating to our drug candidates or those of our competitors;
- announcements of financial results and other operating performance measures, or capital structuring or financing activities;
- technological innovations or the introduction of new drugs by our competitors;
- government regulatory action;
- public concern as to the safety of drugs developed by others;
- developments in patent or other intellectual property rights or announcements relating to these matters;
- developments in domestic and international governmental policy or regulation, for example relating to intellectual property rights;
- developments relating specifically to other companies and market conditions for pharmaceutical and biotechnology stocks or stocks in general; and
- general worldwide or national economic, political and capital market conditions.

OUR ESTIMATES OF OUR LIABILITY UNDER OUR KENDALL SQUARE LEASE MAY BE INACCURATE.

We leased a 290,000 square foot facility in Kendall Square, Cambridge, Massachusetts in January 2003 for a 15-year term. We currently are not occupying the entire facility. We have sublease arrangements in place for the remaining rentable square footage of the facility. In determining our

obligations under the lease for the part of the facility that we are not occupying, we have made certain assumptions relating to the time necessary to sublease the space after the expiration of the initial subleases, projected future sublease rental rates and the anticipated durations of future subleases. Our estimates have changed in the past, and may change in the future, resulting in additional adjustments to the estimate of liability, and the effect of any such adjustments could be material.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K and, in particular, the description of our Business set forth in Item 1, the Risk Factors set forth in this Item 1A and our Management's Discussion and Analysis of Financial Condition and Results of Operations set forth in Item 7 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 for telaprevir, VX-770 and other drug candidates under development by us and our collaborators;
- our expectations regarding the number of patients that will be evaluated, the trial design that will be utilized, the anticipated date by which enrollment will be completed and the expected date by which SVR data, interim data and/or final data will be available and/or publicly announced for our ADVANCE, REALIZE and ILLUMINATE trials, the other ongoing or planned clinical trials of telaprevir, the registration program for VX-770, the Phase 1 clinical trials and Phase 2a clinical trials of VX-809, the Phase 1 clinical trial of VX-813, and the clinical trials being conducted by our collaborators of drug candidates for the treatment of cancer;
- expectations regarding trends with respect to our costs and expenses;
- the data that will be generated by ongoing and planned clinical trials, and the ability to use that data for the design and initiation of further clinical trials and to support regulatory filings, including potentially applications for marketing approval for telaprevir and VX-770;
- our ability to potentially register telaprevir for marketing across a range of genotypes and patient populations;
- our intention to work with regulatory authorities in North America and Europe to design a registration program for VX-770, which, if approved, could begin the first half of 2009;
- our expectations regarding the future market demand and medical need for telaprevir and our other drug candidates;
- 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 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, including with respect to our JAK3 program and drug candidates that could be complimentary to our HCV protease inhibitors;
- 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.

Any or all of our forward-looking statements in this Annual Report on Form 10-K 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 this Annual Report on Form 10-K 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" above in this Item 1A. These are factors and uncertainties that we think could cause our actual results to differ materially from expected results. Other factors and uncertainties besides those listed there could also adversely affect us.

Without limiting the foregoing, the words "believes," "anticipates," "plans," "intends," "expects" and similar expressions are intended to identify forward-looking statements. There are a number of factors and uncertainties that could cause actual events or results to differ materially from those indicated by such forward-looking statements, many of which are beyond our control, including the factors and uncertainties set forth under "Risk Factors" above in this Item 1A. 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 1B. UNRESOLVED STAFF COMMENTS

We did not receive any written comments from the Securities and Exchange Commission prior to the date 180 days before the end of the fiscal year ending December 31, 2008 regarding our filings under the Securities Exchange Act of 1934, as amended, that have not been resolved.

ITEM 2. PROPERTIES

We lease an aggregate of approximately 829,000 square feet of laboratory and office space in facilities located in Cambridge, Massachusetts, San Diego, California, Washington, DC, Coralville, Iowa, and the United Kingdom. We believe our facilities are adequate for our current needs.

Cambridge, Massachusetts

We lease an aggregate of 684,000 square feet of space in nine facilities situated in close proximity to our corporate headquarters facility located at 130 Waverly Street in Cambridge, Massachusetts. We lease approximately 100,000 square feet of laboratory and office space in our 130 Waverly Street corporate headquarters and approximately 192,000 square feet of laboratory and office space at 200 Sidney Street, located adjacent to our corporate headquarters. The 130 Waverly Street and 200 Sidney Street leases expire on December 31, 2015, with two options to extend for five year terms. The lease for 21,000 square feet of office space at 21 Erie Street, also located adjacent to our corporate headquarters, expires in May 2012, with an option to extend for two additional consecutive five-year terms.

The lease for our Kendall Square, Cambridge, Massachusetts facility will expire in 2018. We have the option to extend that lease for two consecutive ten-year terms. We have subleased approximately 145,000 square feet of Kendall Square facility, and are using the remaining square feet of space leased in the facility for our research operations. The subleases are for terms ending in 2011 and 2012 with extension options to 2015 and 2018. One of the subleases has certain termination provisions beginning in 2010.

San Diego, California

We lease approximately 81,000 square feet of laboratory and office space in San Diego, California. The lease for this space will expire on September 30, 2013. We have the option to extend this lease for one additional term of five years.

United Kingdom

We lease approximately 22,000 square feet of laboratory and office space in Milton Park, Abingdon, England, for our United Kingdom business and research and development activities, under a lease expiring in 2013. We also have an agreement to lease an additional 41,000 square feet of laboratory and office space in Milton Park beginning later in 2009 with a term that expires in 2024. This lease has certain termination provisions in 2014 and 2019.

ITEM 3. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings. We are not a party to any litigation in any court with any governmental authority, and management is not aware of any contemplated proceeding by any governmental authority against us.

In the fourth quarter of 2008, the purported shareholder class action brought against us on March 13, 2008 and referred to as *Waterford Township Police Fire Retirement System v. Vertex Pharmaceuticals Incorporated, et al.*, was dismissed with prejudice, and without any payments by the defendant to the plaintiffs.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters submitted to a vote of security holders during the quarter ended December 31, 2008.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is traded on The Nasdaq Global Select Market under the symbol "VRTX." The following table sets forth for the periods indicated the high and low sale prices per share of our common stock as reported by Nasdaq:

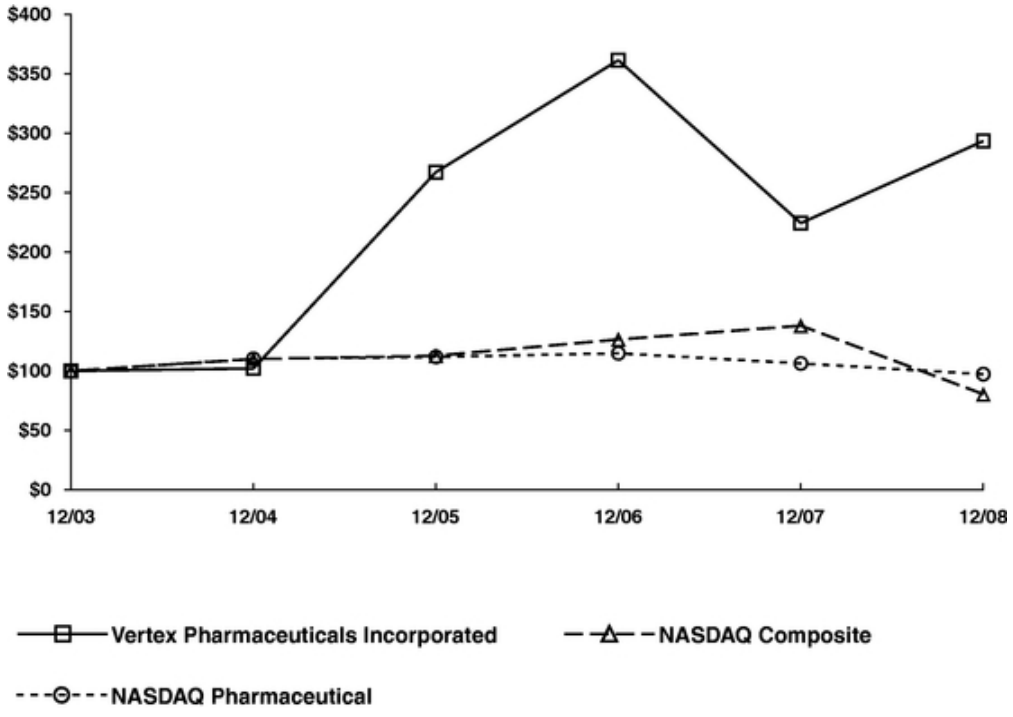
Year Ended December 31, 2007:	High	Low
First quarter	$38.95	$26.98
Second quarter	32.51	25.61
Third quarter	41.42	27.55
Fourth quarter	39.48	22.80

Year Ended December 31, 2008:		
First quarter	$24.67	$13.84
Second quarter	34.97	23.40
Third quarter	35.00	24.62
Fourth quarter	33.19	18.43

As of February 10, 2009, there were 1,717 holders of record of our common stock.

Performance Graph

CUMULATIVE TOTAL RETURN*
Based on Initial Investment of $100 on December 31, 2003
with dividends reinvested (fiscal years ending December 31)



Dividends

We have never declared or paid any cash dividends on our common stock, and we currently expect that future earnings, if any, will be retained for use in our business.

Issuer Repurchases of Equity Securities

The table set forth below shows all repurchases of securities by us during the three months ended December 31, 2008:

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
Oct. 1, 2008 to Oct. 31, 2008	47,927	$ 0.01	—	—
Nov. 1, 2008 to Nov. 30, 2008	1,452	$ 0.01	—	—
Dec. 1, 2008 to Dec. 31, 2008	4,158	$ 0.01	—	—

The repurchases were made under the terms of our 1996 Stock and Option Plan and 2006 Stock and Option Plan. Under these plans, we may award shares of restricted stock to our employees and consultants. These shares of restricted stock 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 applicable Stock and Option Plan under which they were issued. Shares returned to the 2006 Stock and Option Plan are available for future awards under the terms of that plan.

ITEM 6. SELECTED FINANCIAL DATA

The following unaudited selected consolidated financial data for each of the five years in the period ended December 31, 2008 are derived from our audited consolidated financial statements. These data should be read in conjunction with our audited consolidated financial statements and related notes that are included elsewhere in this Annual Report on Form 10-K and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 below.

	Years Ended December 31,				
	2008	2007	2006	2005	2004
	(in thousands, except per share amounts)				
Consolidated Statements of Operations Data:					
Revenues:					
Royalty revenues	$ 37,483	$ 47,973	$ 41,208	$ 32,829	$ 17,322
Collaborative and other research and development revenues	138,021	151,039	175,148	128,061	85,395
Total revenues	175,504	199,012	216,356	160,890	102,717
Costs and expenses:					
Royalty expenses	15,686	13,904	12,170	10,098	5,649
Research and development expenses	516,292	518,677	379,228	248,540	192,162
Sales, general and administrative expenses	101,910	79,104	50,345	43,990	42,139
Restructuring expense	4,324	7,119	3,651	8,134	17,574
Total costs and expenses	638,212	618,804	445,394	310,762	257,524
Loss from operations	(462,708)	(419,792)	(229,038)	(149,872)	(154,807)
Other income/(expense), net	2,857	28,513	15,069	(5,332)	(7,994)
Realized gain on sale of investment(1)	—	—	11,183	—	—
Loss on exchange of convertible subordinated notes(2)(3)	—	—	(5,151)	(48,213)	—
Loss on retirement of convertible subordinated notes(4)	—	—	—	—	(3,446)
Loss before cumulative effect of change in accounting principle	$ (459,851)	$ (391,279)	$ (207,937)	$ (203,417)	$ (166,247)
Cumulative effect of a change in accounting principle—SFAS 123(R) (5)	—	—	1,046	—	—
Net loss	$ (459,851)	$ (391,279)	$ (206,891)	$ (203,417)	$ (166,247)
Basic and diluted loss per common share before cumulative effect of a change in accounting principle	$ (3.27)	$ (3.03)	$ (1.84)	$ (2.28)	$ (2.12)
Basic and diluted cumulative effect of a change in accounting principle per common share.	—	—	0.01	—	—
Basic and diluted net loss per common share	$ (3.27)	$ (3.03)	$ (1.83)	$ (2.28)	$ (2.12)
Basic and diluted weighted-average number of common shares outstanding	140,556	128,986	113,221	89,241	78,571

	December 31,				
	2008	2007	2006	2005	2004
			(in thousands)		
Consolidated Balance Sheets Data:					
Cash, cash equivalents and marketable securities	$832,101	$467,796	$761,752	$407,510	$392,320
Other current assets	35,480	35,980	66,780	23,898	14,392
Restricted cash	30,258	30,258	30,258	41,482	49,847
Property and equipment, net	68,331	66,509	61,535	54,533	64,225
Other non-current assets	14,309	934	1,254	21,575	24,669
Total assets	$980,479	$601,477	$921,579	$548,998	$545,453
Deferred revenues	$247,474	$126,745	$150,184	$ 32,300	$ 66,086
Accrued restructuring expense	34,064	35,292	33,073	42,982	55,843
Other current liabilities	172,567	148,148	110,640	54,443	50,161
Collaborator development loan (due 2008)	—	19,997	19,997	19,997	19,997
Other long-term obligations	—	—	—	—	2,925
Convertible senior subordinated notes (due 2013)(6)	287,500	—	—	—	—
Convertible senior subordinated notes (due 2011)(2)(3)(4)(7)	—	—	59,648	117,998	232,448
Convertible subordinated notes (due 2007)(2)(4)(8)	—	—	42,102	42,102	82,552
Stockholders' equity	238,874	271,295	505,935	239,176	35,441
Total liabilities and stockholders' equity	$980,479	$601,477	$921,579	$548,998	$545,453

(1) In 2006, we sold 817,749 shares of Altus Pharmaceuticals, Inc. common stock for $11.7 million, and warrants to purchase Altus common stock for $18.3 million. As a result of the sales of Altus common stock and warrants, we recorded a realized gain on a sale of investment of $11.2 million.

(2) In the third quarter of 2005, holders of 5% Convertible Subordinated Notes due in September 2007 ("2007 Notes") exchanged $40.5 million in aggregate principal amount of 2007 Notes, plus interest, for 2.5 million shares of newly issued common stock. As a result of this exchange, we incurred a non-cash charge of $36.3 million. In separate transactions, in the fourth quarter of 2005, holders of 5.75% Convertible Senior Subordinated Notes due in February 2011 ("2011 Notes") exchanged $114.5 million in aggregate principal amount of 2011 Notes, plus interest, for 8.1 million shares of newly issued common stock. As a result of this exchange, we incurred a non-cash charge of $11.9 million. These charges correspond to the value of additional shares issued in the transactions over the number of shares that would have been issued upon conversion of the notes at the conversion prices set forth therein.

(3) In the third quarter of 2006, holders of 2011 Notes exchanged $58.3 million in aggregate principal amount of 2011 Notes, plus interest, for 4.1 million shares of newly issued common stock. As a result of this exchange, we incurred a non-cash charge of $5.2 million. This charge corresponds to the value of additional shares issued in the transaction over the number of shares that would have been issued upon conversion of the notes at the conversion prices set forth therein.

(4) In 2004, we issued $232.4 million in aggregate principal amount of 2011 Notes in exchange for an equal principal amount of our outstanding 2007 Notes. We recorded a charge related to the write-off of the unamortized deferred issuance costs applicable to the 2007 Notes retired.

(5) Financial Accounting Standards Board Statement No. 123(R), "Share-Based Payment" ("SFAS 123(R)") requires us, when recognizing expense related to restricted stock, to recognize expense only for restricted shares that we expect to vest. Accordingly, on the grant date, we are required to estimate forfeitures. In connection with the adoption of SFAS 123(R), we recorded a $1.0 million benefit due to the cumulative effect of estimating forfeitures on the grant date rather than recording them as they occur.

(6) In the first quarter of 2008, we issued $287.5 million in aggregate principal amount of 4.75% convertible senior subordinated notes due 2013.

(7) In 2007, the holders of all of the outstanding 2011 Notes converted their notes into shares of our common stock. The notes were converted into common stock at a conversion rate of $14.94 per share.

(8) In 2007, we repaid upon maturity the outstanding principal amount of $42.1 million and accrued interest on the 2007 Notes.

ITEM 7. 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 an oral hepatitis C protease inhibitor and one of the most advanced of a new class of antiviral treatments in clinical development that targets HCV infection. Telaprevir is being evaluated in a fully-enrolled registration program focused on treatment-naïve and treatment-experienced patients with genotype 1 HCV. We currently intend to file a new drug application, or NDA, for telaprevir in the United States in the second half of 2010, assuming the successful completion of our ongoing Phase 3 clinical trials. We also are developing, among other compounds, VX-770, a drug candidate for the treatment of patients with cystic fibrosis. In the first half of 2009, we expect to begin a registration program for VX-770 that focuses on CF patients with the G551D mutation in the gene responsible for CF. We intend to continue investing in our research programs with the goal of adding to our pipeline promising drug candidates designed to address significant unmet medical needs and provide substantial benefits to patients.

Business Focus

Over the next several years, we expect to focus a substantial portion of our resources on the development and potential commercialization of telaprevir. Our clinical development program is designed to support registration by us of telaprevir in North America for treatment-naïve and treatment-experienced patients with genotype 1 HCV, and by our collaborators, Janssen, a Johnson & Johnson company, and Mitsubishi Tanabe, in international markets. In addition to conducting the clinical trials of telaprevir, we are continuing clinical development of our earlier-stage HCV protease inhibitors, VX-813 and VX-985, and are pursuing business development activities with third parties who have potentially complimentary therapies including polymerase inhibitors, other direct-acting antivirals, and novel interferons. In preparation for the potential commercial launch of telaprevir, we are building our drug development, supply chain management, commercialization and marketing organizations.

In the first half of 2009, we expect to initiate a registration program for VX-770 focused on patients with CF who have the G551D mutation. We also expect to continue the development of VX-809, an investigational corrector compound, for the treatment of CF patients with *CFTR* gene mutations that lead to trafficking defects. As a result, we expect that over the next several years we will need to substantially increase resources focused on the development of our CF drug candidates. We plan to leverage the infrastructure that we are building in preparation for the launch of telaprevir to support the potential launch of VX-770.

In addition to the registration programs for telaprevir and VX-770, we plan to continue investing in our research programs and to develop drug candidates, alone or with third-party collaborators, that have emerged from our research programs. Using our drug discovery capability, which integrates biology, pharmacology, biophysics, chemistry, automation and information technologies in a coordinated manner, we have identified and are developing, among other drug candidates: telaprevir; VX-813 and VX-985, two additional HCV protease inhibitors; VX-770 and VX-809; and VX-509, a novel JAK3 inhibitor that targets immune-mediated inflammatory diseases.

Drug Discovery and Clinical Development

Discovery and development of a new pharmaceutical product is a lengthy and resource-intensive process, which may 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 profile 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, and most drug candidates that do advance into formal development never become commercial products. 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 including, for example, the lack of sufficient efficacy against the disease target, the 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 treated or that adversely affect the competitive commercial profile of the drug candidate.

Designing and coordinating large-scale clinical trials to determine the efficacy and safety of drug candidates and to support the submission of an NDA requires significant financial resources, along with extensive technical and regulatory expertise and infrastructure. Prior to commencing a late-stage clinical trial of any drug candidate, we must work collaboratively with regulatory authorities, including the FDA, in order to identify the specific scientific issues that need to be addressed by the clinical trials in order to support continued development and approval of the drug candidate. These discussions typically occur over a period of months and can result in significant changes to planned clinical trial designs or timelines. In addition, even after agreement with respect to a clinical trial design has been reached, regulatory authorities may request additional clinical trials or changes to existing clinical trial protocols. If the data from our ongoing clinical trials or nonclinical studies regarding the safety or efficacy of our drug candidates are not favorable, we may be forced to delay or terminate the clinical development program, which, particularly in the case of telaprevir, would materially harm our business. Further, even if we obtain marketing approvals from the FDA and comparable foreign regulatory authorities in a timely manner, we cannot be sure that the drug will be commercially successful.

Our investments are subject to the considerable risk that one or more of our drug candidates will not progress to product registration due to a wide range of adverse experimental outcomes. We monitor the results of our clinical trials, discovery research and our nonclinical studies and frequently evaluate our portfolio investments 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 is analyzed and we gain additional insights into ongoing programs and potential new programs. Although we believe that our development activities and the clinical trial data we have obtained to date have reduced the risks associated with obtaining marketing approval for telaprevir, we cannot be sure that our development of telaprevir will lead successfully to regulatory approval on a timely basis, or at all, or that obtaining regulatory approval will lead to commercial success. With respect to our other drug candidates, 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 will result in pharmaceuticals products.

Drug Candidates

HCV

Telaprevir is being investigated in a registration program focused on patients with genotype 1 HCV that includes ADVANCE, a Phase 3 clinical trial in treatment-naïve patients, ILLUMINATE, a clinical trial in treatment-naïve patients, and REALIZE, a Phase 3 clinical trial in treatment-experienced patients. Enrollment in ADVANCE, ILLUMINATE and REALIZE was completed in October 2008, December 2008 and February 2009, respectively. We currently intend to file an NDA for telaprevir in the second half of 2010, assuming the successful completion of our ongoing registration program. In addition to the clinical trials in our registration program, we and our collaborators are conducting several additional clinical trials in order to evaluate twice-daily dosing of telaprevir and the use of telaprevir for treatment of patients with other HCV genotypes.

We have completed two Phase 2b clinical trials of telaprevir-based combination therapy in patients with genotype 1 HCV, which enrolled an aggregate of approximately 580 treatment-naïve patients and are referred to as PROVE 1 and PROVE 2. In the 24-week telaprevir-based treatment arms of PROVE 1 and PROVE 2, 61% and 69%, respectively, of patients achieved an SVR on an

intent-to-treat basis. In the control arms of PROVE 1 and PROVE 2, 41% and 46%, respectively, of patients achieved an SVR on an intent-to-treat basis. We also are conducting PROVE 3, a Phase 2b clinical trial in patients with genotype 1 HCV who did not achieve an SVR with a previous treatment with peg-IFN and RBV. In PROVE 3, 52% of the 115 patients in the 24-week telaprevir-based regimen had undetectable HCV RNA 12 weeks post-treatment on an intent-to-treat basis. The interim analyses of safety data from our Phase 2 clinical trials indicated that the most common adverse events, regardless of treatment assignment, were fatigue, rash, headache and nausea. Gastrointestinal disorders, skin adverse events, including rash and pruritus, and anemia were more frequent, and the rash more frequently severe, in the telaprevir arms than in the control arms over the dosing period.

Mitsubishi Tanabe has initiated registration trials of telaprevir in Japan focused on evaluation of 24-week telaprevir-based treatment regimens, including peg-IFN and RBV, in approximately 300 patients with genotype 1 HCV. These trials include both treatment-naïve patients and treatment-experienced patients. Mitsubishi Tanabe expects to have SVR data from its Phase 3 clinical trials of telaprevir in mid-2011.

In addition to telaprevir, we are continuing the development of VX-813 and VX-985, additional HCV protease inhibitors and are pursuing business development activities with respect to potentially complimentary therapies including polymerase inhibitors, other direct-acting antivirals, and novel interferons.

The successful development and commercialization of telaprevir is critical to the success of our business as currently conducted. While we are devoting significant resources, time and attention to the development, potential regulatory approval and a successful commercial launch, all of these efforts involve significant scientific and execution risk and can be adversely affected by events, such as competitive activities and regulatory actions, outside our direct control.

Cystic Fibrosis

In October 2008, we completed a Phase 2a clinical trial of VX-770 in 39 patients with CF. Patients in this Phase 2a clinical trial had the G551D mutation and received VX-770 over 14-day and 28-day dosing periods. The primary endpoint for this clinical trial was safety, and no serious adverse events attributable to VX-770 were observed. Based on the promising lung function data from this Phase 2a clinical trial, as measured by improvements in FEV_1, the lung function test most commonly used to monitor CF disease progression, and based also on observed changes in biomarkers that seek to measure the activity of the CFTR protein, we are working with regulatory authorities in North America and Europe to finalize the design of a registration program for VX-770 focused on patients with the G551D mutation.

In 2008, we conducted Phase 1 clinical trials of VX-809 in healthy volunteers and we recently completed an escalating single-dose pharmacokinetics and safety clinical trial of VX-809 in patients with CF who carry the F508del mutation on at least one of the patient's two *CFTR* alleles. We plan to initiate a Phase 2a, 28-day clinical trial of VX-809 in the first half of 2009.

Immune-Mediated Inflammatory Disease

VX-509 is a novel oral JAK3 inhibitor that we believe has the potential to be used in multiple IMID indications. We have completed a Phase 1 clinical trial of VX-509. We may seek to out-license VX-509 to fund and support other research and development investments.

Commercialization

In order to market telaprevir in North America, we intend to build a marketing organization and a specialized sales force, which will require substantial effort and significant management and financial resources. While we intend to stage our commitments to the extent possible in consideration of the telaprevir development timeline, in order to support an effective launch we will need to make significant financial commitments to our marketing organization prior to receiving regulatory approval.

We believe that effectively marketing telaprevir will require a substantial effort to educate physicians and patients about telaprevir's profile, the potential for treatment-experienced patients to achieve an SVR if telaprevir is approved for that patient population, the risks of waiting to treat patients who have not yet received treatment, and the benefits of screening at-risk patients to identify a larger percentage of the currently undiagnosed patient population. To ensure appropriate third-party reimbursement upon launch, we will need to engage in a dialogue with commercial health insurers, government payers—such as state Medicaid plans and the Veteran's Administration—employers, pharmacies and HCV care providers with respect to the potential value of telaprevir-based treatment regimens.

We believe that marketing VX-770, if it is approved for sale, will require a smaller than usual marketing and sales effort, because most patients with CF in the United States and in Europe are already receiving specialized treatments for CF from a relatively small group of physicians and have been screened for the specific mutations that cause their disease.

Manufacturing

As we advance our proprietary drug candidates through clinical development toward commercialization, we will need to continue to build our supply chain resources and maintain our quality assurance resources. 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 these third parties to meet our commercial supply needs for those drugs, if they are approved for sale. Our supply chain for sourcing raw materials and manufacturing drug product ready for distribution is a multi-step international endeavor in which we rely on third-party contract manufacturers in Asia for the supply of raw materials, and in the European Union and the United States for the application of specific manufacturing processes for the conversion of raw materials into drug substance, and for conversion of drug substance into final dosage form. Establishing and managing this global supply chain requires significant financial commitments, experienced personnel and the creation or expansion of numerous third-party contractual relationships.

We will require a supply of telaprevir for sale in North America if we are successful in obtaining marketing approval. We have completed the technical development work for our commercial formulation of telaprevir, and we are manufacturing product, through our third-party manufacturer network, to meet Janssen's, Mitsubishi Tanabe's and our clinical supply needs. We have established relationships with multiple third-party manufacturers for the manufacture of a commercial supply of telaprevir and have completed contracts for our primary supply of drug substance and most raw materials. We believe our continuing efforts to expand our relationships with third-party manufacturers and oversee their activities will be important in order to support a timely and effective commercial launch, and consistent commercial supply, of telaprevir in subsequent years. We are completing the transfer of technical information regarding the manufacture of telaprevir to Janssen so that Janssen will be able to manufacture telaprevir, if approved, for sale in Janssen's territories and as a secondary source of drug substance for us.

We require VX-770 for clinical trials in North America and Europe, and will require a supply of VX-770 for sale in North America and Europe, if we obtain marketing approval. We are manufacturing, through our third-party manufacturer network, VX-770 to meet our clinical supply needs and are focused on completing the technical development work and commercial formulation of VX-770. Over the next several years, we expect to expand our existing relationships with our third-party manufacturers or establish new relationships with third-party manufacturers, in order to establish a supply chain for VX-770 and support the potential commercial launch and subsequent commercial supply of VX-770.

Corporate Collaborations

Corporate collaborations have been and will continue to be an important component of our business strategy. Under our agreement with Janssen, we have retained exclusive commercial rights to telaprevir in North America, and we are leading the global clinical development program. Janssen

agreed to be responsible for 50% of the drug development costs under the development program for telaprevir in North America and the Janssen territories, to pay us contingent milestone payments based on successful development, approval and launch of telaprevir, to be responsible for the commercialization of telaprevir outside of North America and the Far East and to pay us royalties on any telaprevir product sales in its territories. We also have a collaboration with Mitsubushi Tanabe with respect to the development of telaprevir in Japan and other countries in the Far East.

Our pipeline also includes Aurora kinase inhibitors that are being investigated by Merck for oncology indications. In the second quarter of 2008, Merck initiated a Phase 1 clinical trial of MK-5108 (VX-689) alone and in combination with docetaxel in patients with advanced and/or refractory tumors. In the third quarter of 2008, Merck selected additional Aurora kinase inhibitors for possible development.

We will not have the resources for some time to develop and commercialize all drug candidates that emerge from our research group, and therefore we will need to rely on corporate collaborations for the development and commercialization of some or all of our new drug candidates. Historically, we have been successful in initiating and concluding productive collaborations, but we will need to continue to do so in the future, even though economic and competitive conditions may be different than in the past.

Financing Strategy

At December 31, 2008, we had $832.1 million of cash, cash equivalents and marketable securities, which was an increase of $364.3 million from $467.8 million at December 31, 2007. This increase was the result of net proceeds of $391.3 million from the sale in February 2008 of 6,900,000 shares of our common stock and $287.5 million in aggregate principal amount of our 4.75% convertible senior subordinated notes due 2013, which we refer to as the 2013 Notes; gross cash proceeds of $160.0 million we received in May 2008 in connection with the sale of our right to receive future royalty payments arising from sales of Lexiva/Telzir and Agenerase under our 1993 agreement with GlaxoSmithKline; and net proceeds of $217.4 million from the sale in September 2008 of 8,625,000 shares of our common stock. These cash inflows were partially offset by cash used to fund our operations during 2008 and the repayment of a $20.0 million collaborator development loan in May 2008. As a result of the sale of future royalties under our license to GlaxoSmithKline, we will not receive future cash royalty payments related to HIV protease inhibitors.

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, if we ever do. Therefore, we are dependent in large part on our continued 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, proceeds from the disposition of assets, investment income and the issuance of common stock under our employee benefit plans.

We expect that we will need additional capital in order to complete the development and any commercialization of telaprevir and to continue the development of our other drug candidates, including VX-770. We may raise additional capital from public offerings or private placements of our securities or other methods of financing. We cannot be sure that any such financing opportunities will be available on acceptable terms, if at all. If adequate funds are not available on acceptable terms, or at all, we may be required to curtail significantly or discontinue one or more of our research, drug discovery 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 technologies or drug candidates.

As part of our strategy for managing our capital structure, we have from time to time adjusted the amount and maturity of our debt obligations through new issues, privately negotiated transactions and market purchases, depending on market conditions and our perceived needs at the time. We expect to continue pursuing a general financial strategy that may lead us to undertake one or more additional

transactions with respect to our outstanding debt obligations, and the amounts involved in any such transactions, individually or in the aggregate, may be material. Any such transactions may or may not be similar to transactions in which we have engaged in the past.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reported periods. These items are monitored and analyzed by us 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.

We believe that our application of the following accounting policies, each of which require significant judgments and estimates on the part of management, are the most critical to aid in fully understanding and evaluating our reported financial results: revenue recognition; research and development expenses; restructuring expense; and stock-based compensation expense. Our accounting polices, including the ones discussed below, are more fully described in Note B, "Accounting Policies," to our consolidated financial statements included in this Annual Report on Form 10-K.

Revenue Recognition

Our revenues are generated primarily through collaborative research, development and/or commercialization agreements. The terms of these agreements typically include payment to us of one or more of the following: nonrefundable, up-front license fees; milestone payments; and royalties on product sales. In addition, we have sold our rights to receive future royalties from our HIV assets and have been recognizing revenues under this arrangement since May 2008.

Up-front License Fees

We recognize revenues from nonrefundable, up-front license fees related to collaboration agreements, including the $165.0 million we received from Janssen in 2006, on a straight-line basis over the contracted or estimated period of performance. The period of performance over which the revenues are recognized is typically the period over which the research and/or development is expected to occur. As a result, we often are required to make estimates regarding drug development and commercialization timelines for compounds being developed pursuant to a collaboration agreement. Because the drug development process is lengthy and our collaboration agreements typically cover activities over several years, this approach often has resulted in the deferral of significant amounts of revenue into future periods. In addition, because of the many risks and uncertainties associated with the development of drug candidates, our estimates regarding the period of performance have changed in the past and may change in the future. Any change in our estimates could result in substantial changes to the period over which the revenues from an up-front license fee are recognized.

Milestones

At the inception of each agreement that includes contingent milestone payments, we evaluate whether the contingencies underlying each milestone are substantive, specifically reviewing factors such as the scientific and other risks that must be overcome to achieve the milestone, as well as the level of successful effort and investment required. If we do not consider a milestone to be substantive, the revenues from the related milestone payment cannot be recognized when the milestone is achieved, but must be recognized on a straight-line basis over the remaining performance period. All of the

milestones that have been achieved under our Janssen collaboration agreement during the three years ended December 31, 2008 have been considered substantive.

Where a substantive milestones is achieved in a collaboration arrangement and the corresponding payment is reasonably assured, the payment is recognized as earned subject to specific policies applicable where we have obligations remaining after achievement of the milestone. Because the recognition of a substantive milestone under a collaboration agreement typically requires the completion of a number of activities conducted over a significant period of time, the expenses related to achieving the milestone often are incurred prior to the period in which the milestone payment is recognized. In the past, significant fluctuations in our revenues from milestone payments on a quarterly and annual basis have contributed to significant fluctuations in our collaborative revenues.

Royalty Revenues

In May 2008, we entered into a purchase agreement with Fosamprenavir Royalty, L.P. pursuant to which we sold, and Fosamprenavir Royalty purchased for a one-time cash payment of $160.0 million, our right to receive royalty payments, net of subroyalty amounts payable to a third party, arising from sales of Lexiva/Telzir and Agenerase under our 1993 agreement with GlaxoSmithKline. We deferred the recognition of $155.1 million of revenues in connection with this sale. On May 31, 2008, we began recognizing these deferred revenues under 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 net royalty payments due from GlaxoSmithKline to Fosamprenavir Royalty for the period by (2) the ratio of the remaining revenues we received from the sale of our rights to HIV royalty payments that we have not yet recognized to the total estimated remaining net royalties that we expect GlaxoSmithKline to pay Fosamprenavir Royalty over the remaining term of the agreement. Estimating the total remaining net royalties that GlaxoSmithKline will pay to Fosamprenavir Royalty requires the use of subjective estimates and assumptions, including estimates regarding the size of the potential market for HIV protease inhibitors, the competitive position of Lexiva/Telzir specifically and HIV protease inhibitors generally with respect to currently approved drugs and drugs that may be approved in the future and the pricing of Lexiva/Telzir. Changes to our estimate of the total remaining net royalties that GlaxoSmithKline will pay to Fosamprenavir Royalty could have a material effect on the amount of royalty revenues we recognize in a particular period.

Prior to May 2008, royalty revenues typically were recognized based upon actual and estimated net sales of licensed products in licensed territories and generally were recognized in the period the sales occurred. We reconciled and adjusted for differences between actual royalty revenues and estimated royalty revenues in the quarter any differences become known. These differences were not significant.

Research and Development Expenses

All research and development expenses, including amounts funded through research and development collaborations, are expensed as incurred. Research and development expenses are comprised of costs incurred 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; expenses associated with the commercial supply investment in telaprevir, which are considered research and development expenses due to telaprevir's stage of development; and infrastructure costs, including facilities costs and depreciation.

When third-party service providers' billing terms do not coincide with our period-end, we are required to make estimates of the costs, including clinical trial and pharmaceutical development costs, contractual services and investment in commercial supply in telaprevir, incurred in a given accounting period and record accruals at the end of the period. We base our estimates on our knowledge of the research and development programs, services performed for the period, past history for related activities and the expected duration of the third-party service contract, where applicable.

We are incurring significant costs related to commercial supplies of telaprevir, which entered into Phase 3 development in the first quarter of 2008. After a drug candidate enters into Phase 3 clinical development, determining whether to continue to classify all of these costs as research and development expenses or to capitalize some of them as inventory involves significant judgments. Generally, inventory may be capitalized if it is probable that future revenues exceeding the costs of the inventory will be generated from the sale of the inventory. While we believe that the development activities and clinical trial data to date have reduced the risks associated with obtaining marketing approval for telaprevir, because of the inherent risks of drug development for accounting purposes we are continuing to expense all of our costs related to commercial supplies of telaprevir. To the extent that we continue to expense these costs as we continue development of telaprevir, we expect that if, and when, we receive marketing approval for telaprevir we will have significant commercial supplies of telaprevir available, the costs of which would have already been expensed. A consequence of the application of this accounting policy is that during the initial period after the potential launch of telaprevir our cost of goods sold will exclude costs that previously had been expensed as research and development expenses in prior periods.

Restructuring Expense

We record liabilities associated with restructuring activities based on estimates of fair value in the period the liabilities are incurred. The liability for accrued restructuring expense of $34.1 million at December 31, 2008 is related to that portion of our facility in Kendall Square, Cambridge, Massachusetts that we are not occupying and do not intend to occupy. This liability is calculated by applying our best estimate of the net amount of our ongoing obligation. We use a discounted cash-flow analysis to calculate the amount of this liability. The probability-weighted discounted cash-flow analysis is based on management's assumptions and estimates of our ongoing lease obligations, including contractual rental commitments, build-out commitments and building operating costs, and estimates of income from subleases, based on the term and timing of the subleases. We discount the estimated cash flows using a discount rate of approximately 10%. These cash flow estimates are reviewed and may be adjusted in subsequent periods. Adjustments are based, among other things, on management's assessment of changes in factors underlying the estimates. Because our estimate of the liability includes the application of a discount rate to reflect the time-value of money, the estimate will increase simply as a result of the passage of time, even if all other factors remain unchanged.

Our estimates of our restructuring liability have changed in the past, and it is possible that our assumptions and estimates will change in the future, resulting in additional adjustments to the amount of the estimated liability. The effect of any such adjustments could be material. For example, we currently have two subleases for portions of the Kendall Square facility with remaining terms of two and four years, respectively, and we have made certain estimates and assumptions relating to future sublease terms following the expiration of the current subleases. Market variability may require adjustments to those assumptions in the future. We will review our assumptions and judgments related to the lease restructuring on at least a quarterly basis until the Kendall Square lease is terminated or expires, and make whatever modifications we believe are necessary, based on our best judgment, to reflect any changed circumstances.

Stock-based Compensation Expense

We measure compensation cost of stock-based compensation at the grant date, based on the fair value of the award, including estimated forfeitures, and recognize that cost as an expense ratably over the employees' service periods, which generally is the vesting period of the equity award, or the derived service period for awards with market conditions. We calculate the fair value of stock options and shares purchased pursuant to the Employee Stock Purchase Plan using the Black-Scholes valuation model. The Black-Scholes valuation model requires us to make certain assumptions and estimates concerning our stock price volatility, the rate of return of risk-free investments, the expected term of the awards, and our anticipated dividends. In determining the amount of expense to be recorded, we also are required to exercise judgment to estimate forfeiture rates for awards, based on the probability that employees will complete the required service period. If actual forfeitures differ significantly from our estimates, or if any of our estimates or assumptions prove incorrect, our results could be materially affected.

RESULTS OF OPERATIONS

	2008	2007	2006	08/07 Comparison Increase/ (Decrease)	08/07 Comparison Increase/ (Decrease)	07/06 Comparison Increase/ (Decrease)	07/06 Comparison Increase/ (Decrease)
	(in thousands)			(in thousands, except percentages)			
Revenues	$ 175,504	$ 199,012	$ 216,356	$(23,508)	(12)%	$ (17,344)	(8)%
Costs and expenses	638,212	618,804	445,394	19,408	3%	173,410	39%
Net interest income	2,857	28,513	15,069	(25,656)	(90)%	13,444	89%
Other, net	—	—	7,078	—	n/a	(7,078)	(100)%
Net loss	$(459,851)	$(391,279)	$(206,891)	$ 68,572	18%	$184,388	89%

Net Loss

In 2008 as compared to 2007, our net loss increased by $68.6 million, or 18%. The increased net loss in 2008 as compared to 2007 was the result of a combination of factors, including lower revenues from royalties as a result of the sale of our HIV royalty stream and decreases in our revenues from our collaborations, an increase in our overall expenses and a decrease in our net interest income as a result of lower yields on invested funds and higher levels of outstanding debt. In 2008, we continued to increase our workforce, particularly in our development and commercialization organizations, leading to increased internal expenses relating to our employees. In 2008, these increased internal expenses, as compared to 2007, were largely offset by decreased expenses related to our commercial supply investment in telaprevir, resulting in an overall 3% increase in our costs and expenses.

In 2007 as compared to 2006, our net loss increased by $184.4 million, or 89%. This substantial increase in our net loss was primarily the result of a $173.4 million increase in our costs and expenses as we significantly increased our headcount, incurred increased expenses relating to our clinical trials and made significant investments in telaprevir commercial supply.

Net Loss Per Share

Our net loss for 2008 was $3.27 per basic and diluted common share compared to a net loss for 2007 of $3.03 per basic and diluted common share. Our net loss per basic and diluted common share increased in 2008 from 2007 as a result of our 18% increase in net loss, mostly offset by an increase in the number of basic and diluted weighted-average common shares outstanding from 129.0 million shares in 2007 to 140.6 million shares in 2008.

Our net loss for 2007 was $3.03 per basic and diluted common share compared to a net loss for 2006 of $1.83 per basic and diluted common share. Our net loss per basic and diluted common share increased in 2007 from 2006 as a result of our 89% increase in net loss partially offset by an increase in the number of basic and diluted weighted-average common shares outstanding from 113.2 million shares in 2006 to 129.0 million shares in 2007.

Stock-based Compensation Expense and Restructuring Expense

Our costs and expenses in 2008, 2007 and 2006 included the following stock-based compensation expense and restructuring expense:

	2008	2007	2006
		(in thousands)	
Stock-based compensation expense	$57,987	$59,407	$39,137
Restructuring expense	$ 4,324	$ 7,119	$ 3,651

Revenues

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
	(in thousands)			(in thousands, except percentages)			
Royalty revenues	$ 37,483	$ 47,973	$ 41,208	$ (10,490)	(22)%	$ 6,765	16%
Collaborative and other research and development revenues	138,021	151,039	175,148	(13,018)	(9)%	(24,109)	(14)%
Total revenues	$ 175,504	$ 199,012	$ 216,356	$ (23,508)	(12)%	$ (17,344)	(8)%

Our total revenues in recent periods have been comprised primarily of collaborative and other research and development revenues. On a quarterly and annual basis our collaborative and other research and development revenues can fluctuate significantly, due to the timing of recognition of significant milestone payments and the level of net reimbursement we receive for our development programs. Our royalty revenues decreased significantly in 2008 due to the sale in the second quarter of 2008 of our right to receive future royalties related to sales of the HIV protease inhibitor Lexiva/Telzir.

Collaborative and Other Research and Development Revenues

The table presented below is a summary of revenues from collaborative arrangements for 2008, 2007 and 2006:

	2008	2007	2006
		(in thousands)	
Collaborative and other research and development revenues:			
Janssen	$120,122	$117,739	$ 68,004
CFFT	764	15,883	12,636
Merck	6,000	9,000	58,705
Novartis	—	—	17,585
Other	11,135	8,417	18,218
Total collaborative and other research and development revenues	$138,021	$151,039	$175,148

In 2008 and 2007, we depended on our Janssen collaboration for 87% and 78%, respectively, of our total collaborative and other research and development revenues. During 2008 and 2007, revenues derived from the Janssen collaboration agreement consisted of:

- development milestone payments recognized in the period;
- net reimbursements for development costs of telaprevir; and
- an amortized portion of the $165.0 million up-front payment we received in 2006.

In 2008, as compared to 2007, a $25.0 million increase in milestone revenues from Janssen offset a decrease in our net reimbursements and other revenues from the Janssen collaboration, resulting in a small increase in total revenues from Janssen. The $25.0 million increase in milestone revenues from $30.0 million in 2007 to $55.0 million in 2008 was primarily the result of a $45.0 million milestone that we achieved in the second quarter of 2008 for the enrollment of patients in our ADVANCE clinical trial. The principal milestones remaining under our agreement with Janssen relate to filing for marketing authorization for telaprevir with the European Medicines Evaluation Agency and the launch of telaprevir in the European Union, and as a result we expect our revenues from Janssen to decrease in 2009 as compared to 2008. Amounts that Janssen pays us for reimbursement of our telaprevir clinical development expenses, after we offset reimbursement amounts owed to Janssen for Janssen's telaprevir clinical trial expenses, are recorded as revenues. The decreased net reimbursements in 2008 as compared to 2007 were the result of lower reimbursable expenses related to telaprevir clinical trials incurred by us combined with increased reimbursable expenses incurred by Janssen associated with the clinical trials, including REALIZE, being led by Tibotec.

The decrease in our total collaborative and other research and development revenues in 2008 as compared to 2007 was primarily attributable to decreased revenues from our collaboration with CFFT. In 2008, we completed our reimbursable activities under our collaboration with CFFT, which resulted in the $15.1 million decrease in revenues from this collaboration in 2008 as compared to 2007.

Our total collaborative and other research and development revenues decreased by $24.1 million in 2007 as compared to 2006, as significant increases in our revenues related to our Janssen collaboration, which began in June 2006, were offset by significant decreases in revenues from our collaborations with Merck and Novartis as these activities were completed. In addition, our revenues from milestones related to the Merck collaboration decreased from $36.3 million in 2006 to $9.0 million in 2007.

Royalty Revenues

Our royalty revenues relate to sales of the HIV protease inhibitors Lexiva/Telzir and Agenerase by GlaxoSmithKline. Until May 30, 2008, these royalty revenues were based on actual and estimated worldwide net sales of Lexiva/Telzir and Agenerase. On May 30, 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 on these net sales to a third party, in return for a one-time cash payment of $160.0 million. We deferred the recognition of $155.1 million of revenues from this sale. We are recognizing these deferred revenues over the term of our agreement with GlaxoSmithKline under the "units-of-revenue" method. We will continue to recognize royalty revenues equal to the amount of the third-party subroyalty and an offsetting royalty expense for the third-party subroyalty payment.

The $10.5 million, or 22%, decrease in royalty revenues in 2008 compared to 2007 resulted from this sale of our future HIV royalties in the second quarter of 2008. The $6.8 million, or 16%, increase in royalty revenues in 2007 as compared to 2006 was due to the increase in Lexiva/Telzir net sales. In 2009, 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

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
		(in thousands)		(in thousands, except percentages)			
Royalty expenses	$ 15,686	$ 13,904	$ 12,170	$ 1,782	13%	$ 1,734	14%
Research and development expenses	516,292	518,677	379,228	(2,385)	0%	139,449	37%
Sales, general and administrative expenses	101,910	79,104	50,345	22,806	29%	28,759	57%
Restructuring expense	4,324	7,119	3,651	(2,795)	(39)%	3,468	95%
Total costs and expenses	$ 638,212	$ 618,804	$ 445,394	$ 19,408	3%	$ 173,410	39%

Our costs and expenses primarily relate to our research and development expenses and our sales, general and administrative expenses. Over the three-year period ending December 31, 2008, we increased the number of our employees, particularly in our development and commercialization organizations, leading to increased expenses relating to our workforce. Our total costs and expenses increased by $19.4 million, or 3%, in 2008 compared to 2007, as a result of these increased expenses related to our workforce, partially offset by decreased commercial supply investment in telaprevir. Our total costs and expenses increased by $173.4 million, or 39%, in 2007 compared to 2006, primarily as a result of significant increases in our development expenses, including a significant commercial supply investment in telaprevir.

Research and Development Expenses

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
	(in thousands)			(in thousands, except percentages)			
Research expenses	$165,381	$162,471	$141,671	$ 2,910	2%	$ 20,800	15%
Development expenses	350,911	356,206	237,557	(5,295)	(1)%	118,649	50%
Total research and development expenses	$516,292	$518,677	$379,228	$(2,385)	0%	$139,449	37%

Research Expenses

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
	(in thousands)			(in thousands, except percentages)			
Research Expenses:							
Salary and benefits	$ 55,351	$ 50,649	$ 45,546	$ 4,702	9%	$ 5,103	11%
Stock-based compensation expense	18,764	21,572	15,495	(2,808)	(13)%	6,077	39%
Laboratory supplies and other direct expenses	25,044	23,844	23,103	1,200	5%	741	3%
Contractual services	8,725	7,555	6,640	1,170	15%	915	14%
Infrastructure costs	57,497	58,851	50,887	(1,354)	(2)%	7,964	16%
Total research expenses	$ 165,381	$ 162,471	$ 141,671	$ 2,910	2%	$ 20,800	15%

The $2.9 million increase in total research expenses in 2008 compared to 2007 was primarily related to an increase in salary and benefits. The $20.8 million increase in total research expenses in 2007 compared to 2006 was the result of increases in salary and benefits, stock-based compensation expense and infrastructure costs. Most of our research expenses relate to employee expenses and infrastructure costs and are not dependent on the timing of clinical development activities.

Development Expenses

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
	(in thousands)			(in thousands, except percentages)			
Development Expenses:							
Salary and benefits	$ 77,013	$ 54,504	$ 43,905	$ 22,509	41%	$ 10,599	24%
Stock-based compensation expense	26,760	26,846	16,676	(86)	0%	10,170	61%
Laboratory supplies and other direct expenses	35,015	30,237	20,396	4,778	16%	9,841	48%
Contractual services	121,247	114,518	88,949	6,729	6%	25,569	29%
Commercial supply investment in telaprevir	17,374	75,420	27,332	(58,046)	(77)%	48,088	176%
Infrastructure costs	73,502	54,681	40,299	18,821	34%	14,382	36%
Total development expenses	$350,911	$356,206	$237,557	$ (5,295)	(1)%	$118,649	50%

Our development expenses decreased by $5.3 million, or 1%, in 2008 as compared to 2007. This decrease in our development expenses was the result of a $58.0 million decrease in commercial supply investment in telaprevir, which has fluctuated significantly quarter-to-quarter over the past two years, partially offset by increases in the other categories of development expenses, including expenses related to our increased headcount and infrastructure. The varying levels of our investment in telaprevir commercial supply correspond with development timelines and estimated time to market and was significantly higher in 2007 as a result of the initial investment required to validate telaprevir manufacturing processes.

Our development expenses increased by $118.6 million, or 50%, in 2007 as compared to 2006. This significant increase in our development expenses was the result of increases in each category of development expense as we advanced telaprevir. The most significant increase from 2006 to 2007 was in our commercial supply investment, which increased by $48.1 million.

To date we have incurred in excess of $2.7 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. 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. The most significant costs associated with drug discovery and development are those costs associated with Phase 2 and Phase 3 clinical trials. Given the uncertainties related to development, we currently are unable to reliably estimate when, if ever, our drug candidates will generate revenues and net cash inflows.

Sales, General and Administrative Expenses

	2008	2007	2006	08/07 Comparison		07/06 Comparison	
	(in thousands)			(in thousands, except percentages)			
Sales, general and administrative expenses	$101,910	$79,104	$50,345	$22,806	29%	$28,759	57%

Sales, general and administrative expenses increased substantially in each of 2008 and 2007 as compared to the preceding year as the result of increased headcount as we advance our drug candidates, particularly telaprevir, into late-stage development.

Royalty Expenses

Royalty expenses increased $1.8 million, or 13%, in 2008 compared to 2007, and by $1.7 million, or 14%, in 2007 compared to 2006. Royalty expenses primarily relate to a subroyalty payable to a third party on net sales of Lexiva/Telzir and Agenerase. The subroyalty expense offsets a corresponding amount of royalty revenues. We expect to continue to recognize this subroyalty as an expense in future periods.

Restructuring Expense

As of December 31, 2008 our lease restructuring liability was $34.1 million. In 2008, 2007 and 2006, we recorded restructuring expense of $4.3 million, $7.1 million and $3.7 million, respectively. The restructuring expense in all periods included imputed interest cost related to the restructuring liability associated with our Kendall Square lease. The decrease in restructuring expense for 2008 compared to 2007 and the increase in restructuring expense for 2007 as compared to 2006 was in each case primarily the result of a revision, in the first quarter of 2007, of certain key estimates and assumptions about building operating costs for the remaining period of the lease commitment, for which there were no corresponding revisions in 2008 or 2006.

We review our estimates and assumptions with respect to the Kendall Square lease on at least 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.

Non-Operating Items

Interest income decreased $14.5 million, or 47%, to $16.3 million in 2008 from $30.8 million in 2007. The decrease is a result of lower portfolio yields during 2008, partially offset by higher average levels of invested funds in 2008. Our cash, cash equivalents and marketable securities yielded approximately 2% on an annual basis in 2008 compared to approximately 5% in 2007. Interest income increased $7.8 million, or 34%, to $30.8 million for 2007 from $23.0 million for 2006. The increase in 2007 was the result of higher levels of invested funds and higher portfolio yields during 2007 as compared to 2006.

Interest expense increased $11.2 million to $13.5 million in 2008 compared to $2.3 million in 2007. This increase in 2008 as compared to 2007 resulted from the issuance in February 2008 of $287.5 million in aggregate principal amount of 2013 Notes. Interest expense decreased $5.7 million, or 71%, to $2.3 million for 2007 from $8.0 million for 2006 as a result of our reduction of outstanding debt in 2006 and 2007.

In 2006, we sold 817,749 shares of the common stock of Altus Pharmaceuticals, Inc. for $11.7 million and warrants to purchase 1,962,494 shares of Altus common stock for $18.3 million, resulting in a realized gain of $11.2 million.

In 2006, we recorded a non-cash loss on exchange of convertible subordinated notes of $5.2 million in connection with our issuance of common stock in exchange for a portion of our 5.75% Convertible Senior Subordinated Notes due February 2011. This loss corresponded to the value of additional shares issued in the transaction over the number of shares that would have been issued upon the conversion of the notes under their original terms.

In connection with the adoption of SFAS 123(R) during 2006, we recorded a $1.0 million benefit from the cumulative effect of changing from recording forfeitures related to restricted stock awards as they occurred to estimating forfeitures during the service period.

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, investment income and proceeds from the issuance of common stock under our employee benefit plans. We expect that we will require additional capital in order to commercialize telaprevir and continue our planned activities in other areas.

At December 31, 2008, we had cash, cash equivalents and marketable securities of $832.1 million, which was an increase of $364.3 million from $467.8 million at December 31, 2007. The increase was primarily a result of the $391.3 million of net proceeds from the offerings of common stock and 2013 Notes that we completed in February 2008; the proceeds we received from the sale of our HIV royalty stream in May 2008; and the $217.4 million of net proceeds from the September 2008 offering of common stock. In addition, we received milestone and other payments from our collaborators and $32.0 million from the issuance of common stock under our employee benefits plans. These cash inflows were partially offset by cash expenditures we made in 2008 related to, among other things, research and development expenses and sales, general and administrative expenses and the repayment in May 2008 of a $20.0 million loan, which was outstanding under the loan facility established under our collaboration with Novartis. Capital expenditures for property and equipment during 2008 were $32.2 million.

At December 31, 2008, we had outstanding $287.5 million in aggregate principal amount of our 2013 Notes. The 2013 Notes bear interest at the rate of 4.75% per annum, and we are 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 2013 Notes will mature on February 15, 2013. The 2013 Notes are convertible, at the option of the holder, into our common stock at a price equal to approximately $23.14 per share, subject to adjustment. On or after February 15, 2010, we may redeem the 2013 Notes at our option, in whole or in part, at the redemption prices stated in the indenture, plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

Our accrued restructuring expense of $34.1 million at December 31, 2008 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 2008, we made cash payments of $14.0 million against the accrued expense and received $8.5 million in sublease rental payments. During 2009, we expect to make additional cash payments of $14.7 million against the accrued expense and receive $8.4 million in sublease rental payments.

We expect to continue to make significant investments in our development pipeline, particularly in clinical trials of telaprevir, in our effort to prepare for potential registration, regulatory approval and commercial launch of telaprevir, and in clinical trials for our other drug candidates, including VX-770. We also expect to maintain our substantial investment in research. As a result, we expect to incur future losses on a quarterly and annual basis. 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, in addition to amounts we expect to receive from our collaborators under existing contractual obligations, will be sufficient to fund our operations for at least the next twelve months. We expect that we will need additional capital in order to complete the development and commercialization of telaprevir and to continue the development of our other drug candidates, including VX-770. We may raise additional capital 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 also will continue to manage our capital structure and 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

The first part of the following table sets forth commitments and obligations that have been recorded on our consolidated balance sheets at December 31, 2008. Certain other obligations and commitments, while not required under GAAP to be included in the consolidated balance sheets, may have a material impact on liquidity. We have presented these items, all of which we have entered into in the ordinary course of business, in the remaining rows of the table below in order to present a more complete picture of our financial position and liquidity. Included in our additional commitments for

facilities operating leases, are commitments that we made in January 2009 to extend specific leases in Cambridge, Massachusetts through December 2015.

	2009	2010-2011	2012-2013	2014 and later	Total
			(in thousands)		
Commitments and Obligations Recorded on the Consolidated Balance Sheets at December 31, 2008:					
Convertible senior subordinated notes (due February 2013)—Principal Payment	$ —	$ —	$287,500	$ —	$287,500
Convertible senior subordinated notes (due February 2013)—Interest Payments	5,349	—	—	—	5,349
Additional Commitments and Obligations at December 31, 2008:					
Convertible senior subordinated notes (due February 2013)—Interest Payments	8,307	27,313	20,484	—	56,104
Facilities operating leases	45,337	94,386	100,344	164,441	404,508
Research and development and other commitments	8,706	841	—	—	9,547
Total contractual commitments and obligations	$67,699	$122,540	$408,328	$ 164,441	$763,008

Commitments and Obligations Recorded on the Consolidated Balance Sheets at December 31, 2008

In February 2008, we issued $287.5 million in aggregate principal amount of our 4.75% convertible senior subordinated notes due 2013. The principal and interest accrued as of December 31, 2008 under these notes is included on our consolidated balance sheets as of December 31, 2008. The interest that is due for periods after December 31, 2008 is not required to be reflected on our consolidated balance sheets and is set forth separately on the table above.

Additional Commitments and Obligations Not Required to be Recorded on Consolidated Balance Sheets at December 31, 2008

Our future minimum commitments and contractual obligations included future interest payments due on our 2013 Notes, facilities operating leases—including commitments made in January 2009 to extend leases of specified facilities in Cambridge, Massachusetts through December 2015—and contractual commitments related to our research and development programs. These items are not required under GAAP to be recorded on our consolidated balance sheets. They are disclosed in the table presented above to provide a more complete picture of our financial position and liquidity.

Our future minimum commitments under our Kendall Square lease for the period commencing on January 1, 2009 are $24.8 million for 2009, $49.7 million for 2010 and 2011, $51.0 million for 2012 and 2013, and $116.4 million through the expiration of the lease in 2018. These amounts are included in the table above as part of our facilities operating leases. Rent payments for our Kendall Square lease will be subject to increase in May 2013, based on changes in an inflation factor. We are using for our operations approximately 40% of the Kendall Square facility. We have entered into two subleases for the remaining rentable square footage at the Kendall Square facility to offset our on-going contractual lease obligations. The subleases will expire in 2011 and 2012 and contain options to extend through 2015 and 2018, respectively. One of the subleases has certain termination provisions beginning in 2010. The future minimum committed income from the subleases is $8.2 million for 2009, $12.6 million for 2010 and 2011 and $1.7 million for 2012. These amounts are not offset against our obligations set forth in the table above. See Note F, "Restructuring Expense" to our consolidated financial statements included in this Annual Report on Form 10-K.

Commitments under research and development programs represent contractual commitments entered into for materials and services in the normal course of business.

Our table detailing contractual commitments and obligations does not include severance pay obligations to certain of our executive officers in the event of a not-for-cause termination under existing employment contracts.

Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board ("FASB") issued Statement No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 establishes a common definition for fair value to be applied under GAAP requiring use of fair value, establishes a framework for measuring fair value, and expands disclosure about such fair value measurements. Issued in February 2008, FASB Staff Position No. SFAS 157-1, "Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13" removed leasing transactions accounted for under FASB Statement No. 13 and related guidance from the scope of SFAS 157. Issued in February 2008, FASB Staff Position No. SFAS 157-2, "Effective Date of FASB Statement No. 157," deferred the effective date of SFAS 157 for all nonfinancial assets and nonfinancial liabilities to fiscal years beginning after November 15, 2008. The implementation of SFAS 157 for financial assets and financial liabilities, effective for us on January 1, 2008, did not have a material effect on our consolidated financial statements. We currently are evaluating the effect of SFAS 157 for nonfinancial assets and nonfinancial liabilities on our consolidated financial statements.

In October 2008, the FASB issued FASB Staff Position No. SFAS 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active," ("FSP 157-3"), to clarify the application of the provisions of SFAS 157 in an inactive market and how an entity would determine fair value in an inactive market. FSP 157-3 was effective upon issuance, including prior periods for which financial statements had not been issued. The implementation of FSP 157-3 did not have a material effect on our consolidated financial statements.

In December 2007, the FASB issued Statement No. 141 (Revised 2007), "Business Combinations" ("SFAS 141(R)"). SFAS 141(R) establishes principles and requirements for how an acquirer in a business combination recognizes and measures in its financial statements, the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. SFAS 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of business combinations. SFAS 141(R) became effective on a prospective basis for our financial statements beginning on January 1, 2009. Accordingly, any future business combination we enter into would be subject to SFAS 141(R).

In December 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force ("EITF") on EITF Issue No. 07-1, "Accounting for Collaborative Arrangements" ("EITF 07-1"). EITF 07-1 requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF 07-1 clarified the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF Issue No. 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 became effective for us beginning on January 1, 2009. EITF 07-1 is not expected to have a material effect on our consolidated financial statements.

In March 2008, the FASB issued Statement No. 161, "Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 is intended to improve financial reporting about derivative instruments and hedging activities by requiring

enhanced disclosures to enable investors to better understand their effects on an entity's financial position, financial performance, and cash flows. SFAS 161 became effective for us beginning on January 1, 2009. The adoption of SFAS 161 is not expected to have a material effect on our consolidated financial statements.

ITEM 7A. 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 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item 8 is contained on pages F-1 through F-39 of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(1) Evaluation of Disclosure Controls and Procedures. The Company's chief executive officer and chief financial officer, after evaluating the effectiveness of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) promulgated under the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this Annual Report on Form 10-K, have concluded that, based on such evaluation, the Company's disclosure controls and procedures were effective. In designing and evaluating the disclosure controls and procedures, the Company's 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 the Company's management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

(2) Management's Annual Report on Internal Control over Financial Reporting. The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and Rule 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board of Directors, management and other personnel, 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. The Company's internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;

- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2008. In making this assessment, it used the criteria set forth in the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, the Company's management has concluded that, as of December 31, 2008, the Company's internal control over financial reporting is effective based on those criteria.

The Company's independent registered public accounting firm, Ernst & Young LLP, issued an attestation report on the Company's internal control over financial reporting. See Section 4 below.

(3) Changes in Internal Controls. During the quarter ended December 31, 2008, there were no changes in our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

(4) Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
Vertex Pharmaceuticals Incorporated

We have audited Vertex Pharmaceuticals Incorporated's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Vertex Pharmaceuticals Incorporated's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Vertex Pharmaceuticals Incorporated maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Vertex Pharmaceuticals Incorporated as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2008 of Vertex Pharmaceuticals Incorporated and our report dated February 12, 2009 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 12, 2009

ITEM 9B. OTHER INFORMATION

On February 5, 2009, our Board of Directors approved year-end discretionary bonuses and 2009 annual salaries. The year-end discretionary bonuses and 2009 annual salaries for our named executive officers are set forth on exhibit 10.60, which is attached to this Annual Report on Form 10-K.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding directors required by this Item 10 will be included in the definitive Proxy Statement for our 2009 Annual Meeting of Stockholders, or the 2009 Proxy Statement, under "Election of Directors," "Information Regarding our Board of Directors and its Committees," "Stockholder Proposals for the 2010 Annual Meeting and Nominations for Director" and is incorporated herein by reference. Other information required by this Item 10 will be included in the 2009 Proxy Statement under "Section 16(a) Beneficial Ownership Reporting Compliance" and "Code of Conduct and Ethics" and is incorporated herein by reference. The information regarding executive officers required by this Item 10 is included in Part I of this Annual Report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item 11 will be included in the 2009 Proxy Statement under "Executive Compensation," and "Compensation Committee Interlocks and Insider Participation," and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item 12 will be included in the 2009 Proxy Statement under "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item 13 will be included in the 2009 Proxy Statement under "Election of Directors" and "Approval of Related Person Transactions and Transactions with Related Persons" and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item 14 will be included in the 2009 Proxy Statement under "Independent Registered Public Accounting Firm" and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) The Financial Statements required to be filed by Items 8 and 15(c) of Form 10-K, and filed herewith, are as follows:

(a)(2) Financial Statement Schedules have been omitted because they are either not applicable or the required information is included in the consolidated financial statements or notes thereto.

(a)(3) Exhibits.

The following is a list of exhibits filed as part of this Annual Report on Form 10-K.

Exhibit Number	Exhibit Description	Filed with this report	Incorporated by Reference herein from–Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
3.1	Restated Articles of Organization of Vertex Pharmaceuticals Incorporated, as amended.		10-Q (Exhibit 3.1)	August 11, 2008	000-19319
3.2	By-laws of Vertex, as amended and restated as of May 11, 2005.		10-Q (Exhibit 3.1)	August 9, 2005	000-19319
4.1	Specimen stock certificate.		S-1 (Exhibit 4.1)	July 18, 1991	33- 40966
4.2	Rights Agreement, dated as of July 1, 1991.		S-1 (Exhibit 4.2)	July 5, 1991	33-40966
4.3	First Amendment to Rights Agreement, dated as of February 21, 1997.		10-K (Exhibit 4.3)	March 28, 1997	000-19319
4.4	Second Amendment to Rights Agreement, dated as of June 30, 2001.		10-Q (Exhibit 4.4)	August 14, 2001	000-19319
4.5	Indenture dated as of February 19, 2008 by and between Vertex Pharmaceuticals Incorporated and U.S. Bank National Association, as trustee		8-K (Exhibit 4.1)	February 25, 2008	000-19319
4.6	Form of 4.75% Convertible Senior Subordinated Note due 2013		8-K (Exhibit 4.2)	February 25, 2008	000-19319
Agreements with Respect to Collaborations, Licenses, Research and Development					
10.1	License, Development, Manufacturing and Commercialization Agreement, dated June 30, 2006, by and between Vertex Pharmaceuticals Incorporated and Janssen Pharmaceutica, N.V.†		10-Q (Exhibit 10.1)	August 9, 2006	000-19319
10.2	Research Agreement and License Agreement, both dated December 16, 1993, between Vertex and Burroughs Wellcome Co.†		10-K (Exhibit 10.16)	Year Ended December 31, 1993	000-19319
10.3	Purchase Agreement, dated May 30, 2008, by and between Vertex Pharmaceuticals Incorporated and Fosamprenavir Royalty, L.P.		10-Q (Exhibit 10.2)	August 11, 2008	000-19319

Exhibit Number	Exhibit Description	Filed with this report	Incorporated by Reference herein from–Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
10.4	License, Development and Commercialization Agreement, dated as of June 11, 2004, between Vertex and Mitsubishi Pharma Corporation.†		10-Q (Exhibit 10.2)	August 9, 2007	000-19319
10.5	Research, Development and Commercialization Agreement, dated as of May 24, 2004, between Vertex and Cystic Fibrosis Foundation Therapeutics Incorporated.†		8-K/A (Exhibit 99.2)	September 10, 2004	000-19319
10.6	Amendment No. 1 to Research, Development and Commercialization Agreement, dated as of January 6, 2006, between Vertex and Cystic Fibrosis Foundation Therapeutics Incorporated.†		10-K (Exhibit 10.9)	March 16, 2006	000-19319
10.7	Second Amendment to Research, Development and Commercialization Agreement, dated as of March 17, 2006, between Vertex and Cystic Fibrosis Foundation Therapeutics Incorporated.†		10-Q (Exhibit 10.1)	May 10, 2006	000-19319
10.8	Exclusive Research Collaboration, License and Commercialization Agreement, dated as of June 21, 2004, between Vertex Pharmaceuticals Incorporated and Merck & Co., Inc.†		10-Q (Exhibit 10.1)	August 11, 2008	000-19319
10.9	Letter Agreement, dated June 26, 2006, by and between Merck & Co., Inc. and Vertex Pharmaceuticals Incorporated.		10-Q (Exhibit 10.2)	August 9, 2006	000-19319
Leases					
10.10	Lease, dated as of March 3, 1995, between Fort Washington Realty Trust and Vertex.		10-K (Exhibit 10.15)	Year Ended December 31, 1994	000-19319
10.11	First Amendment to Lease, dated as of December 29, 1995, between Fort Washington Realty Trust and Vertex.		10-K (Exhibit 10.15)	Year Ended December 31, 1995	000-19319
10.12	Second Amendment to Lease, dated as of June 13, 1997, between Fort Washington Realty Trust and Vertex.		10-K (Exhibit 10.20)	March 26, 1998	000-19319
10.13	Third, Fourth and Fifth Amendments to Lease between Fort Washington Realty Trust and Vertex.†		10-K (Exhibit 10.14)	March 26, 2001	000-19319
10.14	Lease, dated as of September 17, 1999, between Trustees of Fort Washington Realty Trust and Vertex.†		10-Q (Exhibit 10.27)	November 15, 1999	000-19319
10.15	Lease, dated as of January 18, 2001, between Kendall Square, LLC and Vertex.†		10-K (Exhibit 10.16)	March 26, 2001	000-19319
10.16	Agreement for Lease, dated as of November 4, 1998, between Milton Park Limited, Vertex and Vertex Pharmaceuticals (Europe) Limited.		10-K (Exhibit 10.21)	March 30, 1999	000-19319
Equity Plans					
10.17	1991 Stock Option Plan, as amended and restated as of September 14, 1999.*		10-K (Exhibit 10.1)	March 3, 2000	000-19319
10.18	1994 Stock and Option Plan, as amended and restated as of September 14, 1999.*		10-K (Exhibit 10.2)	March 3, 2000	000-19319
10.19	1996 Stock and Option Plan, as amended and restated as of March 14, 2005.*		10-K (Exhibit 10.3)	March 16, 2005	000-19319
10.20	Form of Stock Option Agreement under 1996 Stock and Option Plan.*		8-K (Exhibit 10.1)	February 9, 2005	000-19319
10.21	Form of Restricted Stock Agreement under 1996 Stock and Option Plan—Annual Vesting.*		8-K (Exhibit 10.2)	February 9, 2005	000-19319
10.22	Form of Restricted Stock Agreement under 1996 Stock and Option Plan—Performance Accelerated Restricted Stock.*		8-K (Exhibit 10.3)	February 9, 2005	000-19319
10.23	Amended and Restated Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan.*		10-Q (Exhibit 10.7)	August 11, 2008	000-19319
10.24	Form of Stock Option Grant under 2006 Stock and Option Plan.*		8-K (Exhibit 10.2)	May 15, 2006	000-19319

Exhibit Number	Exhibit Description	Filed with this report	Incorporated by Reference herein from–Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
10.25	Form of Restricted Stock Award (Performance Accelerated Restricted Stock) under 2006 Stock and Option Plan.*		8-K (Exhibit 10.4)	May 15, 2006	000-19319
10.26	Vertex Pharmaceuticals Incorporated Employee Stock Purchase Plan, as amended and restated.*		10-Q (Exhibit 10.8)	August 11, 2008	000-19319
Agreements with Executive Officers and Directors					
10.27	Executive Employment Agreement, dated as of November 1, 1994, between Vertex and Joshua S. Boger.*		10-K (Exhibit 10.6)	Year Ended December 31, 1994	000-19319
10.28	Amendment to Employment Agreement, dated as of May 12, 1995, between Vertex and Joshua S. Boger.*		10-Q (Exhibit 10.1)	Quarter Ended June 30, 1995	000-19319
10.29	Second Amendment to Employment Agreement, dated as of November 8, 2004, between Vertex and Joshua S. Boger.*		10-Q (Exhibit 10.9)	November 9, 2004	000-19319
10.30	Third Amendment to Employment Agreement, dated December 30, 2008, between Vertex and Joshua S. Boger.*	X			
10.31	Transition Agreement between Joshua S. Boger and Vertex, dated February 5, 2009.*		8-K (Exhibit 10.3)	February 10, 2009	000-19319
10.32	Agreement between Matthew W. Emmens and Vertex, dated February 5, 2009.*		8-K (Exhibit 10.1)	February 10, 2009	000-19319
10.33	Employee Non-disclosure, Non-competition and Inventions Agreement between Matthew W. Emmens and Vertex, dated February 5, 2009.*		8-K (Exhibit 10.2)	February 10, 2009	000-19319
10.34	Amended and Restated Employment Agreement, dated as of November 8, 2004, between Vertex and Ian F. Smith.*		10-Q (Exhibit 10.13)	November 9, 2004	000-19319
10.35	Employment Agreement, between Vertex Pharmaceuticals Incorporated and Kurt Graves, dated June 29, 2007.*		10-Q (Exhibit 10.3)	August 9, 2007	000-19319
10.36	Amendment No. 1 to Amended and Restated Employment Agreement, dated February 11, 2008, between Vertex and Kenneth S. Boger.*		10-K (Exhibit 10.32)	February 11, 2008	000-19319
10.37	Employment Agreement, dated February 11, 2008, between Peter Mueller and Vertex.*		10-Q (Exhibit 10.2)	May 12, 2008	000-19319
10.38	Form of Letter Agreement, dated as of March 7, 2003, between Vertex and each of John Alam and Peter Mueller.*		10-K (Exhibit 10.32)	March 31, 2003	000-19319
10.39	Form of Amendment to Letter Agreement, dated as of November 8, 2004, between Vertex and each of John Alam and Peter Mueller.*		10-Q (Exhibit 10.7)	November 9, 2004	000-19319
10.40	Second Amendment to Letter Agreement, dated February 11, 2008, between Peter Mueller and Vertex.*		10-K (Exhibit 10.38)	February 11, 2008	000-19319
10.41	Form of Restricted Stock Agreement for 2007 Restricted Stock Awards to Peter Mueller, John Alam and Ian F. Smith.*		10-Q (Exhibit 10.5)	August 9, 2007	000-19319
10.42	Amended and Restated Employment Agreement, dated as of November 8, 2004, between Vertex and Kenneth S. Boger.*		10-Q (Exhibit 10.3)	November 9, 2004	000-19319
10.43	Employment Agreement between Vertex Pharmaceuticals Incorporated and Freda Lewis-Hall, dated June 18, 2008.*		10-Q (Exhibit 10.3)	August 11, 2008	000-19319
10.44	Change-of-Control Agreement between Vertex Pharmaceuticals Incorporated and Freda Lewis-Hall, dated June 18, 2008.*		10-Q (Exhibit 10.4)	August 11, 2008	000-19319

Exhibit Number	Exhibit Description	Filed with this report	Incorporated by Reference herein from–Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
10.45	Restricted Stock Agreement (35,000 shares) between Vertex Pharmaceuticals Incorporated and Freda Lewis-Hall, dated June 18, 2008.*		10-Q (Exhibit 10.5)	August 11, 2008	000-19319
10.46	Restricted Stock Agreement (10,000 shares) between Vertex Pharmaceuticals Incorporated and Freda Lewis-Hall, dated June 18, 2008.*		10-Q (Exhibit 10.6)	August 11, 2008	000-19319
10.47	Form of Restricted Stock Agreement between Vertex and each of the individuals listed on Schedule 1 thereto.*		10-Q (Exhibit 10.8)	November 9, 2004	000-19319
10.48	Employment Agreement, dated February 11, 2008, between Richard C. Garrison and Vertex.*		10-Q (Exhibit 10.5)	May 12, 2008	000-19319
10.49	Change of Control Letter Agreement, dated as of December 12, 2005, between Vertex and Richard C. Garrison.*		10-K (Exhibit 10.36)	March 16, 2006	000-19319
10.50	Amendment to Change of Control Letter Agreement, dated as of December 12, 2005, between Vertex and Richard C. Garrison.*		10-K (Exhibit 10.37)	March 16, 2006	000-19319
10.51	Second Amendment to Change of Control Letter Agreement, dated February 11, 2008, between Richard C. Garrison and Vertex.*		10-K (Exhibit 10.45)	February 11, 2008	000-19319
10.52	Employment Agreement, dated February 11, 2008, between Lisa Kelly-Croswell and Vertex.*		10-Q (Exhibit 10.3)	May 12, 2008	000-19319
10.53	Change of Control Letter entered into between Vertex Pharmaceuticals Incorporated and Lisa Kelly-Croswell on July 12, 2007.*		10-Q (Exhibit 10.1)	November 9, 2007	000-19319
10.54	Amendment to Change of Control Letter Agreement, dated February 11, 2008, between Lisa Kelly-Croswell and Vertex.*		10-K (Exhibit 10.48)	February 11, 2008	000-19319
10.55	Offer Letter, between Vertex and Amit Sachdev, dated June 4, 2007.*		10-Q (Exhibit 10.4)	August 9, 2007	000-19319
10.56	Employment Agreement, dated February 11, 2008, between Amit Sachdev and Vertex.*		10-Q (Exhibit 10.4)	May 12, 2008	000-19319
10.57	Change of Control Agreement, dated February 11, 2008, between Amit Sachdev and Vertex.*		10-K (Exhibit 10.51)	February 11, 2008	000-19319
10.58	Form of Employee Non-Disclosure and Inventions Agreement.*		S-1 (Exhibit 10.4)	May 30, 1991	33-40966
10.59	Vertex Pharmaceuticals Incorporated Executive Compensation Program.*		10-Q (Exhibit 10.6)	May 12, 2008	000-19319
10.60	Vertex Employee Compensation Plan*	X			
10.61	Vertex Pharmaceuticals Non-Employee Board Compensation*		10-K (Exhibit 10.43)	March 1, 2007	000-19319
10.62	Employment Agreement, dated February 11, 2008, between John J. Alam and Vertex.*		10-Q (Exhibit 10.1)	May 12, 2008	000-19319
10.63	Second Amendment to Letter Agreement, dated February 11, 2008, between John J. Alam and Vertex.*		10-K (Exhibit 10.37)	February 11, 2008	000-19319
10.64	Amendment No 2. to Amended and Restated Employment Agreement between Kenneth S. Boger and Vertex, dated December 29, 2008.*	X			
10.65	Amendment No. 1 to Employment Agreement between Kurt Graves and Vertex, dated December 29, 2008.*	X			
10.66	Amendment No. 1 to Amended and Restated Employment Agreement between Ian F. Smith and Vertex, dated December 29, 2008.*	X			
10.67	Form of Amendment to Employment Agreement and Change of Control Agreement, dated December 2008, entered into by Vertex and each of Richard Garrison, Amit Sachdev, Lisa Kelly-Croswell and Freda Lewis-Hall.*	X			

Exhibit Number	Exhibit Description	Filed with this report	Incorporated by Reference herein from–Form or Schedule	Filing Date/ Period Covered	SEC File/ Reg. Number
21.1	Subsidiaries of Vertex.	X			
23.1	Consent of Independent Registered Public Accounting Firm Ernst & Young LLP.	X			
31.1	Certification of the Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.	X			
31.2	Certification of the Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.	X			
32.1	Certification of the Chief Executive Officer and the Chief Financial Officer under Section 906 of the Sarbanes-Oxley Act of 2002.	X			

* Management contract, compensatory plan or agreement.

† Confidential portions of these documents have been filed separately with the Securities and Exchange Commission pursuant to a request for confidential treatment.

SIGNATURES

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

VERTEX PHARMACEUTICALS INCORPORATED

February 13, 2009 By: /s/ JOSHUA S. BOGER

Joshua S. Boger
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	Title	Date
/s/ JOSHUA S. BOGER Joshua S. Boger	Director and Chief Executive Officer (Principal Executive Officer)	February 13, 2009
/s/ MATTHEW W. EMMENS Matthew W. Emmens	Director and President	February 13, 2009
/s/ IAN F. SMITH Ian F. Smith	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 13, 2009
/s/ PAUL M. SILVA Paul M. Silva	Vice President and Corporate Controller (Principal Accounting Officer)	February 13, 2009
/s/ CHARLES A. SANDERS Charles A. Sanders	Chairman of the Board of Directors	February 13, 2009
/s/ ERIC K. BRANDT Eric K. Brandt	Director	February 13, 2009
/s/ ROGER W. BRIMBLECOMBE Roger W. Brimblecombe	Director	February 13, 2009
/s/ STUART J.M. COLLINSON Stuart J.M. Collinson	Director	February 13, 2009
/s/ EUGENE H. CORDES Eugene H. Cordes	Director	February 13, 2009
/s/ BRUCE I. SACHS Bruce I. Sachs	Director	February 13, 2009
/s/ ELAINE S. ULLIAN Elaine S. Ullian	Director	February 13, 2009

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of
Vertex Pharmaceuticals Incorporated

We have audited the accompanying consolidated balance sheets of Vertex Pharmaceuticals Incorporated as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Vertex Pharmaceuticals Incorporated at December 31, 2008 and 2007, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

As discussed in Notes B and D to the consolidated financial statements, on January 1, 2006, the Company adopted the provisions of Statement of Financial Accounting Standards No. 123(R), *Share-Based Payment.*

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Vertex Pharmaceuticals Incorporated's internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 12, 2009 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 12, 2009

VERTEX PHARMACEUTICALS INCORPORATED

Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	December 31, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 389,115	$ 355,663
Marketable securities, available for sale, current portion	442,986	105,208
Accounts receivable	23,489	31,320
Prepaid expenses and other current assets	11,991	4,660
Total current assets	867,581	496,851
Marketable securities, available for sale, excluding current portion	—	6,925
Restricted cash	30,258	30,258
Property and equipment, net	68,331	66,509
Other assets	14,309	934
Total assets	$ 980,479	$ 601,477
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 51,760	$ 32,750
Accrued expenses and other current liabilities	94,203	98,350
Accrued interest	5,349	—
Deferred revenues, current portion	37,678	25,528
Accrued restructuring expense, current portion	6,319	5,606
Collaborator development loan (due May 2008)	—	19,997
Other obligations	21,255	17,048
Total current liabilities	216,564	199,279
Accrued restructuring expense, excluding current portion	27,745	29,686
Convertible senior subordinated notes (due February 2013)	287,500	—
Deferred revenues, excluding current portion	209,796	101,217
Total liabilities	741,605	330,182
Commitments and contingencies (Note L and Note S)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 1,000,000 shares authorized; none issued and outstanding at December 31, 2008 and 2007, respectively	—	—
Common stock, $0.01 par value; 300,000,000 and 200,000,000 shares authorized at December 31, 2008 and 2007, respectively; 151,245,384 and 132,875,540 shares issued and outstanding at December 31, 2008 and 2007, respectively	1,494	1,312
Additional paid-in capital	2,281,817	1,856,856
Accumulated other comprehensive income	3,168	881
Accumulated deficit	(2,047,605)	(1,587,754)
Total stockholders' equity	238,874	271,295
Total liabilities and stockholders' equity	$ 980,479	$ 601,477

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

VERTEX PHARMACEUTICALS INCORPORATED

Consolidated Statements of Operations

(in thousands, except per share amounts)

	Years Ended December 31,		
	2008	2007	2006
Revenues:			
Royalty revenues	$ 37,483	$ 47,973	$ 41,208
Collaborative and other research and development revenues	138,021	151,039	175,148
Total revenues	175,504	199,012	216,356
Costs and expenses:			
Royalty expenses	15,686	13,904	12,170
Research and development expenses	516,292	518,677	379,228
Sales, general and administrative expenses	101,910	79,104	50,345
Restructuring expense	4,324	7,119	3,651
Total costs and expenses	638,212	618,804	445,394
Loss from operations	(462,708)	(419,792)	(229,038)
Interest income	16,328	30,798	23,024
Interest expense	(13,471)	(2,285)	(7,955)
Realized gain on sale of investment	—	—	11,183
Loss on exchange of convertible subordinated notes	—	—	(5,151)
Loss before cumulative effect of a change in accounting principle	(459,851)	(391,279)	(207,937)
Cumulative effect of a change in accounting principle—SFAS 123(R)	—	—	1,046
Net loss	$ (459,851)	$ (391,279)	$ (206,891)
Basic and diluted loss per common share before cumulative effect of a change in accounting principle	$ (3.27)	$ (3.03)	$ (1.84)
Basic and diluted cumulative effect of a change in accounting principle per common share	—	—	0.01
Basic and diluted net loss per common share	$ (3.27)	$ (3.03)	$ (1.83)
Basic and diluted weighted-average number of common shares outstanding	140,556	128,986	113,221

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

VERTEX PHARMACEUTICALS INCORPORATED

Consolidated Statements of Stockholders' Equity and Comprehensive Loss

(in thousands)

	Common Stock		Additional Paid-In Capital	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares	Amount						
Balance, December 31, 2005	108,153	$ 1,081	$ 1,243,960	$ (13,408)	$ (2,873)	$ (989,584)	$ 239,176	
Unrealized holding gains on marketable securities					1,563		1,563	$ 1,563
Reclassification adjustment for realized gain on marketable securities included in net loss					141		141	141
Translation adjustments					207		207	207
Net loss						(206,891)	(206,891)	(206,891)
Comprehensive loss								$ (204,980)
Issuances of common stock:								
Equity offering	10,000	100	313,618				313,718	
Convertible Subordinated Notes exchanged	4,065	41	64,197				64,238	
Benefit plans	3,903	22	55,670				55,692	
Reversal of deferred compensation			(13,408)	13,408			—	
Stock-based compensation expense			39,137				39,137	
Cumulative effect of a change in accounting principle—SFAS 123(R)			(1,046)				(1,046)	
Balance, December 31, 2006	126,121	$ 1,244	$ 1,702,128	$ —	$ (962)	$ (1,196,475)	$ 505,935	
Unrealized holding gains on marketable securities					1,751		1,751	$ 1,751
Reclassification adjustment for realized gain on marketable securities included in net loss					100		100	100
Translation adjustments					(8)		(8)	(8)
Net loss						(391,279)	(391,279)	(391,279)
Comprehensive loss								$ (389,436)
Issuances of common stock:								
Convertible Subordinated Notes converted	3,992	40	59,035				59,075	
Benefit plans	2,763	28	36,286				36,314	
Stock-based compensation expense			59,407				59,407	
Balance, December 31, 2007	132,876	$ 1,312	$ 1,856,856	$ —	$ 881	$ (1,587,754)	$ 271,295	
Unrealized holding gains on marketable securities					3,683		3,683	$ 3,683
Reclassification adjustment for realized loss on marketable securities included in net loss					(1,242)		(1,242)	(1,242)
Translation adjustments					(154)		(154)	(154)
Net loss						(459,851)	(459,851)	(459,851)
Comprehensive loss								$ (457,564)
Issuances of common stock:								
Equity offerings	15,525	155	329,990				330,145	
Benefit plans	2,844	27	36,986				37,013	
Stock-based compensation expense			57,985				57,985	
Balance, December 31, 2008	151,245	$ 1,494	$ 2,281,817	$ —	$ 3,168	$ (2,047,605)	$ 238,874	

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

VERTEX PHARMACEUTICALS INCORPORATED

Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,		
	2008	2007	2006
Cash flows from operating activities:			
Net loss	$ (459,851)	$ (391,279)	$ (206,891)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization expense	32,196	27,459	25,868
Stock-based compensation expense	57,985	59,407	39,137
Other non-cash based compensation expense	5,027	4,340	3,341
Cumulative effect of a change in accounting principle	—	—	(1,046)
Loss on disposal of property and equipment	11	142	10
Realized (gain) loss on marketable securities	(633)	155	(7,579)
Realized gain on warrants	—	—	(3,520)
Charge for exchange of convertible subordinated notes	—	—	5,151
Changes in operating assets and liabilities:			
Accounts receivable	7,831	31,603	(42,328)
Prepaid expenses and other current assets	(7,331)	(803)	(554)
Accounts payable	19,010	17,382	9,158
Accrued expenses and other current liabilities	58	22,032	48,523
Accrued restructuring expense	(1,228)	2,219	(9,909)
Accrued interest	5,349	(1,694)	280
Deferred revenues	115,094	(23,439)	117,884
Net cash used in operating activities	(226,482)	(252,476)	(22,475)
Cash flows from investing activities:			
Purchases of marketable securities	(755,422)	(317,470)	(508,085)
Sales and maturities of marketable securities	427,648	755,620	302,265
Sale of warrants	—	—	18,369
Expenditures for property and equipment	(32,180)	(32,415)	(32,417)
Restricted cash	—	—	11,224
Investments and other assets	(696)	(569)	173
Net cash (used in) provided by investing activities	(360,650)	405,166	(208,471)
Cash flows from financing activities:			
Issuances of common stock from employee benefit plans, net	31,983	31,965	52,363
Issuances of common stock from stock offerings, net	330,145	—	313,672
Issuances of convertible senior subordinated notes (due February 2013), net	278,607	—	—
Repayment of collaborator development loan (due May 2008)	(19,997)	—	—
Principal payments on convertible subordinated notes (due September 2007)	—	(42,102)	—
Debt exchange costs	—	(53)	(170)
Net cash provided by (used in) financing activities	620,738	(10,190)	365,865
Effect of changes in exchange rates on cash	(154)	(8)	207
Net increase in cash and cash equivalents	33,452	142,492	135,126
Cash and cash equivalents—beginning of period	355,663	213,171	78,045
Cash and cash equivalents—end of period	$ 389,115	$ 355,663	$ 213,171
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 6,676	$ 3,820	$ 7,212
Cash paid for taxes	$ —	$ —	$ —

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

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements

A. The Company

Vertex Pharmaceuticals Incorporated ("Vertex" or the "Company") is in the business of discovering, developing and commercializing small molecule drugs for the treatment of serious diseases. Telaprevir, the Company's lead drug candidate, is an oral hepatitis C protease inhibitor and one of the most advanced of a new class of antiviral treatments in clinical development that targets HCV infection. Telaprevir is being evaluated in a registration program focused on treatment-naïve and treatment-experienced patients with genotype 1 HCV. The Company is also developing, among other compounds, VX-770, an investigational potentiator compound in Phase 2 clinical development designed for the treatment of cystic fibrosis ("CF"). In June 2006, the Company entered into a collaboration agreement with Janssen Pharmaceutica, N.V., a Johnson & Johnson company, relating to telaprevir. Under the collaboration agreement, the Company has retained exclusive commercial rights to telaprevir in North America. Janssen has agreed to be responsible for 50% of the drug development costs under the development program for North America and the Janssen territories.

The Company's net loss for 2008 was $459.9 million, or $3.27 per basic and diluted common share, and the Company expects to incur operating losses at least until it obtains marketing approval and successfully commercializes a product. As of December 31, 2008, the Company had cash, cash equivalents and marketable securities of $832.1 million. The Company expects that the Company's current cash, cash equivalents and marketable securities in addition to amounts the Company expects to receive from its collaborators under existing contractual agreements will be sufficient to fund its operations for the next twelve months, but that it will need additional capital to complete the development of telaprevir. There can be no assurance that additional financing will be available on acceptable terms, if at all. If adequate funds are not available, the Company may be required to curtail significantly or discontinue one or more of the Company's research, drug discovery or development programs or attempt to obtain funds through arrangements that may require the Company to relinquish rights to certain of the Company's technologies, drugs or drug candidates.

Vertex is subject to risks common to companies in its industry including, but not limited to, the dependence on the success of the Company's lead drug candidate, limited experience in drug development, manufacturing, and sales and marketing, rapid technological change and competition, uncertain protection of proprietary technology, uncertainty about clinical trial outcomes, the need to comply with government regulations, share price volatility, the need to obtain additional funding, uncertainties relating to pharmaceutical pricing and reimbursement, dependence on collaborative relationships and potential product liability.

B. Accounting Policies

Basis of Presentation

The consolidated financial statements reflect the operations of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated. The Company operates in one segment, pharmaceuticals, and all revenues are from United States operations.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the amounts of revenues and expenses during the reported periods. Significant estimates in these consolidated financial statements have been made in connection

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

with the calculation of revenues, research and development expenses, stock-based compensation expense, and restructuring expense. The Company bases its estimates on historical experience and various other assumptions, including in certain circumstances future projections, that management believes to be reasonable under the circumstances. Actual results could differ from those estimates. Changes in estimates are reflected in reported results in the period in which they become known.

Reclassification in the Preparation of Financial Statements

Certain amounts in prior years' financial statements have been reclassified to conform to the current presentation. The reclassifications had no effect on the reported net loss.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of money market funds and marketable securities. The Company places these investments with highly rated financial institutions, and, by policy, limits the amounts of credit exposure to any one financial institution. These amounts at times may exceed federally insured limits. The Company has not experienced any credit losses in these accounts and does not believe it is exposed to any significant credit risk on these funds. The Company has no foreign exchange contracts, option contracts or other foreign exchange hedging arrangements.

The Company's revenues have been generated from a limited number of collaborators in the biotechnology and pharmaceuticals industries in the United States, Europe and Japan. In 2008, the Company had significant revenue transactions with Janssen that accounted for 68% of the Company's total revenues. In 2007, the Company had significant revenue transactions with Janssen and GlaxoSmithKline that accounted for 59% and 24%, respectively, of the Company's total revenues. In 2006, the Company had significant revenue transactions with Janssen, Merck and GlaxoSmithKline that accounted for 31%, 27% and 20%, respectively, of the Company's total revenues.

Receivables from Janssen, GlaxoSmithKline and Mitsubishi Tanabe Pharma Corporation represented 67%, 17% and 11%, respectively, of the Company's accounts receivable balance at December 31, 2008. Receivables from GlaxoSmithKline, Janssen and CFFT represented 44%, 36% and 12%, respectively, of the Company's accounts receivable balance at December 31, 2007. Management believes that credit risks associated with these collaborators are not significant.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents consist principally of money market funds and debt securities. Changes in cash and cash equivalents may be affected by shifts in investment portfolio maturities as well as by actual cash receipts and disbursements.

Marketable Securities

Marketable securities consist of investments in municipal bond securities, U.S. government agency securities, government-sponsored enterprise securities, high-grade corporate bonds and asset-backed securities that are classified as available-for-sale. At December 31, 2008, the Company did not hold any asset-backed securities. The Company classifies marketable securities available to fund current operations as current assets on the consolidated balance sheets. Marketable securities are classified as long-term assets on the consolidated balance sheets if (i) they have been in an unrealized loss position

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

for longer than one year and (ii) the Company has the ability and intent to hold them (a) until the carrying value is recovered and (b) such holding period may be longer than one year. Marketable securities are stated at fair value with their unrealized gains and losses included as a component of accumulated other comprehensive income (loss), which is a separate component of stockholders' equity, until such gains and losses are realized. The fair value of these securities is based on quoted prices for identical or similar assets. If a decline in the fair value is considered other-than-temporary, based on available evidence, the unrealized loss is transferred from other comprehensive income (loss) to the consolidated statements of operations. There were no charges taken for other than temporary declines in fair value of marketable securities in 2008, 2007 and 2006. Realized gains and losses are determined on the specific identification method and are included in interest income in the consolidated statements of operations. Please refer to Note E, "Fair Value of Financial Instruments," for further information.

Stock-based Compensation Expense

The Company adopted Financial Accounting Standards Board ("FASB") Statement No. 123(R), "Share-Based Payment" ("SFAS 123(R)"), on January 1, 2006. SFAS 123(R) revised FASB Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), superseded Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), and amended FASB Statement No. 95, "Statement of Cash Flows" ("SFAS 95"). SFAS 123(R) requires companies to expense the fair value of employee stock options and other forms of stock-based employee compensation over the employees' service periods or the derived service period for awards with market conditions. 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 conditions. Please refer to Note D, "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. On January 1, 2008, the Company adopted Emerging Issues Task Force ("EITF") Issue No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities," ("EITF 07-3"), using a prospective method. The adoption of EITF 07-3 did not have a material effect on the Company's consolidated financial statements as of adoption. Pursuant to EITF 07-3, 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. Prior to the adoption of EITF 07-3, the Company expensed nonrefundable advance payments for research and development activities upon payment.

Research and development expenses are comprised of costs incurred 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 telaprevir; 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.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

The Company's collaborators have funded portions of the Company's research and development programs related to specific drug candidates and research targets, including telaprevir, certain kinases and certain cystic fibrosis research targets in 2008; telaprevir, VX-702, VX-770, certain kinases and certain cystic fibrosis research targets in 2007; and telaprevir, VX-702, VX-770, kinases and certain cystic fibrosis research targets in 2006. The Company's collaborative and other research and development revenues were $138.0 million, $151.0 million and $175.1 million, respectively, for 2008, 2007 and 2006. 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 $155.8 million, $265.7 million and $222.4 million, respectively, for 2008, 2007 and 2006.

Restructuring Expense

The Company records costs and liabilities associated with exit and disposal activities, as defined in FASB Statement No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS 146"), 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. In 2008, 2007 and 2006, the Company recorded costs and liabilities for exit and disposal activities related to a restructuring plan in accordance with SFAS 146. The liability is evaluated and adjusted as appropriate at least on a quarterly basis for changes in circumstances. Please refer to Note F, "Restructuring Expense," for further information.

Revenue Recognition

The Company recognizes revenues in accordance with the SEC's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements," as amended by SEC Staff Accounting Bulletin No. 104, "Revenue Recognition," and for revenue arrangements entered into after June 30, 2003, EITF Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21").

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 efforts; milestone payments; and royalties on product sales.

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.

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 research or development term. Research and development funding is recognized as earned, ratably over the period of effort.

Substantive milestones achieved in collaboration arrangements are recognized as earned when the corresponding payment is reasonably assured, subject to the following policies in those circumstances where the Company has obligations remaining after achievement of the milestone:

- In those circumstances where collection of a substantive milestone payment is reasonably assured, the Company has remaining obligations to perform under the collaboration

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

arrangement and the Company has sufficient evidence of the fair value for the performance of its remaining obligations, management considers the milestone payment and the remaining obligations to be separate units of accounting. In these circumstances, the Company uses the residual method under EITF 00-21 to allocate revenues among the milestones and the remaining obligations.

- In those circumstances where collection of a substantive milestone payment is reasonably assured and the Company has remaining obligations to perform under the collaboration arrangement, but the Company does not have sufficient evidence of the fair value for its remaining obligations, management considers the milestone payment and the remaining obligations under the contract as a single unit of accounting. If the collaboration does not require specific deliverables at specific times or at the end of the contract term, but rather, the Company's obligations are satisfied over a period of time, substantive milestone payments are recognized over the period of performance. This typically results in a portion of the milestone payment being recognized as revenue on the date the milestone is achieved equal to the applicable percentage of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized over the remaining period of performance.

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. Milestones that are not considered substantive and that do not meet the separation criteria are accounted for as license payments and recognized on a straight-line basis over the remaining period of performance.

Payments received or reasonably assured after performance obligations are met completely are recognized as earned.

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.

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), 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 in accordance with EITF Issue No. 88-18, "Sales of Future Revenues" ("EITF 88-18"). 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.

Property and Equipment

Property and equipment are recorded at cost. Depreciation and amortization is provided using the straight-line method over the estimated useful life of the related asset, generally four to seven years for furniture and equipment and three to five years for computers and software. Leasehold improvements

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

are amortized using the straight-line method over the lesser of the useful life of the improvements or the remaining life of the associated lease. Major additions and betterments are capitalized; maintenance and repairs to an asset that do not improve or extend its life are charged to operations. When assets are retired or otherwise disposed of, the assets and related allowances for depreciation and amortization are eliminated from the accounts and any resulting gain or loss is reflected in the Company's consolidated statements of operations.

Investments

Investments include long-term investments recorded using the cost method of accounting. When the Company holds an ownership interest in an entity of less than 20%, and does not have the ability to exercise significant influence over the entity's operating activities, the Company accounts for its investment using the cost method. If any adjustment to the fair value of an investment reflects a decline in the value of that investment below its cost, the Company considers the evidence available to it, including the duration and extent to which the fair value of the investment has been less than cost, to evaluate the extent to which the decline is other-than-temporary. If the decline is considered other-than-temporary, the cost basis of the investment is written down to fair value as a new cost basis and the amount of the write-down is included in the Company's consolidated statements of operations. There were no write-downs of investments in 2008, 2007 or 2006. Please refer to Note J, "Altus Investment," for further information about the Company's investment in Altus Pharmaceuticals, Inc.

Income Taxes

Deferred tax assets and liabilities are recognized for the expected future tax consequences of temporary differences between the financial statement carrying amounts and the income tax bases of assets and liabilities. A valuation allowance is applied against any net deferred tax asset if, based on the weighted available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

Debt Issuance Costs and Royalty Sale Transaction Expenses

Debt issuance costs incurred to complete the Company's convertible subordinated note offerings are deferred and included in other assets on the consolidated balance sheets. The debt issuance costs are amortized based on the effective interest method over the term of the related debt issuance. The amortization expense related to the debt issuance costs is included in interest expense on the consolidated statements of operations.

The Company defers direct and incremental costs associated with its transaction to sell its future rights to its HIV royalty stream by analogy to FASB Technical Bulletin No. 90-1, "Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts." These costs are included in other assets on the consolidated balance sheets. The transaction costs are amortized based on the "units-of-revenue" method in the same manner and over the same period in which the related deferred revenues are recognized as royalty revenues. The amortization expense related to the transaction expenses is included in royalty expenses on the consolidated statements of operations.

Equity Offering Costs

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

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

Comprehensive Loss

Comprehensive loss consists of net loss and other comprehensive income (loss), which includes foreign currency translation adjustments and unrealized gains and losses on certain marketable securities. For purposes of comprehensive loss disclosures, the Company does not record tax provisions or benefits for the net changes in foreign currency translation adjustment, as the Company intends to permanently reinvest undistributed earnings in its foreign subsidiary.

Foreign Currency Translation

The functional currency of the Company's foreign subsidiary is the local currency. Assets and liabilities of the foreign subsidiary are re-measured into U.S. dollars at rates of exchange in effect at the end of the year. Revenue and expense amounts are re-measured using the average exchange rates for the period. Net unrealized gains and losses resulting from foreign currency translation are included in other comprehensive income (loss), which is a separate component of stockholders' equity. Included in accumulated other comprehensive income (loss) are a net unrealized gain related to foreign currency translation of $27,000, $181,000 and $189,000 at December 31, 2008, 2007 and 2006, respectively.

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 that has been issued but is 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 the vesting of unvested restricted shares of common stock. 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 December 31,		
	2008	2007	2006
	(in thousands, except per share amounts)		
Stock options	16,497	15,358	14,279
Weighted-average exercise price (per share)	$ 29.16	$ 28.70	$ 26.44
Convertible notes	12,425	—	4,449
Weighted-average conversion price (per share)	$ 23.14	n/a	$ 22.87
Unvested restricted shares	1,851	1,676	1,764

Recent Accounting Pronouncements

In September 2006, the FASB issued SFAS 157. SFAS 157 establishes a common definition for fair value to be applied under GAAP requiring use of fair value, establishes a framework for measuring fair value, and expands disclosure about such fair value measurements. Issued in February 2008, FASB Staff Position No. SFAS 157-1, "Application of FASB Statement No. 157 to FASB Statement No. 13 and Other Accounting Pronouncements That Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13," removed leasing transactions accounted for under FASB Statement No. 13, "Accounting for Leases," and related guidance from the scope of SFAS 157.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

B. Accounting Policies (Continued)

Issued in February 2008, FASB Staff Position No. SFAS 157-2, "Effective Date of FASB Statement No. 157," deferred the effective date of SFAS 157 for all nonfinancial assets and nonfinancial liabilities to fiscal years beginning after November 15, 2008. The implementation of SFAS 157 for financial assets and financial liabilities, effective for the Company on January 1, 2008, did not have a material effect on the Company's consolidated financial statements. The Company currently is evaluating the effect of SFAS 157 for nonfinancial assets and nonfinancial liabilities on the Company's consolidated financial statements. Please refer to Note E, "Fair Value of Financial Instruments," for further information.

In October 2008, the FASB issued FASB Staff Position No. SFAS 157-3, "Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active," ("FSP 157-3"), to clarify the application of the provisions of SFAS 157 in an inactive market and how an entity would determine fair value in an inactive market. FSP 157-3 was effective upon issuance, including prior periods for which financial statements had not been issued. The implementation of FSP 157-3 did not have a material effect on the Company's consolidated financial statements.

In December 2007, the FASB issued Statement No. 141 (Revised 2007), "Business Combinations" ("SFAS 141(R)"). SFAS 141(R) establishes principles and requirements for how an acquirer in a business combination recognizes and measures in its financial statements, the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree. SFAS 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of business combinations. SFAS 141(R) became effective on a prospective basis for financial statements for the Company beginning on January 1, 2009. Accordingly, any future business combination the Company enters into would be subject to SFAS 141(R).

In December 2007, the FASB ratified the consensus reached by the EITF on EITF Issue No. 07-1, "Accounting for Collaborative Arrangements" ("EITF 07-1"). EITF 07-1 requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. Further, EITF 07-1 clarified the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF Issue No. 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 became effective for the Company beginning on January 1, 2009. EITF 07-1 is not expected to have a material effect on the Company's consolidated financial statements.

In March 2008, the FASB issued Statement No. 161, "Disclosures about Derivative Instruments and Hedging Activities—an amendment of FASB Statement No. 133" ("SFAS 161"). SFAS 161 is intended to improve financial reporting about derivative instruments and hedging activities by requiring enhanced disclosures to enable investors to better understand their effects on an entity's financial position, financial performance and cash flows. SFAS 161 became effective for the Company beginning on January 1, 2009. The adoption of SFAS 161 is not expected to have a material effect on the Company's consolidated financial statements.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

C. Common and Preferred Stock

Stock and Option Plans

At December 31, 2008, the Company had four stock-based employee compensation plans: the 1991 Stock Option Plan (the "1991 Plan"), the 1994 Stock and Option Plan (the "1994 Plan"), the 1996 Stock and Option Plan (the "1996 Plan") and the 2006 Stock and Option Plan (the "2006 Plan," and together with the 1991 Plan, the 1994 Plan and the 1996 Plan, collectively, the "Stock and Option Plans") and one Employee Stock Purchase Plan (the "ESPP"). On May 15, 2008, the Company's stockholders approved an increase in the number of shares of common stock authorized for issuance under the 2006 Plan of 6,600,000, to a total of 13,902,380 shares of common stock, and an increase in the number of shares of common stock authorized for issuance under the ESPP of 2,000,000. In connection with the Stock and Option Plans, the Company issues stock options and restricted stock awards with service conditions, which are generally the vesting periods of the awards. The Company also issues to certain members of senior management restricted stock awards that vest upon the earlier of the satisfaction of a market condition or a service condition ("PARS").

Under the 2006 Plan, the Company may issue restricted stock and options to its employees, directors and consultants for services. Stock options may be granted under the 2006 Plan either as options intended to qualify as "incentive stock options" ("ISOs") under the Internal Revenue Code or as non-qualified stock options ("NQSOs"). Each option granted under the 2006 Plan has an exercise price equal to the fair market value of the underlying common stock on the date of grant. For options issued to current employees, the date of grant is the date the option grant is approved by the Company's Board of Directors. For grants to new employees, the date of grant is the employee's first day of employment. The price per share of restricted stock granted to employees is equal to $0.01, the par value of the Company's common stock. Vesting of options and restricted stock generally is ratable over specified periods, usually four years, and is determined by the Company's Board of Directors. All options awarded under the 2006 Plan expire not more than ten years from the grant date.

Stock options granted under the 1991 Plan, the 1994 Plan and the 1996 Plan were granted either as ISOs or NQSOs. Under the 1991 Plan, stock options could only be granted to employees (including officers and directors who were employees) and to consultants of the Company (NQSOs only). Under the 1994 Plan and the 1996 Plan, stock rights, which may be (i) ISOs when Internal Revenue Code requirements are met, (ii) NQSOs, or (iii) shares of common stock or the opportunity to make a direct purchase of shares of common stock, could be granted to employees (including officers and directors who are employees) and consultants, advisors and non-employee directors (NQSOs and stock awards only). Under the 1991 Plan and the 1994 Plan, ISOs could only be granted at a price not less than the fair market value of the common stock on the date of the grant, and NQSOs could be granted at an exercise price established by the Board of Directors, which could have been less than, equal to or greater than the fair value of the common stock on the date of the grant. Stock options granted under the 1996 Plan could not have been granted at a price less than the fair market value of the common stock on the date of grant. Vesting is ratable over specified periods for all plans, is generally four or five years, and was determined by the Board of Directors. ISOs granted under the 1991 Plan, the 1994 Plan and the 1996 Plan must expire not more than ten years from the date of grant.

The ESPP permits eligible employees to enroll in a twelve-month offering period comprising two six-month purchase periods. Participants may purchase shares of the Company's common stock, through payroll deductions, at a price equal to 85% of the fair market value of the common stock on the first day of the applicable twelve-month offering period, or the last day of the applicable six-month purchase period, whichever is lower. Purchase dates under the ESPP occur on or about May 14 and November 14 of each year.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

C. Common and Preferred Stock (Continued)

The Company reserved an aggregate of 8,000,000 shares under the 1991 Plan and 1994 Plan. The Company reserved 22,000,000 shares under the 1996 Plan and 13,902,380 shares under the 2006 Plan. At December 31, 2008, the Company had approximately 16,497,000 stock options outstanding and approximately 1,851,000 outstanding and unvested restricted shares. At December 31, 2008, the Company had approximately 4,595,000 shares of common stock available for grants under the 2006 Plan. At December 31, 2008, no shares were available for grants under the 1991 Plan, the 1994 Plan or the 1996 Plan. As of December 31, 2008, approximately 1,845,000 shares remained available for future purchases under the ESPP and approximately 651,000 shares remained available for grant under the 401(k) Plan.

Rights

Each Vertex shareholder also holds one share purchase right (a "Right") for each share of common stock owned. Each Right entitles the holder to purchase from the Company one half of one-hundredth of a share of Series A junior participating preferred stock, $0.01 par value (the "Junior Preferred Shares"), of the Company at a price of $135 per one half of one-hundredth of a Junior Preferred Share, subject to adjustment (the "Purchase Price"). The Rights are not exercisable until after the acquisition by a person or group of 15% or more of the outstanding common stock (an "Acquiring Person"), or after the announcement of an intention to make or the commencement of a tender offer or exchange offer, the consummation of which would result in the beneficial ownership by a person or group of 15% or more of the outstanding common stock (the earlier of such dates being called the "Distribution Date"). Until the Distribution Date (or earlier redemption or expiration of the Rights), the Rights will be traded with, and only with, the common stock. Until a Right is exercised, the Right will not entitle the holder thereof to any rights as a stockholder.

If any person or group becomes an Acquiring Person, each holder of a Right, other than Rights beneficially owned by the Acquiring Person, will thereafter have the right to receive upon exercise and payment of the Purchase Price that number of shares of common stock having a market value of two times the Purchase Price and, if the Company is acquired in a business combination transaction or 50% or more of its assets are sold, each holder of a Right will thereafter have the right to receive upon exercise and payment of the Purchase Price that number of shares of common stock of the acquiring company that at the time of the transaction will have a market value of two times the Purchase Price.

At any time after any person becomes an Acquiring Person and prior to the acquisition by such person or group of 50% or more of the outstanding common stock, the Board of Directors of the Company may cause the Rights (other than Rights owned by such person or group) to be exchanged, in whole or in part, for common stock or Junior Preferred Shares, at an exchange rate of one share of common stock per Right or one half of one-hundredth of a Junior Preferred Share per Right.

At any time prior to the acquisition by a person or group of beneficial ownership of 15% or more of the outstanding common stock, the Board of Directors of the Company may redeem the Rights at a price of $0.01 per Right.

The Rights have certain anti-takeover effects, in that they will cause substantial dilution to a person or group that attempts to acquire a significant interest in Vertex on terms not approved by the Board of Directors.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

D. Stock-based Compensation Expense

The Company records stock-based compensation expense in accordance with SFAS 123(R), which requires companies to recognize share-based payments to employees as compensation expense using the "fair value" method. The fair value of stock options and shares purchased pursuant to the ESPP is calculated using the Black-Scholes valuation model. The fair value of restricted stock awards is typically based on intrinsic value on the date of grant. Under the fair value recognition provisions of SFAS 123(R), stock-based compensation, measured at the grant date based on the fair value of the award, is recognized as expense ratably over the service period. The expense recognized over the service period includes an estimate of awards that will be forfeited.

For PARS awards, a portion of the fair value of the common stock on the date of grant is recognized ratably over a derived service period that is equal to the estimated time to satisfy the market condition. The portion of the fair value of the common stock that is recognized over the derived service period is determined on the basis of the estimated probability that the PARS award will vest as a result of satisfying the market condition. For the PARS awards granted in 2008, 2007 and 2006, the derived service period relating to each market condition was shorter than the four-year service-based vesting period of the PARS. The difference between the fair value of the common stock on the date of grant and the value recognized over the derived service period is recognized ratably over the four-year service-based vesting period of the PARS. The stock-based compensation expense recognized over each of the derived service periods and the four-year service periods includes an estimate of awards that will be forfeited prior to the end of the derived service periods or the four-year service periods, respectively.

Prior to adoption of SFAS 123(R), Vertex recorded the effect of forfeitures of restricted stock as they occurred. In connection with the adoption of SFAS 123(R) on January 1, 2006 using a modified prospective method, Vertex recorded a $1.0 million benefit in 2006 from the cumulative effect of changing from recording forfeitures related to restricted stock awards as they occurred to estimating forfeitures during the service period.

The effect of stock-based compensation expense during the three years ended December 31, 2008 was as follows:

	2008	2007	2006
		(in thousands)	
Stock-based compensation expense by type of award:			
Stock options	$ 39,449	$ 38,330	$ 29,804
Restricted stock (including PARS)	15,195	18,419	7,065
ESPP issuances	3,343	2,658	2,268
Total stock-based compensation expense	$ 57,987	$ 59,407	$ 39,137
Effect of stock-based compensation expense by line item:			
Research and development expenses	$ 45,524	$ 48,418	$ 32,171
Sales, general and administrative expenses	12,463	10,989	6,966
Total stock-based compensation expense	$ 57,987	$ 59,407	$ 39,137
Cumulative effect of a change in accounting principle—SFAS 123(R)	—	—	(1,046)
Stock-based compensation expense included in net loss	$ 57,987	$ 59,407	$ 38,091

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

D. Stock-based Compensation Expense (Continued)

Stock Options

All stock options awarded during 2008, 2007 and 2006 were awarded with exercise prices equal to the fair market value of the Company's common stock on the date the award was made by the Company's Board of Directors. Under amendments to the 2006 Plan adopted on May 15, 2008, no options can be issued with an exercise price less than the fair market value on the date of grant.

The stock options granted during 2008 included options to purchase 536,625 shares of common stock (the "Contingent Options") at an exercise price of $18.93 per share that were granted to the Company's executive officers on February 7, 2008, subject to ratification by the Company's stockholders. At the Company's 2008 Annual Meeting of Stockholders, the stockholders ratified the Contingent Options as part of the Company's proposal to increase the number of shares authorized for issuance under the 2006 Plan. Under SFAS 123(R), the Contingent Options are deemed for accounting purposes to have been granted on May 15, 2008 (the date of ratification by the Company's stockholders), and the grant-date fair value of the Contingent Options is based on a Black-Scholes valuation model based on the fair market value of the Company's stock on May 15, 2008. The options granted during 2008, 2007 and 2006 had weighted-average grant-date fair values per share, measured on the grant date, of $14.33, $17.45 and $20.08, respectively.

The Company recorded stock-based compensation expense of $39.4 million, $38.3 million and $29.8 million in 2008, 2007 and 2006, respectively, related to stock options. The stock-based compensation expense related to stock options for 2007 included $1.9 million related to stock options accelerated in connection with an executive officer's severance arrangement.

As of December 31, 2008, there was $76.1 million of total unrecognized compensation expense, net of estimated forfeitures, related to unvested options granted under the Stock and Option Plans. That expense is expected to be recognized over a weighted-average period of 2.66 years.

The Company uses the Black-Scholes valuation model to estimate the fair value of stock options at the grant date. The Black-Scholes valuation model uses the option exercise price as well as estimates and assumptions related to the expected price volatility of the Company's stock, the rate of return on risk-free investments, the expected period during which the options will be outstanding, and the expected dividend yield for the Company's stock to estimate the fair value of a stock option on the grant date. The Company validates its estimates and assumptions through consultations with independent third parties having relevant expertise.

The fair value of each option granted under the Stock and Option Plans during 2008, 2007 and 2006 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2008	2007	2006
Expected stock price volatility	52.78%	51.95%	57.10%
Risk-free interest rate	3.42%	4.81%	4.74%
Expected term	5.78 years	5.74 years	5.64 years
Expected annual dividends	—	—	—

The weighted-average valuation assumptions were determined as follows:

- *Expected stock price volatility:* Options to purchase the Company's stock with remaining terms of greater than one year are regularly traded in the market. Expected stock price volatility is calculated using the trailing one month average of daily implied volatilities prior to grant date.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

D. Stock-based Compensation Expense (Continued)

- *Risk-free interest rate:* The Company bases the risk-free interest rate on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period that is commensurate with the assumed expected option term.

- *Expected term of options:* The expected term of options represents the period of time options are expected to be outstanding. The Company uses historical data to estimate employee exercise and post-vest termination behavior. The Company believes that all groups of employees exhibit similar exercise and post-vest termination behavior and therefore does not stratify employees into multiple groups in determining the expected term of options.

- *Expected annual dividends:* The estimate for annual dividends is $0.00 because the Company has not historically paid, and does not intend for the foreseeable future to pay, a dividend.

The following table summarizes information related to the outstanding and vested options during 2008:

	Stock Options (in thousands)	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2007	15,358	$ 28.70		
Granted	3,798	25.34		
Exercised	(1,712)	14.06		
Forfeited	(546)	28.77		
Expired	(401)	40.47		
Outstanding at December 31, 2008	16,497	$ 29.16	6.26	$ 101,857
Exercisable at December 31, 2008	10,740	$ 29.33	4.98	$ 81,315
Total exercisable or expected to vest	15,360	$ 29.15	6.04	$ 97,995

The aggregate intrinsic value in the table above represents the total pre-tax amount, net of exercise price, which would have been received by option holders if all option holders had exercised all options with an exercise price lower than the market price on December 31, 2008, which was $30.41 based on the average of the high and low price of the Company's common stock on that date.

The total intrinsic value (the amount by which the fair market value exceeded the exercise price) of stock options exercised during 2008, 2007 and 2006 was $23.7 million, $28.3 million and $63.4 million, respectively. The total cash received from employees as a result of employee stock option exercises during 2008, 2007 and 2006 was $24.1 million, $26.3 million and $46.5 million, respectively.

The Company settles employee stock option exercises with newly issued common shares.

Restricted Stock

The Company recorded stock-based compensation expense of $15.2 million, $18.4 million and $7.1 million for 2008, 2007 and 2006, respectively, related to restricted shares outstanding during those periods. The stock-based compensation expense related to restricted stock for 2008 included $0.6 million related to accelerated vesting of restricted stock awards in connection with an executive officer's separation arrangement. The stock-based compensation expense related to restricted stock for 2007 included $1.4 million related to accelerated vesting of restricted stock awards in connection with an executive officer's severance arrangement.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

D. Stock-based Compensation Expense (Continued)

As of December 31, 2008, there was $25.9 million of total unrecognized stock-based compensation expense, net of estimated forfeitures, related to unvested restricted stock granted under the Stock and Option Plans. The Company expects to recognize that expense over a weighted-average period of 2.41 years.

The following table summarizes the restricted stock activity of the Company during 2008:

	Restricted Stock (in thousands)	Weighted-Average Grant-Date Fair Value (per share)
Outstanding and unvested at December 31, 2007	1,676	$ 26.62
Granted	753	$ 24.12
Vested	(418)	$ 24.74
Cancelled	(160)	$ 28.06
Outstanding and unvested at December 31, 2008	1,851	$ 25.92

The total fair value of the shares vesting during 2008, 2007 and 2006 (measured on the date of vesting) was $11.0 million, $22.5 million and $9.9 million, respectively.

Employee Stock Purchase Plan

The stock-based compensation expense related to the ESPP for 2008, 2007 and 2006 was $3.3 million, $2.7 million and $2.3 million, respectively. As of December 31, 2008, there was $3.0 million of total unrecognized compensation expense, net of estimated forfeitures, related to ESPP shares. The Company expects to recognize that expense during 2009.

During 2008, the following shares were issued to employees under the ESPP:

	Year Ended December 31, 2008 (shares in thousands)
Number of shares	362
Average price paid per share	$ 22.77

The weighted-average fair value of each purchase right granted during 2008, 2007 and 2006 was $10.14, $8.45, and $13.07, respectively. The following table reflects the weighted-average assumptions used in the Black-Scholes valuation model for 2008, 2007 and 2006:

	2008	2007	2006
Expected stock price volatility	66.63%	46.94%	55.84%
Risk-free interest rate	1.16%	4.03%	4.99%
Expected term	0.72 years	0.70 years	0.75 years
Expected annual dividends	—	—	—

The expected stock price volatility for ESPP offerings is based on implied volatility. The Company bases the risk-free interest rate on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period that is commensurate with the assumed expected term. The expected term represents purchases and purchase periods that take place within the offering period. The expected annual dividends estimate is $0.00 because the Company has not historically paid, and does not for the foreseeable future intend to pay, a dividend.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

E. Fair Value of Financial Instruments

On January 1, 2008, the Company adopted FASB Statement No. 157, "Fair Value Measurements" ("SFAS 157"), which establishes a framework for measuring the fair value of assets and liabilities pursuant to GAAP and expands the required disclosure regarding assets and liabilities that are measured at fair value. SFAS 157 became applicable to the Company's financial assets and liabilities on January 1, 2008 and became applicable to the Company's nonfinancial assets and liabilities on January 1, 2009.

SFAS 157 did not change the standard for determining whether assets and liabilities should be recorded at cost or at fair value. For assets and liabilities required to be disclosed at fair value, SFAS 157 introduced, or reiterated, a number of key concepts that form the foundation of the fair value measurement approach. In accordance with SFAS 157, 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). SFAS 157 establishes the following fair value hierarchy for the use of observable inputs and unobservable inputs in valuing 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 December 31, 2008, the majority of the Company's investments are in money market instruments and short-term government guaranteed securities.

As of December 31, 2008, all of the Company's financial assets that were subject to fair value measurements were valued using observable inputs and the Company had no financial liabilities that were subject to fair value measurement. The Company's financial assets valued based on Level 1 inputs consisted of money market instruments and government-sponsored enterprise securities. The Company's money market instruments and government-sponsored enterprise securities are government guaranteed. The Company's financial assets valued based on Level 2 inputs consisted of commercial paper and corporate bonds. The Company's investments in commercial paper and corporate bonds consist of high-grade investments. During 2008, the Company did not record an impairment charge related to its investments.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

E. Fair Value of Financial Instruments (Continued)

The following table sets forth the Company's financial assets subject to fair value measurements as of December 31, 2008:

	Fair Value Measurements as of December 31, 2008			
		Fair Value Hierarchy		
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Financial assets carried at fair value:				
Cash equivalents	$383,624	$383,624	$ —	$ —
Marketable securities, available for sale	442,986	350,695	92,291	—
Restricted cash	30,258	30,258	—	—
Total	$856,868	$764,577	$92,291	$ —

The adoption of SFAS 157 did not have a material effect on the Company's consolidated financial statements for the twelve months ended December 31, 2008.

In the first quarter of 2008, the Company also adopted the provisions of FASB Statement No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115" ("SFAS 159"). SFAS 159 permits the Company to measure eligible assets and liabilities at fair value with changes in value recognized in earnings. Fair value treatment may be elected either upon initial recognition of an eligible asset or liability or, for an existing asset or liability, if an event triggers a new basis of accounting. In 2008, the Company did not elect to re-measure any of its existing financial assets or liabilities under the provisions of SFAS 159.

F. 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. 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.

In accordance with SFAS 146, the Company's initial estimate of its liability for net ongoing costs associated with the Kendall Square Lease obligation was recorded in the second quarter of 2003 at fair value. The restructuring expense incurred from the second quarter of 2003 through the end of the first quarter of 2005 (i.e., immediately prior to the Company's decision to use a portion of the Kendall Square Facility for its operations) relates to the estimated incremental net ongoing lease obligations associated with the entire Kendall Square Facility, together with imputed interest costs relating to the restructuring liability. The restructuring expense incurred in the period beginning in the second quarter of 2005 continues to be estimated in accordance with SFAS 146, but relates only to the portion of the building that the Company currently 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. The

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

F. Restructuring Expense (Continued)

Company reviews its assumptions and estimates quarterly and updates its estimates of this liability as changes in circumstances require. As required by SFAS 146, the expense and liability recorded is calculated using probability-weighted discounted cash-flows of the Company's estimated ongoing lease obligations, including contractual rental and build-out commitments, net of estimated sublease rentals, offset by related sublease costs.

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 consolidated statements of operations.

The restructuring liability of $34.1 million at December 31, 2008 relates solely to the portion of the Kendall Square Facility that the Company does not intend to use for its operations and includes other related lease obligations, recorded at net present value. The Company classified $6.3 million of the total restructuring liability at December 31, 2008 as short-term, and $27.7 million as long-term. The short-term portion of the restructuring liability represents the net amount the Company expects to pay in 2009.

In 2003, the Company recorded restructuring and other related expenses of $91.8 million. The $91.8 million included $78.7 million of lease restructuring expense, $6.0 million of lease operating expense incurred prior to the decision not to occupy the Kendall Square Facility, $2.6 million for severance and related employee transition benefits and $4.5 million for a write-off of leasehold improvements and other assets. The activity related to restructuring and other liability for 2003 was as follows:

	Charge in 2003	Cash payments in 2003	Non-cash write-off in 2003	Liability as of December 31, 2003
		(in thousands)		
Lease restructuring and other operating lease expense	$84,726	$(15,200)	$ —	$ 69,526
Employee severance, benefits and related costs	2,616	(2,616)	—	—
Leasehold improvements and asset impairments	4,482	—	(4,482)	—
Total	$91,824	$(17,816)	$(4,482)	$ 69,526

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

F. Restructuring Expense (Continued)

The activity related to the restructuring since December 31, 2003 is as follows:

	Restructuring Liability (in thousands)
Liability: December 31, 2003	$ 69,526
Cash payments in 2004	(31,550)
Cash received from sublease, net of operating costs, in 2004	293
Additional charge in 2004	17,574
Liability: December 31, 2004	55,843
Cash payments in 2005	(24,229)
Cash received from subleases in 2005	3,234
Credit for portion of facility Vertex decided to occupy in 2005	(10,018)
Additional charge in 2005	18,152
Liability: December 31, 2005	42,982
Cash payments in 2006	(21,607)
Cash received from subleases in 2006	8,047
Additional charge in 2006	3,651
Liability: December 31, 2006	33,073
Cash payments in 2007	(12,854)
Cash received from subleases in 2007	7,954
Additional charge in 2007	7,119
Liability: December 31, 2007	35,292
Cash payments in 2008	(14,017)
Cash received from subleases in 2008	8,465
Additional charge in 2008	4,324
Liability: December 31, 2008	$ 34,064

In 2004, the Company recorded restructuring expense of $17.6 million primarily as the result of a revision of estimates and assumptions about when subtenants would be identified and secured and imputing an interest charge for the related restructuring liability.

In 2005, the Company recorded net restructuring expense of $8.1 million. This net expense includes a $10.0 million credit to the restructuring liability made when the Company decided to occupy and use a portion of the Kendall Square Facility, which was offset by (i) the estimated incremental net ongoing lease obligations associated with the portion of the Kendall Square Facility that the Company does not intend to occupy and (ii) imputed interest costs relating to the restructuring liability. The portion of the $18.2 million additional charge in 2005 that was for incremental lease obligations was related to the revision of certain key estimates and assumptions about operating costs, including real estate taxes associated with the portion of the Kendall Square Facility that the Company does not intend to occupy.

In 2006, the Company recorded restructuring expense of $3.7 million, which was primarily attributable to imputed interest and to build-out costs relating to the restructuring liability.

In 2007, the Company recorded restructuring expense of $7.1 million, which was primarily the result of revising certain key estimates and assumptions in the first quarter of 2007 about building operating costs for the remaining period of the lease commitment and the imputed interest cost relating to the restructuring liability.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

F. Restructuring Expense (Continued)

In 2008, the Company recorded restructuring expense of $4.3 million, which was primarily attributable to imputed interest cost relating to the restructuring liability.

G. Marketable Securities

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

December 31, 2008	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
		(in thousands)		
Cash and cash equivalents				
Cash and money market funds	$ 389,115	$ —	$ —	$ 389,115
Total cash and cash equivalents	$ 389,115	$ —	$ —	$ 389,115
Marketable securities				
Government-sponsored enterprise securities				
Due within 1 year	$ 347,982	$ 2,713	$ —	$ 350,695
Total government-sponsored enterprise securities	$ 347,982	$ 2,713		$ 350,695
Corporate debt securities				
Due within 1 year	$ 91,863	$ 428	$ —	$ 92,291
Total corporate debt securities	$ 91,863	$ 428	$ —	$ 92,291
Total marketable securities	$ 439,845	$ 3,141	$ —	$ 442,986
Total cash, cash equivalents and marketable securities	$ 828,960	$ 3,141	$ —	$ 832,101
December 31, 2007				
Cash and cash equivalents				
Cash and money market funds	$ 355,663	$ —	$ —	$ 355,663
Total cash and cash equivalents	$ 355,663	$ —	$ —	$ 355,663
Marketable securities				
Government-sponsored enterprise securities				
Due within 1 year	$ 11,026	$ 49	$ (7)	$ 11,068
Due after 1 year through 5 years	38,971	730	(44)	39,657
Total government-sponsored enterprise securities	$ 49,997	$ 779	$ (51)	$ 50,725
Corporate debt securities				
Due within 1 year	41,020	62	(90)	40,992
Due after 1 year through 5 years	20,415	121	(120)	20,416
Total corporate debt securities	$ 61,435	$ 183	$ (210)	$ 61,408
Total marketable securities	$ 111,432	$ 962	$ (261)	$ 112,133
Total cash, cash equivalents and marketable securities	$ 467,095	$ 962	$ (261)	$ 467,796

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

G. Marketable Securities (Continued)

The Company has marketable securities of $443.0 million and $105.2 million classified as current assets on the consolidated balance sheets as of December 31, 2008 and 2007, respectively, and $0 and $6.9 million classified as long term-assets on the consolidated balance sheets as of December 31, 2008 and 2007, respectively.

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 whether it has the ability and intent to hold the investment until a market price recovery and considers whether the evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary. 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 year end.

The Company owned 46 available-for-sale marketable securities at December 31, 2008. Of these 46 securities, there were no securities with unrealized losses.

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 unrealized loss position as of December 31, 2007:

	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	$ 36	$ —	$ 8,872	$ (51)	$ 8,908	$ (51)
Corporate debt securities	19,415	(123)	15,577	(87)	34,992	(210)
Total	$ 19,451	$ (123)	$ 24,449	$ (138)	$ 43,900	$ (261)

As of December 31, 2007, unrealized losses in the portfolio related to various debt securities including U.S. government agency securities, government-sponsored enterprise securities, corporate debt securities and asset-backed securities. For these securities, the unrealized losses were primarily due to increases in interest rates. The investments held by the Company were high investment grade and there were no adverse credit events. Because the Company had the ability and intent to hold these investments until a recovery of fair value, which may be maturity, the Company did not consider these investments to be other-than-temporarily impaired as of December 31, 2007.

Gross realized gains and losses for 2008 were $943,000 and $310,000, respectively. Gross realized gains and losses for 2007 were $122,000 and $277,000, respectively. Gross realized gains and losses for 2006 were $4,000 and $88,000, respectively.

H. Restricted Cash

At December 31, 2008 and 2007, the Company held $30.3 million in restricted cash. At December 31, 2008 and 2007 the balance was held in deposit with certain banks predominantly to collateralize conditional stand-by letters of credit in the names of the Company's landlords pursuant to certain operating lease agreements.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

I. Property and Equipment

Property and equipment consist of the following at December 31:

	2008	2007
	(in thousands)	
Furniture and equipment	$118,292	$110,043
Leasehold improvements	84,402	83,059
Software	37,891	26,584
Computers	21,324	20,202
Total property and equipment, gross	261,909	239,888
Less accumulated depreciation and amortization	193,578	173,379
Total property and equipment, net	$ 68,331	$ 66,509

Depreciation and amortization expense for the years ended December 31, 2008, 2007 and 2006 was $30.4 million, $27.3 million and $25.4 million, respectively.

In 2008, 2007 and 2006, the Company wrote-off certain assets that were fully depreciated and no longer utilized. There was no effect on the Company's net property and equipment. Additionally, the Company wrote-off or sold certain assets that were not fully depreciated. The loss on disposal of those assets was $11,000 for 2008, $142,000 for 2007 and $10,000 for 2006.

J. Altus Investment

Altus Pharmaceuticals, Inc. ("Altus") completed an initial public offering in January 2006. As a result of investments Vertex had made in Altus while Altus was a private company, Vertex owned 817,749 shares of Altus common stock and warrants to purchase 1,962,494 shares of Altus common stock (the "Altus Warrants"). In addition, the Company, as of the completion of the offering, held 450,000 shares of Altus redeemable preferred stock, which are not convertible into common stock and which are redeemable for $10.00 per share plus accrued dividends at Vertex's option on or after December 31, 2010, or by Altus at any time. Dividends have been accruing at an annual rate of $0.50 per share since the redeemable preferred stock was issued in 1999. The Company was restricted from trading Altus securities for a period of six months following the initial public offering.

In July 2006, the Company sold 817,749 shares of Altus common stock for $11.7 million, resulting in a realized gain of $7.7 million. Upon the expiration of the trading restrictions in July 2006, the Company began accounting for the Altus Warrants as derivative instruments under the FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"). In accordance with SFAS 133, in the third quarter of 2006, the Company recorded the Altus Warrants on its consolidated balance sheets at a fair market value of $19.1 million and recorded an unrealized gain on the fair market value of the Altus Warrants of $4.3 million. In the fourth quarter of 2006, the Company sold the Altus Warrants for $18.3 million, resulting in a realized loss of $0.7 million. As a result of the Company's sales of Altus common stock and Altus Warrants, the Company recorded a net realized gain on a sale of investment of $11.2 million in 2006.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

K. Current Liabilities

Accrued expenses and other current liabilities consist of the following at December 31:

	2008	2007
	(in thousands)	
Research and development contract costs	$43,615	$62,464
Payroll and benefits	39,835	25,783
Professional fees	6,081	5,952
Other	4,672	4,151
Total	$94,203	$98,350

Other obligations of $21.3 million consist of a deposit received from a collaborator for potential future obligations of the Company.

L. Commitments

The Company leases its facilities and certain equipment under non-cancelable operating leases. The Company's leases have terms through July 2019. The term of the Kendall Square Lease began January 1, 2003 and lease payments commenced in May 2003. Rent payments will be subject to increase in May 2013, based on changes in an inflation index. These increases will be treated as contingent rentals. The Kendall Square Lease will expire in 2018, and the Company has the option to extend the term for two consecutive terms of ten years each, ultimately expiring in 2038. The Company occupies and uses for its operations approximately 120,000 square feet of the Kendall Square Facility. The Company has sublease arrangements in place for the remaining rentable square footage of the Kendall Square Facility, with initial terms that expire in April 2011 and August 2012. See Note F, "Restructuring Expense" for further information.

As of December 31, 2008, future minimum commitments under facility operating leases with non-cancelable terms of more than one year are as follows:

Year	Kendall Square Lease	Sublease income for Kendall Square Facility	Other Operating Leases	Total Operating Leases
		(in thousands)		
2009	$ 24,830	$ (8,156)	$ 20,507	$ 37,181
2010	24,830	(8,156)	17,981	34,655
2011	24,830	(4,466)	5,788	26,152
2012	24,830	(1,747)	6,760	29,843
2013	26,186	—	5,191	31,377
Thereafter	116,414	—	8,308	124,722
Total minimum lease payments	$ 241,920	$ (22,525)	$ 64,535	$ 283,930

In January 2009 the leases of specified facilities in Cambridge, Massachusetts were extended through December 2015. The commitments related to the lease extensions are as follows: $3.1 million in 2010, $17.8 million in 2011, $18.4 million in 2012, $19.0 million in 2013 and $39.7 million thereafter.

Rental expense for 2008 was $31.1 million, which included $10.7 million related to the Kendall Square Facility. Rental expense for 2007 was $28.1 million, which included $9.9 million related to the

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

L. Commitments (Continued)

Kendall Square Facility. Rental expense for 2006 was $26.7 million, which included $9.5 million related to the Kendall Square Facility.

The Company has future contractual commitments in connection with its research and development programs. For 2009 and 2010 the amount committed under these contracts is $8.7 million and $0.8 million, respectively.

M. Convertible Subordinated Notes Due 2007 and 2011

On January 1, 2006, the Company had outstanding $118.0 million in aggregate principal amount of 5.75% Convertible Senior Subordinated Notes due in February 2011 (the "2011 Notes") and $42.1 million in aggregate principal amount of 5% Convertible Subordinated Notes due in September 2007 (the "2007 Notes"). The 2011 Notes and 2007 Notes were convertible, at the option of the holder, into common stock at a price per share equal to $14.94 and $92.26, respectively.

In the third quarter of 2006, the Company exchanged approximately 4.1 million shares of newly issued common stock for $58.3 million in aggregate principal amount of then outstanding 2011 Notes plus interest. As a result of this exchange, the Company incurred a non-cash charge of $5.2 million in 2006. This charge corresponded to the value of additional shares issued in the transaction over the number that would have been issued upon the conversion of the 2011 Notes under their original terms, at the original conversion price of $14.94 per share.

In the first quarter of 2007, the Company called all of the remaining outstanding 2011 Notes for redemption. In response and pursuant to the terms of the 2011 Notes, the holders of all the outstanding 2011 Notes converted, at a price equal to $14.94 per share, their $59.6 million in aggregate principal amount of 2011 Notes into 3,992,473 shares of the Company's common stock.

In the third quarter of 2007, the Company repaid upon maturity the outstanding principal and accrued interest on the remaining $42.1 million in principal amount of 2007 Notes.

The following items related to the 2006 exchange and the 2007 conversion were recorded as an offset to additional paid-in capital on the Company's consolidated balance sheets: accrued interest, remaining unamortized issuance costs of the exchanged and converted notes and issuance costs of the common stock.

For the years ended December 31, 2007 and 2006, $0.2 million and $0.5 million, respectively, was amortized to interest expense for the issuance costs of the then outstanding 2007 Notes and the 2011 Notes.

N. Equity and Debt Offerings

On September 23, 2008, the Company completed an offering of 8,625,000 shares of common stock (the "September 2008 Equity Offering"), which were sold at a price of $25.50 per share. This offering resulted in $217.4 million of net proceeds to the Company. The underwriting discount of $2.2 million and other expenses of $0.3 million related to the September 2008 Equity Offering were recorded as an offset to additional paid-in-capital.

On February 19, 2008, the Company completed concurrent offerings of $287.5 million in aggregate principal amount of 4.75% convertible senior subordinated notes due 2013 (the "2013 Notes") and 6,900,000 shares of common stock (the "February 2008 Equity Offering"), which were sold at a price of $17.14 per share.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

N. Equity and Debt Offerings (Continued)

The convertible debt offering resulted in net proceeds of $278.6 million to the Company. The underwriting discount of $8.6 million and other expenses of $0.3 million related to the convertible debt offering were recorded as debt issuance costs and are included in other assets on the Company's consolidated balance sheets. The February 2008 Equity Offering resulted in net proceeds of $112.7 million to the Company. The underwriting discount of $5.3 million and other expenses of $0.2 million related to the February 2008 Equity Offering were recorded as an offset to additional paid-in-capital.

The 2013 Notes are convertible, at the option of the holder, into common stock at a price equal to approximately $23.14 per share, subject to adjustment. The 2013 Notes bear interest at the rate of 4.75% per annum, and the Company is 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 2013 Notes will mature on February 15, 2013.

On or after February 15, 2010, the Company may redeem the 2013 Notes at its option, in whole or in part, at the redemption prices stated in the indenture, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. Holders may require the Company to repurchase some or all of their 2013 Notes upon the occurrence of certain fundamental changes of Vertex, as set forth in the indenture, at 100% of the principal amount of the 2013 Notes to be repurchased, plus any accrued and unpaid interest, if any, to, but excluding, the repurchase date.

If a fundamental change occurs that is also a specific type of change of control under the indenture, the Company will pay a make-whole premium upon the conversion of the 2013 Notes in connection with any such transaction by increasing the applicable conversion rate on such 2013 Notes. The make-whole premium will be in addition to, and not in substitution for, any cash, securities or other assets otherwise due to holders of the 2013 Notes upon conversion. The make-whole premium will be determined by reference to the indenture and is based on the date on which the fundamental change becomes effective and the price paid, or deemed to be paid, per share of the Company's common stock in the transaction constituting the fundamental change, subject to adjustment.

If an event of default under the indenture relates solely to the Company's failure to comply with its reporting obligations pursuant to the 2013 Notes, at the election of the Company, the sole remedy of the holders of the 2013 Notes for the first 180 days following such event of default would consist of the right to receive special interest at an annual rate equal to 1.0% of the outstanding principal amount of the 2013 Notes.

Based on the Company's evaluation of the 2013 Notes in accordance with EITF Issue No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock," and FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities," the Company determined that the 2013 Notes contain a single embedded derivative. This embedded derivative relates to potential penalty interest payments that could be imposed on the Company for a failure to comply with its reporting obligations pursuant to the 2013 Notes. This embedded derivative required bifurcation as the feature was not clearly and closely related to the host instrument. The Company has determined that the value of this embedded derivative was nominal as of February 19, 2008 and December 31, 2008.

At December 31, 2008, the Company had $287.5 million outstanding in aggregate principal amount of the 2013 Notes. At December 31, 2008, the 2013 Notes had a fair value of $391.0 million as obtained from a quoted market source.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

N. Equity and Debt Offerings (Continued)

In September 2006, the Company completed a public offering of 10,900,000 shares of common stock, which were sold at a price of $33.00 per share. This offering resulted in net proceeds of $313.7 million to the Company. The underwriting discount of $15.7 million and other expenses of $0.6 million related to this offering were recorded as an offset to additional paid-in capital.

O. Income Taxes

For the years ended December 31, 2008, 2007 and 2006, there is no provision for income taxes included in the consolidated statements of operations.

The Company's federal statutory income tax rate for 2008, 2007 and 2006 was 34%. The Company has incurred losses from operations but has not recorded an income tax benefit for 2008, 2007 and 2006, as the Company has recorded a valuation allowance against its net operating losses and other net deferred tax assets due to uncertainties related to the realizability of these tax assets.

The difference between the Company's "expected" tax provision (benefit), as computed by applying the U.S. federal corporate tax rate of 34% to loss before provision for income taxes, and actual tax is reconciled as follows:

	2008	2007	2006
		(in thousands)	
Loss before provision for income taxes	$(459,851)	$(391,279)	$(206,891)
Expected tax benefit at 34%	(156,349)	$(133,035)	$ (70,343)
State taxes, net of federal benefit	(28,833)	(24,533)	(12,972)
Unbenefited operating losses	185,016	157,337	81,593
Non-deductible expenses	127	91	1,817
Other	39	140	(95)
Income tax provision	$ —	$ —	$ —

For federal income tax purposes, as of December 31, 2008, the Company has net operating loss carryforwards of approximately $1.9 billion, and $45.6 million of tax credits, which may be used to offset future federal income and tax liability, respectively. For state income tax purposes, the Company has net operating loss carryforwards of approximately $1.2 billion, and $31.4 million of tax credits, which may be used to offset future state income and tax liability, respectively. These operating loss carryforwards began to expire in 2005, and the tax credit carryforwards began to expire in 2004. After consideration of all the evidence, both positive and negative, management has established a valuation allowance for the full amount of the 2008 deferred tax asset since it is more likely than not that the deferred tax asset will not be realized.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

O. Income Taxes (Continued)

Deferred tax assets and liabilities are determined based on the difference between financial statement and tax bases using enacted tax rates in effect for the year in which the differences are expected to reverse. The components of the deferred taxes at December 31 were as follows:

	2008	2007
	(in thousands)	
Deferred Tax Assets:		
Net operating loss	$ 563,273	$ 438,044
Tax credit carryforwards	66,320	54,723
Property and equipment	19,086	17,724
Deferred revenues	99,658	51,040
Stock-based compensation	41,097	26,613
Capitalized research and development	3,832	9,711
Accrued expenses and other	11,040	15,833
Gross Deferred Tax Assets	804,306	613,688
Valuation Allowance	(793,248)	(602,630)
Total Deferred Tax Assets	11,058	11,058
Deferred Tax Liabilities:		
Gain on Investment	(11,058)	(11,058)
Net Deferred Tax Assets/(Liabilities)	$ —	$ —

As discussed in Note D "Stock-based Compensation Expense," the Company adopted SFAS 123(R) effective January 1, 2006 for stock-based compensation plans. Generally, tax return deductions are allowable on such arrangements, but, may arise in different amounts and periods from when compensation costs are recognized in the financial statements. Pursuant to SFAS 123(R), if the tax return deduction for an award exceeds the cumulative compensation expense recognized in the financial statements, any excess tax benefit shall be recognized as additional paid-in capital when the deduction reduces income tax payable. The net tax amount of the unrealized excess tax benefits as of December 31, 2008 is approximately $111.7 million. The gross amount of this excess tax deduction in the net operating loss carryforward is approximately $284.0 million.

The valuation allowance increased by $190.6 million during 2008 due primarily to the increase in net operating losses from operations and tax credits.

Effective January 1, 2007, the Company adopted the provisions of FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109" ("FIN 48"). At December 31, 2008 and December 31, 2007, the Company had no material unrecognized tax benefits and no adjustments to liabilities or operations were required under FIN 48. The Company does not expect that its unrecognized tax benefits will materially increase within the next twelve months. The Company did not recognize any interest or penalties related to uncertain tax positions at December 31, 2008 and December 31, 2007.

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 any major taxing jurisdiction for years before 2004, except where the Company has utilized net operating losses or tax credit carryforwards that originated before 2004. The Company currently is under examination by the Internal Revenue Service with respect to 2006. The Company is not under examination by any other jurisdictions for any tax year.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

P. Significant Revenue Arrangements

The Company has formed strategic collaborations with pharmaceutical companies and other organizations in the areas of drug discovery, development, and commercialization. Research, development and commercialization agreements provide the Company with financial support and other valuable resources for its research programs, for the development of clinical drug candidates, and for the marketing and sales of products. In the Company's collaborative research, development and commercialization programs the Company seeks to discover, develop and commercialize pharmaceutical products in conjunction with and supported by the Company's collaborators. Collaborative research and development arrangements may provide research funding over an initial contract period with renewal and termination options that vary by agreement. The agreements may also include non-refundable, up-front license fees as well as milestone payments based on the achievement of a pre-agreed objective or the occurrence of a designated event. The agreements may also contain development expense reimbursement provisions, royalty rights or profit sharing rights, and manufacturing options. The Company has entered into significant research and development collaborations under terms that vary from agreement to agreement.

Janssen Pharmaceutica, N.V.

In June 2006, the Company entered into a collaboration agreement with Janssen for the development, manufacture and commercialization of telaprevir, the Company's lead investigative hepatitis C virus protease inhibitor. 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. Under the development program for telaprevir, each party is incurring reimbursable drug development cost. Reimbursable costs incurred by Janssen are offset against reimbursable costs incurred by the Company. Amounts that Janssen pays to the Company for reimbursement, after the offset, are recorded as revenues. Accordingly, as Janssen incurs increased costs under the development program, the Company's revenues attributable to the reimbursement are reduced correspondingly.

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. Under the agreement, Janssen agreed to make contingent milestone payments, which could total up to $380.0 million if telaprevir is successfully developed, approved and launched as a product. As of December 31, 2008, the Company had earned $100.0 million of these contingent milestone payments under the agreement. The principal remaining milestones under the Company's agreement with Janssen relate to filing for marketing authorization for telaprevir with the European Medicines Evaluation Agency and the launch of telaprevir in the European Union. The agreement 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, depending upon successful commercialization of telaprevir. Each of the parties will be responsible for drug supply in their respective territories. However, the agreement provides for the purchase by Janssen from the Company of materials required for Janssen's manufacture of the active pharmaceutical ingredient. In addition, Janssen will be responsible for certain third-party royalties on net sales in its territories. Janssen may terminate the agreement without cause at any time upon six months' notice to the Company.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

P. Significant Revenue Arrangements (Continued)

During 2008, the Company recognized $120.1 million in revenues under the Janssen agreement, which includes an amortized portion of the up-front payment, a milestone payment of $45.0 million in connection with commencement of patient enrollment in the Company's first Phase 3 clinical trial of telaprevir, a milestone payment of $10.0 million in connection with the commencement of the Phase 2 clinical trial of telaprevir in patients with genotype 2 and genotype 3 HCV infection, and net reimbursements from Janssen for telaprevir development costs. During 2007, the Company recognized $117.7 million in revenues under the Janssen agreement, which includes an amortized portion of the up-front payment, a milestone payment of $15.0 million in connection with commencement of patient enrollment in PROVE 3, a milestone payment of $15.0 million for achieving specified interim results from the Company's Phase 2 clinical trials of telaprevir in treatment-naïve patients, and net reimbursements from Janssen for telaprevir development costs. During 2006, the Company recognized $68.0 million in revenues under the Janssen agreement, which includes an amortized portion of the up-front payment, a milestone of $15.0 million for achieving specified interim results in PROVE 1, and net reimbursements from Janssen for telaprevir development costs.

Cystic Fibrosis Foundation Therapeutics Incorporated

In May 2004, Vertex entered into an agreement with Cystic Fibrosis Foundation Therapeutics Incorporated ("CFFT") that provided funding through December 31, 2005 for Vertex's late-stage cystic fibrosis drug discovery effort. In 2006, Vertex amended its agreement with CFFT to extend the term of funding into 2008. Under the amended agreement, Vertex retains the right to develop and commercialize VX-770, VX-809 and any other compounds discovered in the research collaboration, and will pay royalties to CFFT on net sales of any drug candidate approved and commercialized under the collaboration. In 2008, 2007 and 2006, Vertex recognized $0.8 million, $15.9 million and $12.6 million, respectively, in revenues related to its agreement with CFFT.

Merck & Co., Inc.

In June 2004, Vertex entered into a global collaboration with Merck to develop and commercialize Aurora kinase inhibitors for the treatment of cancer. The Merck collaboration agreement provided for an up-front license payment of $20 million, which was made in June 2004, and for research funding of $14 million over two years, ending in June 2006. In 2006, the Company agreed with Merck to extend the research program term and corresponding research funding for the parties' ongoing research collaboration for an additional three months beyond the original research program termination date. Vertex could also receive as much as $350 million in milestone payments. Merck is responsible for worldwide clinical development and commercialization all compounds developed under the collaboration and will pay the Company royalties on any product sales. Merck may terminate the agreement at any time without cause upon 90 days' advance written notice, except that six months' advance written notice is required for termination at any time when a product has marketing approval in a major market and the termination is not the result of a safety issue. Merck is currently developing MK-5108 (VX-689), and has selected several other compounds for potential development. In 2008, Vertex received one milestone payment from Merck for $6.0 million. In 2007, Vertex received one milestone payment from Merck for $9.0 million. In 2006, Vertex received three milestone payments from Merck totaling $36.3 million.

Mitsubishi Tanabe Pharma Corporation

In June 2004, Vertex entered into a collaboration agreement with Mitsubishi Tanabe Pharma Corporation, pursuant to which Mitsubishi Tanabe agreed to provide financial and other support for

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

P. Significant Revenue Arrangements (Continued)

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 agreement provides for payments by Mitsubishi Tanabe to Vertex through Phase 2 clinical development, including an up-front license fee, development stage milestone payments and reimbursement of certain drug development costs for telaprevir. Mitsubishi Tanabe has commenced Phase 3 clinical development of telaprevir. The Company is currently negotiating the extent of Mitsubishi Tanabe's future sharing of the Company's costs beyond Phase 2 clinical development as provided in the agreement. The agreement also provides Vertex with royalties on any sales of telaprevir in the Mitsubishi Tanabe territory. Mitsubishi Tanabe may terminate the agreement at any time without cause upon 60 days' prior written notice. Vertex recognized $9.9 million, $4.4 million and $8.6 million in revenues under this agreement in 2008, 2007 and 2006, respectively. The revenues include an amortized portion of the up-front payment, milestone achievements, and reimbursement of certain of Vertex's expenses incurred in telaprevir development.

Novartis Pharma AG

In May 2000, the Company entered into an agreement with Novartis Pharma AG to collaborate on the discovery, development and commercialization of small molecule drugs directed at protein kinases. The agreement was amended in February 2004. Under the original agreement, the Company was responsible for drug discovery and clinical proof-of-concept testing of all drug candidates. Novartis agreed to pay the Company research funding through April 2006, and to make loans to the Company on a non-interest-bearing basis to support clinical proof-of-concept studies. Development loans with respect to any drug candidates accepted by Novartis for development would be forgiven. Under the amended agreement, Vertex continued to receive research funding through April 2006 along with development milestone payments and royalties with respect to drug candidates selected by Novartis for development. Following completion of the research term, Novartis' development option with respect to all compounds discovered in the research program, none of which were then in development by Novartis, had expired. Vertex retains all rights to those candidates, as well as to all of the intellectual property it generated under the collaboration. In 2006, the Company recognized $17.6 million in revenues under this agreement. In May 2008, the Company repaid the $20.0 million in loans outstanding under the loan facility.

Kissei Pharmaceutical Co., Ltd.

The Company and Kissei Pharmaceutical Co., Ltd. were parties to an agreement to collaborate on the identification of inhibitors of p38 MAP kinase and the development of those compounds as novel, orally active drugs for the treatment of inflammatory and neurological diseases. In 2007 and 2006, approximately $3.8 million and $6.4 million, respectively, was recognized as revenues under this agreement. In 2007, the Company concluded its agreement with Kissei for the development and commercialization of VX-702 in the Far East, and the Company received no revenues related to this agreement in 2008. The Company retains worldwide development and commercial rights to VX-702.

GlaxoSmithKline plc

In the fourth quarter of 2005, GlaxoSmithKline and the Company entered into a collaborative agreement to develop and commercialize VX-409 and certain back-up compounds, which were being investigated for the treatment of pain. Under the terms of the agreement, GlaxoSmithKline had the exclusive right and license to develop and commercialize VX-409 and certain back-up compounds worldwide. Revenues earned from GlaxoSmithKline under this agreement were $0 and $2.4 million in

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

P. Significant Revenue Arrangements (Continued)

2007 and 2006, respectively. Development under the collaborative agreement terminated in the fourth quarter of 2007, and the Company earned no revenues under this agreement in 2008.

Q. GlaxoSmithKline plc Collaboration and Sale of HIV Protease Inhibitor Royalty Stream

In December 1993, the Company and GlaxoSmithKline plc ("GlaxoSmithKline") 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.

The Company began earning a royalty from GlaxoSmithKline in 1999 on net sales of Agenerase, in the fourth quarter of 2003 on net sales of Lexiva, and in the third quarter of 2004 on net sales of Telzir. 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 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. In accordance with the Purchase Agreement, GlaxoSmithKline will make 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, however, in connection with this transaction, the Company has instructed GlaxoSmithKline to pay such amounts directly to Searle as they become due.

The Company classified the proceeds received from Fosamprenavir Royalty as deferred revenues, to be 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 in the event that GlaxoSmithKline terminates the collaboration agreement, and compliance with the license agreement with Searle, including the obligation to make future royalty payments to Searle. Because the transaction was structured as a non-cancellable sale, the Company does not have 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 has recorded the proceeds as deferred revenues pursuant to EITF 88-18.

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

Q. GlaxoSmithKline plc Collaboration and Sale of HIV Protease Inhibitor Royalty Stream (Continued)

deferred revenues to be recognized as royalty revenues over the life of the collaboration agreement under 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 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. On May 31, 2008, the Company began recognizing these deferred revenues. In addition, the Company will continue to recognize royalty revenues for the portion of the royalty earned that is due to Searle.

The Company will recognize royalty expenses in each period based on (i) deferred transaction expenses in the same manner and over the same period in 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.

R. Employee Benefits

The Company has a 401(k) retirement plan (the "Vertex 401(k) Plan") in which substantially all of its permanent employees are eligible to participate. Participants may contribute up to 60% of their annual compensation to the Vertex 401(k) Plan, subject to statutory limitations. The Company may declare discretionary matching contributions to the Vertex 401(k) Plan that are payable in Vertex common stock. The match is paid in the form of fully vested interests in a Vertex common stock fund. Employees have the ability to transfer funds from the Company stock fund as they choose. The Company declared matching contributions to the Vertex 401(k) Plan as follows:

	2008	2007	2006
		(in thousands)	
Discretionary matching contributions during the year ended December 31,	$5,027	$4,340	$3,341
Shares issued during the year ended December 31,	195	133	91
Shares issuable as of the year ended December 31,	38	48	28

S. 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 December 31, 2008 or 2007.

T. 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 amounts paid. No indemnification claims are currently outstanding and the Company believes the estimated fair value of these indemnification arrangements is minimal.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

T. Guarantees (Continued)

The Company customarily agrees in the ordinary course of its business to indemnification provisions in agreements with clinical trials 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 in the ordinary course of business, 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.

In March 2003, the Company sold certain assets of PanVera LLC to Invitrogen Corporation for approximately $97 million. In December 2003, the Company sold certain instrumentation assets to Aurora Discovery, Inc. for approximately $4.3 million. The agreements with the buyers each require the Company to indemnify the buyer against any loss it may suffer by reason of Vertex's breach of certain representations and warranties, or failure to perform certain covenants, contained in such agreement. The representations, warranties and covenants contained in the agreements are of a type customary in agreements of this sort. The Company's aggregate obligations under the indemnity contained in each agreement are, with a few exceptions which the Company believes are not material, capped at one-half of the applicable purchase price, and apply to claims under representations and warranties made within fifteen months after closing (which period has ended) although there is no corresponding time limit for claims made based on breaches of covenants. Neither Invitrogen nor Aurora has made any claims to date under the applicable indemnities, and the Company believes that the estimated fair value of the remaining indemnification obligations is minimal.

On September 14, 2006, the Company entered into a purchase agreement with Merrill Lynch, Pierce, Fenner & Smith Incorporated, on February 12, 2008, the Company entered into underwriting agreements with Merrill Lynch, Pierce, Fenner & Smith Incorporated, and on September 18, 2008, the Company entered into an underwriting agreement with Goldman, Sachs & Co. (collectively, the purchase agreements and the underwriting agreements, the "Underwriting Agreements"), 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

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

T. Guarantees (Continued)

against any loss they may suffer by reason of the Company's breach of representations and warranties 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 agreements of this sort. The Company believes the estimated fair value of these indemnification arrangements is minimal.

U. Subsequent Event—Management Transition

On February 5, 2009, Matthew W. Emmens, one of the Company's directors, became the Company's President and on May 23, 2009, he will become the Company's Chief Executive Officer and Chairman. On February 5, 2009, the Company entered into a transition agreement with Dr. Joshua S. Boger that set forth certain benefits he will receive when he steps down as the Company's Chief Executive Officer in May 2009. These benefits include: (i) a lump sum payment of approximately $2.9 million payable in November 2009, (ii) 18 months' accelerated vesting of his outstanding stock options, which will remain exercisable until December 31, 2010, subject to specified limitations, (iii) 18 months' accelerated vesting of each outstanding restricted stock award, treating each award as if it vests ratably over the term of the grant rather than the end of the service period and (iv) reimbursement for certain expenses. The Company expects to record a cash charge of $2.9 million in the first half of 2009 in connection with the lump sum payable in November 2009. In addition, the Company expects to record in 2009 a non-cash charge of approximately $11 million to $13 million due to the acceleration and extended exercisability of Dr. Boger's equity awards. The non-cash charge will include a revaluation of the equity awards, based predominantly on a Black-Scholes analysis or other valuation method.

VERTEX PHARMACEUTICALS INCORPORATED

Notes to Consolidated Financial Statements (Continued)

V. Quarterly Financial Data (unaudited)

	Three Months Ended			
	March 31, 2008	June 30, 2008	Sept. 30, 2008	Dec. 31, 2008
	(in thousands, except per share amounts)			
Revenues:				
Royalty revenues	$ 10,851	$ 9,741	$ 7,763	$ 9,128
Collaborative and other research and development revenues	30,824	59,668	23,846	23,683
Total revenues	41,675	69,409	31,609	32,811
Costs and expenses:				
Royalty expenses	3,576	3,701	4,194	4,215
Research and development expenses	116,152	129,396	131,582	139,162
Sales, general and administrative expenses	20,053	26,625	25,576	29,656
Restructuring expense	630	1,168	885	1,641
Total costs and expenses	140,411	160,890	162,237	174,674
Loss from operations	(98,736)	(91,481)	(130,628)	(141,863)
Interest income	4,496	3,993	4,396	3,443
Interest expense	(1,914)	(3,833)	(3,812)	(3,912)
Net loss	$ (96,154)	$ (91,321)	$ (130,044)	$ (142,332)
Basic and diluted net loss per common share	$ (0.72)	$ (0.66)	$ (0.93)	$ (0.96)
Basic and diluted weighted-average number of common shares outstanding	134,471	138,725	140,109	148,783

	Three Months Ended			
	March 31, 2007	June 30, 2007	Sept. 30, 2007	Dec. 31, 2007
	(in thousands, except per share amounts)			
Revenues:				
Royalty revenues	$ 9,796	$ 10,967	$ 12,522	$ 14,688
Collaborative and other research and development revenues	59,014	27,229	28,492	36,304
Total revenues	68,810	38,196	41,014	50,992
Costs and expenses:				
Royalty expenses	3,269	3,401	3,562	3,672
Research and development expenses	133,827	137,240	130,024	117,586
Sales, general and administrative expenses	15,288	22,269	20,341	21,206
Restructuring expense	5,055	906	882	276
Total costs and expenses	157,439	163,816	154,809	142,740
Loss from operations	(88,629)	(125,620)	(113,795)	(91,748)
Interest income	9,122	8,423	7,256	5,997
Interest expense	(1,221)	(570)	(494)	—
Net loss	$ (80,728)	$ (117,767)	$ (107,033)	$ (85,751)
Basic and diluted net loss per common share	$ (0.64)	$ (0.91)	$ (0.82)	$ (0.66)
Basic and diluted weighted-average number of common shares outstanding	125,756	129,269	130,006	130,741

Exhibit 10.30

Execution Version

Amendment No. 3
to
Employment Agreement

This Amendment No. 3 (the "Amendment") to the Employment Agreement, dated November 1, 1994, as amended on May 12, 1995 and November 8, 2004 (the "Agreement"), between Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (together with its successors and assigns, the "Company") and Joshua S. Boger (the "Executive") is entered into by the parties on December 30, 2008. The parties hereby agree that the Agreement shall be amended as follows:

1. Section 6.4 of the Agreement shall be amended to add the following words at the end of the first sentence of such Section:

", payable in a lump sum within ten (10) business days after the effective date of termination."

2. Section 7.1.4 of the Agreement shall be amended by adding the following at the end of such Section:

"The parties intend that continued health coverage under the Company's plans shall not constitute a 'deferral of compensation' under Treas. Reg. Section 1.409A-1(b) during the period the Executive would be entitled to continuation coverage under COBRA (typically 18 months) and that any continued life, disability and accident coverage shall not constitute a 'deferral of compensation' during any period in which such continued coverage qualifies as a 'limited payment' of an 'in kind' benefit under Treas. Reg. Section 1.409A-1(b)(9)(v)(C) and (D). Any portion of the continued life, disability, accident and health coverage that is subject to Section 409A of the Code is intended to qualify as a 'reimbursement or in-kind benefit plan' under Treas. Reg. Section 1.409A-3(i)(1)(iv). In no event shall the amount that the Company pays for any such benefit in any one year affect the amount that it will pay in any other year, and in no event shall the benefits described in this paragraph be subject to liquidation or exchange. If the Company reimburses the Executive for the amount of any benefit under this Section 7.1.4, such reimbursement shall be made on or before the last day of the Executive's taxable year following the taxable year in which the expense was incurred. Notwithstanding the foregoing, if the Executive is a 'specified employee' (as defined in Section 12) as of the date of the Executive's termination of employment, no such life, disability or accident benefits that are not excludable from the income of the Executive and that are, in the aggregate, in excess of the then current dollar limit set forth in Section 402(g)(1)(B) of the Code shall be payable during the first six (6) months after such Executive's termination of employment. To the extent that amounts would otherwise have been payable during such six month period in excess of such limit, the excess amount shall be payable on the first day following the end of the six-month period after the Executive's termination of employment. The Executive shall have the right during such six-month period to pay any unpaid part of the premiums on such benefits at the Executive's own expense in order for the Executive to keep such benefits in force."

3. Section 7.1.6 of the Agreement shall be amended by adding the following at the end of the last sentence of such Section:

", but in no event later than the last day of the Executive's taxable year following the taxable year in which the Executive remits the related taxes."

---

4. Section 11.5.1 of the Agreement shall be amended by deleting the second sentence of such Section in its entirety.

5. A new Section 12 shall be added, which shall state in its entirety as follows:

"12. 409A.

Each payment and benefit payable under this Agreement is intended to constitute a separate payment for purposes of Treasury Reg. §1.409A-2(b)(2). If the Executive is a 'specified employee' as defined in Treasury Reg. §1.409A-1(i), the commencement of the delivery of any such payments that constitute nonqualified deferred compensation payable upon a 'separation from service' under Section 409A(a)(2)(A)(i) of the Code (determined after applying the presumptions set forth in Treasury Reg. §1.409A-1(h)(1)) will be delayed until the later of (i) the first business day that is more than six months after the employment termination date and (ii) the date such payments would otherwise be payable hereunder. The determination of whether, and the extent to which, any of the payments to be made to the Executive hereunder are nonqualified deferred compensation shall be made after the application of all applicable exclusions, including those set forth under Treasury Reg. § 1.409A-1(b)(9). Any payments that are intended to qualify for the exclusion for separation pay due to involuntary separation from service set forth in Reg. §1.409A-1(b)(9)(iii) must be paid no later than the last day of the second taxable year following the taxable year in which the employment termination date occurs. To the extent that the termination of the Executive's employment does not constitute a separation of service under Section 409A(a)(2)(A)(i) of the Code (as the result of further services that are reasonably anticipated to be provided by the Executive to the Company at the time the Executive's employment is terminated, determined after applying the presumptions set forth in Treasury Reg. §1.409A-1(h)(1)), the payment of any non-qualified deferred compensation will be further delayed until the later of (i) date the first business day that is more than six months after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code and (ii) the date such payments would otherwise be payable hereunder."

6. As so amended, the Agreement shall remain in full force and effect.

7. This Amendment may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the date first written above.

VERTEX PHARMACEUTICALS INCORPORATED

By: /s/ Valerie L. Andrews
Valerie L. Andrews
Vice President and Deputy General Counsel

/s/ Joshua S. Boger
Joshua S. Boger
President and Chief Executive Officer

Exhibit 10.60

Vertex Employee Compensation Plan

On an annual basis in the first quarter of the fiscal year the Management Development and Compensation Committee of our Board of Directors adopts an employee compensation plan for our officers and other employees, including our named executive officers together with performance goals for that fiscal year. The plan addresses three components of employee compensation—base salary, performance bonus which serve as short-term incentives and equity grants which serve as long-term incentive—that are designed to motivate, reward and retain employees by aligning compensation with the achievement of strategic corporate goals as well as individual performance objectives.

Upon completion of each performance period (usually a calendar year), our Board of Directors assigns us a performance rating on the basis of achievement of goals for the company set by the Board early in the performance period. The amount available for payment of performance bonuses is established on the basis of this performance rating, and is allocated to employees on the basis of salary tier and individual performance rating. The base salary of the executive officers are set based on market and other competitive factors. Merit increases to base salaries for other employees are made on the basis of individual performance rating. Annual equity grants, made in the form of stock options, restricted stock grants, or a combination of both are made on the basis of salary tier and individual performance.

The Management Development and Compensation Committee retains broad discretion to determine the appropriate form and level of compensation, particularly for our executives, on the basis of its assessment of our executives, the demand for talent, our performance and other factors. Key corporate performance factors generally include, among other things, achievement of specific financial objectives, research productivity, development progression with respect to both internal development efforts and collaborative development, and other aspects of our performance. We reserve the right to modify the plan, and the key corporate performance factors and criteria under the plan, at any time.

On February 5, 2009, we determined the cash bonus awards related to the fiscal year ended December 31, 2008 and annual salaries effective February 2009. The cash bonus awards for the following executive officers were:

Name	2008 Cash Bonus	2009 Salary
Joshua S. Boger	$ 978,750	$ 950,151
Matthew W. Emmens	$ —	$ 1,100,000
Kurt C. Graves	$ 369,968	$ 470,453
Peter Mueller	$ 385,324	$ 472,481
Ian F. Smith	$ 391,500	$ 463,500
Kenneth S. Boger	$ 315,158	$ 412,207

Exhibit 10.64

Amendment No. 2
to
Amended and Restated Employment Agreement

This Amendment No. 2 to the Amended and Restated Employment Agreement, dated November 8, 2004, as amended on February 11, 2008 (the "Agreement"), between Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (together with its successors and assigns, the "Company") and Kenneth S. Boger (the "Executive") is entered into by the parties on December 29, 2008. The parties hereby agree that the Agreement shall be amended as follows:

1. Section 1(g) shall be amended by adding the following to the end thereof:

"Notwithstanding the foregoing, to the extent that any payments under this Agreement that are payable upon disability constitute nonqualified deferred compensation subject to Section 409A of the Code, "DISABILTY" or "DISABLED" shall mean, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, the Executive is either (a) unable to engage in any substantial gainful activity or (b) receiving income replacement benefits for a period of not less than three months under any disability plan covering employees of the Company. For purposes of the immediately foregoing sentence, the existence of a disability will be determined in all respects in accordance with the provisions of Section 409A(a)(2)(C) of the Code.

2. Section 8 shall be amended by inserting the following language at the end of the current language, as follows:

"Any reimbursement in one calendar year shall not affect the amount that may be reimbursed in any other calendar year, and a reimbursement (or right thereto) may not be exchanged or liquidated for another benefit or payment. Any expense reimbursements subject to Section 409A of the Code shall be made no later than the end of the calendar year following the calendar year in which such business expense is incurred by the Executive."

3. Section 10(a)(vii) shall be amended in its entirety to read as follows:

"(vii) six months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month in which termination under this SECTION 10(a) occurred;"

4. Section 10(b) shall be amended to delete the last paragraph thereof in its entirety.

5. The first phrase of Section 10(c)(iii) shall be amended to read as follows:

"(iii) Twelve months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month during which the Executive's employment is terminated under this SECTION 10(c);"

6. Section 10(c)(viii) shall be amended in its entirety as follows:

"(viii) until the earlier of (a) the expiration of the term of the Severance Pay paid under Section 10(c)(iii) above or (b) the date the Executive receives equivalent coverage and benefits under the

---

plan of a subsequent employer, the Company shall provide the Executive with medical and dental insurance benefits substantially similar to those which the Executive was receiving immediately prior to the termination of his employment, including any employer paid portion of the premium, subject to the Executive's election of benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") in accordance with the applicable plan procedures. During such time that the Executive is receiving such continued medical and dental benefits from the Company, the Company shall also provide Executive with life insurance benefits substantially similar to those which the Executive was receiving immediately prior to the termination of his employment

7. Section 26 shall be amended as follows:

(i) By adding the following to the end of the first paragraph thereof:

"The Company will pay to Executive the Additional Amount within 10 days after the Executive delivers to the Company a calculation of the Additional Amount, together with such supporting documentation as the Company may reasonably require, provided that the Company does not object to such calculation."

(ii) By adding the following to the end of the third paragraph thereof:

"Notwithstanding the foregoing, no payments under this Section 26 from the Company to Executive shall be made after the end of the calendar year immediately following the calendar year in which the Executive remits the related taxes to the applicable taxing authority."

8. Section 27 shall be amended to add the following at the end of the current language:

"Any portion of a payment that constitutes nonqualified deferred compensation under Section 409A of the Code payable as a result of a termination of employment may only be paid upon a "separation from service" under Section 409A(a)(2)(A)(i) of the Code. For purposes of clarification, the foregoing sentence shall not cause any forfeiture of benefits on the part of the Executive, but shall only act as a delay until such time as a "separation from service" occurs."

As so amended, the Employment Agreement shall remain in full force and effect. Executed as of the date set forth above:

VERTEX PHARMACEUTICALS INCORPORATED

By: /s/ Valerie Andrews
V.P. & Deputy General Counsel

/s/ Kenneth S. Boger
Kenneth S. Boger

Exhibit 10.65

Amendment No. 1
to
Employment Agreement

This Amendment No. 1 to the Employment Agreement, dated June 29, 2007 (the "Agreement"), between Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (together with its successors and assigns, the "Company"), and Kurt Graves (the "Executive") is entered into by the parties on December 29, 2008. The parties hereby agree that the Agreement shall be amended as follows:

1. Section 5(e) shall be amended to insert the following sentence after the current first sentence to read as follows:

"To the extent subject to Section 409A of the Code, the reimbursement to the Executive shall be made no later than December 31, 2009."

2. Section 8 shall be amended by inserting the following language at the end of the current language, as follows:

"Any reimbursement in one calendar year shall not affect the amount that may be reimbursed in any other calendar year, and a reimbursement (or right thereto) may not be exchanged or liquidated for another benefit or payment. Any expense reimbursements subject to Section 409A of the Code shall be made no later than the end of the calendar year following the calendar year in which such business expense is incurred by the Executive."

3. Section 11(a)(vii) shall be amended to read as follows:

"(vii) six months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month in which termination under this Section 11(a) occurred; and"

4. Section 11(b) shall be amended to delete the last paragraph thereof in its entirety.

5. The first phrase of Section 11(c)(iii) shall be amended to read as follows:

"(iii) Twelve months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month during which the Executive's employment is terminated under this Section 11(c)"

6. Section 11(c)(viii) shall be amended in its entirety as follows:

"(viii) until the earlier of (a) the expiration of the term of the Severance Pay paid under Section 11(c)(iii) above or (b) the date the Executive receives equivalent coverage and benefits under the plan of a subsequent employer, the Company shall provide the Executive with medical, dental and hospitalization insurance benefits substantially similar to those which the Executive was receiving immediately prior to the termination of his employment, including any employer paid portion of the premium, subject to the Executive's election of benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") in accordance with the applicable plan procedures. During such time that the Executive is receiving such continued medical, dental and hospitalization benefits from the Company, the Company shall also provide Executive with life insurance benefits substantially similar to those which the Executive was receiving immediately prior to the termination of his employment

7. Section 11 shall be amended by adding the following at the end of the final paragraph thereof:

"For purposes of clarification, any portion of a payment that constitutes nonqualified deferred compensation under Section 409A of the Code payable as a result of a termination of employment may only be paid upon a "separation from service" under Section 409A(a)(2)(A)(i) of the Code. For purposes of clarification, the foregoing sentence shall not cause any forfeiture of benefits on the part of the Executive, but shall only act as a delay until such time as a "separation from service" occurs."

As so amended, the Employment Agreement shall remain in full force and effect. Executed as of the date set forth above:

VERTEX PHARMACEUTICALS INCORPORATED

By: /s/ Kenneth S. Boger
Kenneth S. Boger
Senior Vice President and General Counsel

/s/ Kurt Graves
Kurt Graves

Amendment No. 1
to
Amended and Restated Employment Agreement

This Amendment No. 1 to the Amended and Restated Employment Agreement, dated November 8, 2004 (the "Agreement"), between Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (together with its successors and assigns, the "Company"), and Ian F. Smith (the "Executive") is entered into by the parties on December 29, 2008. The parties hereby agree that the Agreement shall be amended as follows:

1. Section 1(g) shall be amended by adding the following thereto:

"Notwithstanding the foregoing, to the extent that any payments under this Agreement that are payable upon disability constitute nonqualified deferred compensation subject to Section 409A of the Code, "DISABILTY" or "DISABLED" shall mean, by reason of any medically determinable physical or mental impairment that can be expected to result in death or can be expected to last for a continuous period of not less than 12 months, the Executive is either (a) unable to engage in any substantial gainful activity or (b) receiving income replacement benefits for a period of not less than three months under any disability plan covering employees of the Company. For purposes of the immediately foregoing sentence, the existence of a disability will be determined in all respects in accordance with the provisions of Section 409A (a)(2)(C) of the Code."

2. Section 8 shall be amended by inserting the following language at the end of the current language, as follows:

"Any reimbursement in one calendar year shall not affect the amount that may be reimbursed in any other calendar year, and a reimbursement (or right thereto) may not be exchanged or liquidated for another benefit or payment. Any expense reimbursements subject to Section 409A of the Code shall be made no later than the end of the calendar year following the calendar year in which such business expense is incurred by the Executive."

3. Section 10(a)(vii) shall be amended in its entirety to read as follows:

"(vii) six months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month in which termination under this SECTION 10(a) occurred;"

4. Section 10(b) shall be amended to delete the second to last paragraph thereof in its entirety.

5. The first phrase of Section 10(c)(iii) shall be amended to read as follows:

"(iii) Twelve months of Severance Pay, payable in accordance with the regular payroll practices of the Company, commencing on the first day of the month following the month during which the Executive's employment is terminated under this SECTION 10(c);"

6. Section 10(c)(ix) shall be amended in its entirety as follows:

"(ix) until the earlier of (a) the expiration of the term of the Severance Pay paid under Section 10(c)(iii) above or (b) the date the Executive receives equivalent coverage and benefits under the plan of a subsequent employer, the Company shall provide the Executive with medical, dental and hospitalization insurance benefits substantially similar to those which the Executive was

---

receiving immediately prior to the termination of his employment, including any employer paid portion of the premium, subject to the Executive's election of benefits under the Consolidated Omnibus Budget Reconciliation Act of 1985 ("COBRA") in accordance with the applicable plan procedures. During such time that the Executive is receiving such continued medical, dental and hospitalization benefits from the Company, the Company shall also provide Executive with life insurance benefits substantially similar to those which the Executive was receiving immediately prior to the termination of his employment."

7. Section 10 shall be amended by adding the following at the end of the final paragraph thereof:

"For purposes of clarification, any portion of any payment hereunder that constitutes nonqualified deferred compensation under Section 409A of the Code payable as a result of a termination of employment may only be paid upon a "separation from service" under Section 409A(a)(2)(A)(i) of the Code. For purposes of clarification, the foregoing sentence shall not cause any forfeiture of benefits on the part of the Executive, but shall only act as a delay until such time as a "separation from service" occurs."

8. Section 26 is amended by adding the following provision to the end thereof:

"Notwithstanding the foregoing, no payments under this Section 26 from the Company to Executive shall be made after the end of the calendar year immediately following the calendar year in which the Executive remits the related taxes to the applicable taxing authority."

9. The Agreement shall be amended by adding the following new Section 27:

"27. 409A COMPLIANCE.

Any severance payment to the Executive under this Agreement shall be bifurcated into two portions, consisting of a portion that does not constitute "nonqualified deferred compensation" within the meaning of Section 409A of the Code and a portion, if any, that does constitute nonqualified deferred compensation. If the Executive is a "specified employee" as defined in Treasury Reg. §1.409A-1(i), the commencement of the delivery of any such payments that constitute nonqualified deferred compensation payable upon a "separation from service" under Section 409A(a)(2)(A)(i) of the Code (determined after applying the presumptions set forth in Treasury Reg. §1.409A-1(h)(1)) will be delayed until the later of (i) the first business day that is more than six months after the employment termination date and (ii) the date such payments would otherwise be payable hereunder. The determination of whether, and the extent to which, any of the payments to be made to the Executive hereunder are nonqualified

deferred compensation shall be made after the application of all applicable exclusions, including those set forth under Treasury Reg. §1.409A-1(b)(9). Any payments that are intended to qualify for the exclusion for separation pay due to involuntary separation from service set forth in Treasury Reg. §1.409A-1(b)(9)(iii) must be paid no later than the last day of the second taxable year following the taxable year in which the employment termination date occurs. To the extent that the termination of the Executive's employment does not constitute a separation of service under Section 409A(a)(2)(A)(i) of the Code (as the result of further services that are reasonably anticipated to be provided by the Executive to the Company at the time the Executive's employment is terminated, determined after applying the presumptions set forth in Treasury Reg. §1.409A-1(h)(1)), the payment of any non-qualified deferred compensation will be further delayed until the later of (i) date the first business day that is more than six months after the date of a subsequent event constituting a separation of service under Section 409A(a)(2)(A)(i) of the Code and (ii) the date such payments would otherwise be payable hereunder. Any portion of a payment that constitutes nonqualified deferred compensation under Section 409A of the Code payable as a result of a termination of employment may only be paid upon a "separation from

service" under Section 409A(a)(2)(A)(i) of the Code. For purposes of clarification, the foregoing sentence shall not cause any forfeiture of benefits on the part of the Executive, but shall only act as a delay until such time as a "separation from service" occurs."

As so amended, the Amended and Restated Employment Agreement shall remain in full force and effect. Executed as of the date set forth above:

VERTEX PHARMACEUTICALS INCORPORATED

By: /s/ Kenneth S. Boger
Kenneth S. Boger
Senior Vice President and General Counsel

/s/ Ian F. Smith
Ian F. Smith

Exhibit 10.67

Form of Amendment to Employment Agreement and Change of Control Agreement

Each of the Employment Agreement and Change of Control Agreement (the "Agreements") between the undersigned and Vertex Pharmaceuticals Incorporated hereby is amended to provide that (i) the general release of all claims to be executed by the undersigned as a condition to payment by the Company of severance benefits shall be executed by the undersigned within 30 days of the last date of the undersigned's employment by the Company, (ii) the Company's right to waive the notice period upon a termination by Executive without Good Reason (in the Employment Agreement) hereby is deleted, and (iii) the continuation insurance premiums to be paid by the Company pursuant to an Agreement shall include all applicable premiums under standard medical, dental and life insurance coverage, whether or not covered by COBRA. Defined terms used without specific definition in this Amendment to the Agreements shall have the meanings set forth in the Agreements.

_____ _____

Date:

VERTEX PHARMACEUTICALS INCORPORATED

By: _____

Name:
Title:

EXHIBIT 21.1

SUBSIDIARIES OF VERTEX PHARMACEUTICALS INCORPORATED

Vertex Pharmaceuticals (San Diego) LLC, a Delaware limited liability company

VSD Sub I LLC, a Delaware limited liability company(1)

VSD Sub II LLC, a Delaware limited liability company(2)

Vertex Securities Corporation, a Massachusetts corporation

Vertex Pharmaceuticals (Cayman) Limited, a Cayman Islands company

Vertex Holdings, Inc., a Delaware corporation

Vertex Securities Trust, a Massachusetts business trust(3)

Vertex Pharmaceuticals (Europe) Ltd., a United Kingdom limited liability company(4)

---

(1) a subsidiary of Vertex Pharmaceuticals (San Diego) LLC

(2) a subsidiary of VSD Sub I LLC

(3) a subsidiary of Vertex Holdings, Inc.

(4) jointly held by Vertex Securities Trust and Vertex Holdings, Inc.

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 33-48030, 33-48348, 33-65472, 333-65666, 33-93324, 333-12325, 333-27011, 333-56179, 333-65664, 333-79549, 333-104362, 333-115458, 333-134482, 333-147277, 333-150946 and 333-150945 and Form S-3 No. 333-153543) of Vertex Pharmaceuticals Incorporated of our reports dated February 12, 2009, with respect to the consolidated financial statements of Vertex Pharmaceuticals Incorporated and the effectiveness of internal control over financial reporting of Vertex Pharmaceuticals Incorporated, included in this Annual Report (Form 10-K) for the year ended December 31, 2008.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 12, 2009

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 31.1

CERTIFICATION

I, Joshua S. Boger, certify that:

1. I have reviewed this Annual Report on Form 10-K 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: February 13, 2009

/s/ JOSHUA S. BOGER

Joshua S. Boger
Chief Executive Officer

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 31.2

I, Ian F. Smith, certify that:

1. I have reviewed this Annual Report on Form 10-K 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: February 13, 2009

/s/ IAN F. SMITH

Ian F. Smith
Executive Vice President and Chief Financial Officer

QuickLinks

QuickLinks -- Click here to rapidly navigate through this document

Exhibit 32.1

SECTION 906 CEO/CFO CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code) each of the undersigned officers of Vertex Pharmaceuticals Incorporated, a Massachusetts corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 10-K for the year ended December 31, 2008 (the "Form 10-K") 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-K fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 13, 2009

/s/ JOSHUA S. BOGER

Joshua S. Boger
Chief Executive Officer

Date: February 13, 2009

/s/ IAN F. SMITH

Ian F. Smith
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

QuickLinks