

VERTEX PHARMACEUTICALS INC / MA  
Form 10-K  
February 11, 2008

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
WASHINGTON, D.C. 20549  
**FORM 10-K**

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

For the Fiscal Year Ended December 31, 2007

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

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**Vertex Pharmaceuticals Incorporated**

(Exact name of registrant as specified in its charter)

**Massachusetts**  
(State or other jurisdiction of  
incorporation or organization)

**04-3039129**  
(I.R.S. Employer  
Identification No.)

**130 Waverly Street**  
**Cambridge, Massachusetts**  
(Address of principal executive offices)

**02139-4242**  
(Zip Code)

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

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

**Title of Each Class**

**Name of Each Exchange on Which Registered**

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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

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

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  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

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

Non-accelerated filer

Smaller reporting company

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

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 29, 2007 (the last trading day of the registrant's second fiscal quarter of 2007) was \$2.5 billion.

As of February 6, 2008, the registrant had 132,964,533 shares of common stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive Proxy Statement for the 2008 Annual Meeting of Stockholders to be held on May 15, 2008 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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## VERTEX PHARMACEUTICALS INCORPORATED

## ANNUAL REPORT ON FORM 10-K

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"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 target hepatitis C virus, or HCV, infection, a life-threatening disease. We expect to begin a Phase 3 clinical trial of telaprevir in March 2008 to evaluate 24-week telaprevir-based treatment regimens in treatment-naïve patients with genotype 1 HCV.

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 this drug discovery capability we have identified among other drug candidates: VX-770 and VX-809, two novel drug candidates targeting cystic fibrosis, or CF; VX-500 and VX-813, two second-generation HCV protease inhibitors; and VX-509, a novel janus kinase 3, or JAK3, inhibitor that targets immune-mediated inflammatory diseases, or IMID. We have a number of other drug candidates in clinical trials or preclinical studies being developed either by us or in collaboration with other pharmaceutical companies, including drug candidates targeting cancer, IMID, pain and other neurological diseases and disorders. We currently are building our drug development, supply chain management and commercialization organizations to prepare for the potential commercial launch of telaprevir and to support the development of the other drug candidates in our pipeline.

We are conducting a comprehensive global clinical development program for telaprevir in collaboration with Janssen Pharmaceutica, N.V., or Janssen, a Johnson & Johnson company, and Mitsubishi Tanabe Pharma Corporation. This program is designed to support potential registration of telaprevir by us in North America and our collaborators in international markets for treatment-naïve and treatment-experienced patients across a range of HCV genotypes. In March 2008, we expect to begin a global, 3-arm Phase 3 clinical trial of telaprevir designed to enroll approximately 1,050 treatment-naïve patients with genotype 1 HCV, the most prevalent form of HCV in the United States, European Union and Japan. Patients in the two 24-week telaprevir-based treatment arms will be dosed with telaprevir for 8 or 12 weeks in combination with pegylated interferon, or peg-IFN, and ribavirin, or RBV, and will continue to receive peg-IFN and RBV after the dosing of telaprevir is complete. The third arm is a control arm with peg-IFN and RBV treatment, alone, for 48 weeks. We expect to complete enrollment in this trial in the fourth quarter of 2008. We expect to receive sustained viral response, or SVR, data from all treatment arms in the first half of 2010.

We have additional clinical trials ongoing or planned that have the potential to fulfill the anticipated registration requirement of at least one additional adequate and well-controlled clinical trial. We expect to begin enrollment in a clinical trial designed to evaluate a 48-week telaprevir-based treatment regimen, in the third quarter of 2008. We expect SVR data from all treatment arms of this clinical trial will be available in mid-2010. Our PROVE 3 clinical trial is a Phase 2b clinical trial involving approximately 440 patients with genotype 1 HCV who did not achieve SVR with previous peg-IFN-based treatments, or treatment-experienced patients. We completed enrollment in this clinical trial in June 2007. We expect the first interim clinical trial data to be available in the second quarter of 2008 and the SVR data from all PROVE 3 treatment arms by the end of 2008.

We continue to evaluate interim data from two Phase 2b clinical trials, PROVE 1 and PROVE 2, which enrolled an aggregate of approximately 580 treatment-naïve patients with genotype 1 HCV. On an intent-to-treat basis, in the 24-week telaprevir-based treatment arms of PROVE 1 and PROVE 2, 61% and 68%, respectively, of patients achieved SVR at 24 weeks post-treatment. In the control arm of PROVE 1, on an intent-to-treat basis, 37% of patients achieved undetectable HCV RNA levels at 12 weeks post-treatment. Post-treatment viral response data for the control arm of PROVE 2 are not yet available. Patients in our clinical trials who achieve SVR have undetectable HCV RNA levels less

than 10 IU/mL as measured by the Roche TaqMan® assay 24 weeks after all treatment has ceased. The interim analyses of safety data from PROVE 1 and PROVE 2 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.

In addition to telaprevir, we are evaluating a number of other drug candidates, including:

VX-770, a cystic fibrosis transmembrane regulator, or CFTR, potentiator compound, which we are investigating for the treatment of CF. In the second quarter of 2007, we initiated a Phase 2a clinical trial of VX-770 in patients with CF.

VX-809, a CFTR corrector compound, which we are investigating for the treatment of CF. We have initiated a Phase 1a clinical trial of VX-809.

VX-500, a second generation oral HCV protease inhibitor, which we are investigating for the treatment of chronic HCV infection. We have initiated a Phase 1a clinical trial of VX-500. We expect VX-813, an additional investigational HCV protease inhibitor, to enter clinical development in 2008.

VX-509, a novel JAK3 inhibitor that we are investigating for the treatment of immune-mediated inflammatory diseases. We expect to initiate a Phase 1 clinical trial of VX-509 in mid-2008.

In 2006, we entered into a collaboration agreement with Janssen under which we have retained exclusive commercial rights to telaprevir in North America and are leading the clinical development program. Janssen will be responsible for the commercialization of telaprevir, including the manufacture of its own commercial supply of telaprevir, for the Janssen territories, which include the territories outside of North America and the Far East. Janssen has agreed to be responsible for 50% of drug development costs under the development program for North America and the Janssen territories and to make contingent milestone payments for the successful development, approval and launch of telaprevir. Mitsubishi Tanabe is conducting clinical trials of telaprevir in Japan. Our pipeline also includes Aurora kinase inhibitors, which are being developed by Merck & Co., Inc., and AVN-944 (VX-944), which is being developed by Avalon Pharmaceuticals, Inc. A Vertex-discovered compound for the treatment of HIV infection, fosamprenavir calcium, is being marketed by our collaborator GlaxoSmithKline plc as Lexiva in the United States and Telzir in Europe.

## OUR STRATEGY

Our goal is to become a fully integrated pharmaceutical company with industry-leading capabilities in research, development and commercialization of pharmaceutical products. The key elements of our strategy are:

*Develop and commercialize telaprevir.* We believe that telaprevir has advanced further along the clinical development pathway than any other new and potentially competing oral HCV therapy. In order to maintain the time-to-market advantage we believe that we have in relation to drug candidates being developed by our competitors, we have a comprehensive clinical development program for telaprevir consisting of multiple concurrent clinical trials, and we are investing significant resources in the Phase 3 clinical development and preparation for launch of telaprevir.

*Create a leadership position in the treatment of HCV infection.* We believe that treatment of HCV infection will continue to require combination drug therapies in order to achieve high SVR rates. We intend to seek to create a leading multi-drug franchise in HCV. To complement telaprevir, VX-500 and/or VX-813, we are pursuing business development activities with complimentary therapies including polymerase inhibitors and novel interferons.

*Expand the value of our portfolio of drug candidates.* We have elected to diversify our research and development activities across a relatively broad array of investment opportunities. In 2008, we intend to

progress VX-770 and VX-809, our drug candidates targeting CF, VX-509, our novel JAK3 inhibitor, which targets immune-mediated inflammatory diseases and other promising drug candidates in our pipeline.

*Capitalize on the advances in our telaprevir clinical program to build our general drug development and commercialization capabilities.* In 2008, we plan to continue our investment in key areas including clinical development, regulatory affairs, safety, quality control, pharmaceutical development, commercial operations and commercial supply chain management that will be necessary in order to complete development of telaprevir, to seek marketing approval for telaprevir and to commercialize telaprevir if we are successful in obtaining marketing approval. We expect that these capabilities also will support realization of additional drug candidates that may progress through our pipeline.

*Invest in research and development and retain a greater proportion of rights to proprietary drug candidates.* We intend to continue making significant investments in our research and development programs. We direct our research and development 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. In recent years, we have funded a greater proportion of our research programs using internal funds rather than collaborator funds. We adopted this strategy with the aim of retaining greater development control of, and commercial rights to, those proprietary drug candidates that may meet our strategic internal investment criteria as in effect from time to time.

*Continue existing and establish new collaborations to develop and commercialize selected drug candidates.* 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 a portion of our drug candidates either worldwide or in markets in which we are not concentrating our resources.

*License and acquire technologies, resources, drugs or drug candidates.* 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 commercial capabilities.

## PIPELINE

Our pipeline is set forth in the following table. In addition, we are engaging in preclinical activities with respect to a number of additional drug candidates.

<b>Drug or Drug Candidate</b>	<b>Clinical Indication(s)</b>	<b>Phase</b>	<b>Marketing Rights (Region)</b>
<i>Infectious Diseases</i>			
Lexiva/Telzir	HIV infection	Marketed	GlaxoSmithKline (Worldwide)
Telaprevir (VX-950)	Chronic HCV infection	Phase 3	Vertex (North America); Mitsubishi Tanabe (Far East); and Janssen (Rest of World)
VX-500	Chronic HCV infection	Phase 1a	Vertex (Worldwide)
VX-813	Chronic HCV infection	Preclinical	Vertex (Worldwide)
VX-883	Bacterial infection	Preclinical	Vertex (Worldwide)
<i>Cystic Fibrosis</i>			
VX-770	Cystic fibrosis	Phase 2a	Vertex (Worldwide)
VX-809	Cystic fibrosis	Phase 1a	Vertex (Worldwide)
<i>Cancer</i>			
MK-0457(VX-680)	Cancer	Phase 2	Merck (Worldwide)
AVN-944(VX-944)	Cancer	Phase 2	Avalon (Worldwide)
VX-689	Cancer	Preclinical	Merck (Worldwide)

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<b>Drug or Drug Candidate</b>	<b>Clinical Indication(s)</b>	<b>Phase</b>	<b>Marketing Rights (Region)</b>
<i>Immune-Mediated Inflammatory Diseases</i>			
VX-702	Rheumatoid arthritis and other inflammatory diseases	Phase 2	Vertex (Worldwide)
VX-509	IMID	Preclinical	Vertex (Worldwide)

## HIV LEXIVA/TELZIR

Fosamprenavir calcium is an HIV protease inhibitor that is marketed by our collaborator, GlaxoSmithKline, under the trade name Lexiva in the United States and under the trade name Telzir in the European Union. We co-discovered fosamprenavir calcium with GlaxoSmithKline. Lexiva was launched in the United States in late 2003, and in certain European Union countries in the third quarter of 2004. Lexiva/Telzir is a prodrug of amprenavir, a drug we discovered for the treatment of HIV infection, and which was marketed by GlaxoSmithKline, prior to the introduction of Lexiva/Telzir, as Agenerase.

Infection with HIV can lead to AIDS, a severe, life-threatening impairment of the immune system. According to the Joint United Nations Programme on HIV/AIDS, an estimated 33.2 million people worldwide were living with HIV in 2007. The United States National Institutes of Health has estimated that there may be as many as 1.2 million individuals in the United States infected with HIV. HIV protease inhibitors are used as part of combination regimens for the treatment of HIV infection. HIV protease inhibitors block the cleavage of HIV polyproteins into active proteins, resulting in the production of non-infectious viral particles. Sales of HIV protease inhibitors (excluding the boosting agent ritonavir) in the United States exceeded \$1.7 billion in 2007, an increase of approximately 8% from 2006.

The market for HIV protease inhibitors is highly competitive, with a number of HIV protease inhibitors currently on the market. In 2007, Lexiva generated the third largest sales revenues among HIV protease inhibitors in the United States, excluding ritonavir, and it currently holds an approximate 10% share of the United States HIV protease inhibitor market based on total prescriptions, also excluding ritonavir. Lexiva/Telzir currently is approved for sale in about 40 countries worldwide, including the United States, France, Germany, Spain, Italy, the United Kingdom and Canada. We receive a royalty from GlaxoSmithKline on net sales of Lexiva/Telzir.

## DEVELOPMENT PROGRAMS

### *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. In March 2008, we expect to begin a 1,050-patient Phase 3 clinical trial of telaprevir that will evaluate 24-week telaprevir-based treatment regimens compared to current standard treatment in treatment-naïve patients with genotype 1 HCV. We expect to complete patient enrollment in this clinical trial in the fourth quarter of 2008 and expect that SVR data from all treatment arms will be available in the first half of 2010.

We anticipate that we will need results from at least one additional adequate and well-controlled clinical trial of telaprevir in order to file an NDA with the FDA. We believe that the planned multi-arm clinical trial of a 48-week telaprevir-based treatment regimen and the PROVE 3 clinical trial have the potential to fulfill this requirement. We expect that the 48-week telaprevir-based clinical trial will enroll approximately 400 treatment-naïve patients with genotype 1 HCV, beginning in the third quarter of 2008. We expect SVR data from all treatment arms of this clinical trial by mid-2010. The PROVE 3 clinical trial is a 440-patient trial that is being conducted in North America and the European Union in treatment-experienced patients. Patient enrollment in PROVE 3 was completed in June 2007, and SVR data from all PROVE 3 treatment arms are expected by the end of 2008. These trials, when combined with the Phase 3 clinical trial described above and multiple Phase 2 clinical trials, are also expected to fulfill the anticipated registration requirement of a safety database of 1,000 to 1,500 patients who are treated with at least 12 weeks of telaprevir.

Two additional Phase 2b clinical trials are ongoing: PROVE 1 in the United States and PROVE 2 in the European Union, both in treatment-naïve patients. In aggregate, approximately 580 patients were enrolled into these clinical trials. Patient dosing is complete in both.



We also have a number of other clinical trials ongoing or planned for 2008, including Phase 2 clinical trials being conducted by Tibotec, a Johnson & Johnson company affiliated with Janssen, to explore twice-daily, or BID, dosing of telaprevir and telaprevir-based treatment regimens in patients with genotype 2, genotype 3 and genotype 4 HCV, and clinical trials being conducted by Mitsubishi Tanabe Pharma Corporation in Japan.

Under our agreement with Janssen, we have retained exclusive commercial rights to telaprevir in North America and are leading the clinical development program 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 will owe Eli Lilly royalties on any future sales of telaprevir.

### **Background: Treatment of Chronic Hepatitis C Virus Infection**

HCV infection causes chronic inflammation in the liver. The World Health Organization estimates that there are as many as 170 million people chronically infected with HCV worldwide and that an additional 3 million to 4 million people are infected each year. Reports published by the American Association for the Study of Liver Disease have estimated that approximately 3.4 million people in the United States are chronically infected with HCV, and the American Liver Foundation estimates that 8,000 to 10,000 people in the United States die as a result of HCV infection each year.

The current standard treatment for infection by genotype 1 HCV, the most common HCV genotype in the United States, 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. In a recent clinical trial 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 alone achieved SVR. We believe new safe and effective treatment options for HCV infection are needed.

### **Phase 3 Clinical Trial**

The Phase 3 clinical trial is a global, 3-arm clinical trial that will evaluate two 24-week telaprevir-based treatment regimens compared to a 48-week control arm. The Phase 3 clinical trial is designed to enroll approximately 1,050 treatment-naïve patients with genotype 1 HCV, who will be randomized equally across three treatment arms with approximately 350 patients per trial arm. The clinical trial will be conducted at approximately 100 centers primarily located in the United States and the European Union. The three planned trial arms are:

a 24-week telaprevir-based treatment arm, with telaprevir dosed for 12 weeks in combination with peg-IFN and RBV, followed by treatment with peg-IFN and RBV alone for 12 weeks;

a 24-week telaprevir-based treatment arm, with telaprevir dosed for 8 weeks in combination with peg-IFN and RBV, followed by treatment with peg-IFN and RBV alone for 16 weeks; and

a control arm with peg-IFN and RBV treatment, alone, for 48 weeks.

Patients in the telaprevir-based treatment arms who achieve extended rapid viral response, or eRVR will receive 24 weeks of treatment. Our criteria for eRVR require that the patient have undetectable HCV RNA levels less than 10 IU/mL as measured by the Roche TaqMan® assay at 4 weeks and again at 12 weeks after the start of treatment. Patients in the telaprevir-based treatment

arms who have undetectable HCV RNA levels at 24 weeks after the start of treatment, but who did not achieve eRVR, will continue to receive treatment with peg-IFN and RBV for a total duration of 48 weeks. We expect to begin enrolling patients in the Phase 3 clinical trial in March 2008 and to complete enrollment in the fourth quarter of 2008. We expect to have SVR data from all treatment arms of this clinical trial in the first half of 2010.

#### Clinical Trial to Evaluate 48-Week Telaprevir-Based Treatment Regimens

We currently are planning another clinical trial, which we expect will enroll approximately 400 treatment-naïve patients with genotype 1 HCV. We plan that this clinical trial will evaluate a 48-week telaprevir-based regimen. An objective of this clinical trial will be to generate SVR and relapse rate data to confirm that there is no benefit/risk advantage, for patients who achieve RVR, of extending treatment with peg-IFN and RBV from 24 weeks to 48 weeks. We expect that we will begin enrolling patients in this clinical trial in the third quarter of 2008 and SVR data from all treatment arms of this clinical trial will be available in mid-2010.

#### PROVE 1 and PROVE 2

The PROVE 1 and PROVE 2 clinical trials are evaluating SVR rates in approximately 580 treatment-naïve patients infected with genotype 1 HCV, including patients who received telaprevir-based treatment, and also patients in standard treatment control arms.

A description of the clinical trial design for the PROVE 1 and PROVE 2 clinical trials, including the intended number of patients in each clinical trial arm, is set forth in the following table:

Treatment Regimen	Planned Number of Patients (treatment naïve) PROVE 1	Planned Number of Patients (treatment naïve) PROVE 2	Total
<b>24-week Telaprevir-Based Treatment Arm:</b>			
telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 12 weeks	80	80	160
<b>48-week Telaprevir-Based Treatment Arm:</b>			
telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 36 weeks	80	0	80
<b>12-week Telaprevir-Based Treatment Arm With RBV:</b>			
telaprevir in combination with peg-IFN and RBV for 12 weeks	20	80	100
<b>12-week Telaprevir-Based Treatment Arm Without RBV:</b>			
telaprevir in combination with only peg-IFN for 12 weeks	0	80	80
<b>48-week Control Arm:</b>			
48-weeks of therapy with peg-IFN and RBV	80	80	160
<b>Total</b>	<b>260</b>	<b>320</b>	<b>580</b>

In the PROVE 1 and PROVE 2 clinical trials, patients received telaprevir in a tablet formulation at a dose of 750 mg every eight hours for 12 weeks. In these trials, patients are said to achieve rapid viral response, or RVR, if they have undetectable HCV RNA levels at 4 weeks after commencement of treatment. In PROVE 1, patients in the 24-week telaprevir-based treatment arms who achieved a RVR and maintained undetectable HCV RNA from week 4 through week 20 stopped all treatment after 24 weeks of therapy. In PROVE 2, patients in the 24-week telaprevir-based treatment arms who had undetectable HCV RNA levels after 20 weeks of treatment stopped all treatment after 24 weeks. Patients in the 24-week telaprevir-based treatment arms in both trials who did not satisfy the criteria for stopping treatment continued to receive treatment with peg-IFN and RBV for a total of 48 weeks. The PROVE 1 clinical trial is double-blinded and placebo-controlled, and the PROVE 2 clinical trial is partially double-blinded and placebo-controlled.

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### *Interim Data from the PROVE 1 and PROVE 2 Clinical Trials*

Interim data from our PROVE 1 and PROVE 2 clinical trials regarding viral response rates, safety, RVR rates, viral breakthrough rates and viral relapse rates are provided below. Collection and analysis of data from the PROVE 1 and PROVE 2 clinical trials is ongoing, and as such all of the interim results are subject to change as final data are received.

#### ***Viral Response***

Data in the tables below include patients who completed treatment, as well as those who discontinued treatment prior to completion of dosing but who had undetectable HCV RNA levels at the time of measurement. Patients in our Phase 2b clinical trials achieve SVR if they have undetectable HCV RNA levels 24 weeks after completion of treatment.

#### *24-Week Telaprevir-Based Treatment Arms*

SVR rates on an intent-to-treat basis for PROVE 1 and PROVE 2 for the 24-week telaprevir-based treatment arms are set forth in the table below.

	<b>Number of Patients</b>	<b>SVR Rate</b>
		(% with HCV RNA <10 IU/mL)
24-week telaprevir-based treatment arm (PROVE 1) telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 12 weeks	79	61%
24-week telaprevir-based treatment arm (PROVE 2) telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 12 weeks	81	68%

#### *48-Week Treatment Arms*

SVR data, which require undetectable HCV RNA levels measured 24 weeks after completion of treatment, are not yet available for the 48-week control arms in PROVE 1 and PROVE 2 or the 48-week telaprevir-based treatment arm in PROVE 1. The following table sets forth, on an intent-to-treat basis, the percentage of patients that had undetectable HCV RNA at end of treatment and 12 weeks post-treatment, where available.

	<b>Number of Patients</b>	<b>End of Treatment</b>	<b>12 Weeks Post-Treatment</b>
			(% with HCV RNA <10 IU/mL)
48-week control arm (PROVE 1) 48-weeks of therapy with peg-IFN and RBV	75	45%	37%
48-week control arm (PROVE 2) 48-weeks of therapy with peg-IFN and RBV	82	55%	Not Available
48-week telaprevir-based treatment arm (PROVE 1) telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 36 weeks	79	65%	66%

Typically, following the completion of 48 weeks of treatment with peg-IFN and RBV alone, a proportion of patients with undetectable HCV RNA at end of treatment relapse during the following 24 weeks.

*12-Week Treatment Arms*

In the 12-week treatment arms in which patients received telaprevir plus peg-IFN and RBV for 12 weeks and then stopped all treatment, on an intent-to-treat basis, 35% of the 17 patients in PROVE 1 and 63% of the 82 patients in PROVE 2 achieved SVR. In the PROVE 2 12-week treatment arm in which patients received telaprevir plus peg-IFN for 12 weeks and did not receive RBV, 35% of patients achieved SVR. We are not further evaluating 12-week total duration treatment regimens at this time and do not intend to evaluate regimens without RBV after completion of the PROVE 3 trial.

***Safety***

The types of adverse events that have been commonly observed with peg-IFN and RBV treatment were seen across all treatment arms of PROVE 1 and PROVE 2. 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 rash more frequently severe, in the telaprevir arms than in the control arm over the dosing period.

In PROVE 1, the overall discontinuation rate through 12 weeks was 18% across all telaprevir treatment arms and 3% in the control arm. This includes discontinuations due to adverse events, withdrawal of consent and patients lost to follow-up. The incidence of treatment discontinuations through week 12 due to adverse events was 13% and 2% in the telaprevir and control arms, respectively. The most common reason for discontinuation was rash, with 7% of the patients discontinuing for this reason in the telaprevir arms during the first 12 weeks of treatment. After week 12, discontinuations due to adverse events were 8% in each of the telaprevir and control arms. Over the full course of the treatment period for all arms of the trial, the incidence of severe adverse events was 27% in the telaprevir arms and 24% in the control arm.

In PROVE 2, the overall discontinuation rate through 12 weeks of treatment was 14% across all telaprevir treatment arms and 6% in the control arm. This includes discontinuations due to adverse events, withdrawal of consent and patients lost to follow-up. The incidence of treatment discontinuations through week 12 due to adverse events was 10% and 3% in the telaprevir and control arms, respectively. As with PROVE 1, the most common reason for discontinuation was rash, with 7% of the patients in the telaprevir arms discontinuing due to rash, compared to less than 1% in the control arm during the first 12 weeks of treatment. Through to week 12, the incidence of severe adverse events was 17% in the telaprevir arms and 10% in the control arm.

The collection of adverse event and discontinuation data is ongoing in the PROVE clinical program.

***Rapid Viral Response***

A rapid viral response, or RVR, is one in which a patient has undetectable levels of HCV RNA less than 10 IU/mL as measured by the Roche TaqMan® assay at 4 weeks after commencement of treatment. Other clinical trials suggest that patients undergoing standard-of-care treatment with peg-IFN and RBV therapy for 48 weeks who achieve RVR are substantially more likely to achieve SVR than patients on the same treatment who do not achieve RVR. In PROVE 1 and PROVE 2 combined, on an intent-to-treat basis, 77% of patients receiving telaprevir in combination with peg-IFN and RBV achieved RVR 79% in PROVE 1 and 75% in PROVE 2. In the control arms of PROVE 1 and PROVE 2, 12% of patients achieved RVR 11% in PROVE 1 and 13% in PROVE 2. The result of statistical testing is often defined in terms of a "p-value," with a level of 0.05 or less considered to be a statistically significant difference, which means the result is unlikely due to chance. The difference between the RVR rates in the telaprevir arms and the control arms was statistically significant, with a p-value of less than 0.001 in both the PROVE 1 and the PROVE 2 trials.

For those patients in the 24-week telaprevir treatment arms in PROVE 1 and PROVE 2 who achieved RVR, completed 24 weeks of telaprevir-based therapy and for whom data was available for

analysis, 91% achieved SVR. We believe these data demonstrate a correlation between RVR and SVR in a 24-week telaprevir-based treatment regimen.

#### ***Viral Breakthrough***

In PROVE 1 and PROVE 2, 90% of patients receiving telaprevir in combination with peg-IFN and RBV achieved undetectable HCV RNA on at least one occasion during treatment. The remaining 10% of patients either withdrew from treatment with detectable HCV RNA levels or who did not achieve undetectable HCV RNA levels and had HCV RNA levels that increased at least 10-fold from their lowest levels while on treatment.

We consider a patient who first achieves undetectable viral levels less than 10 IU/mL and whose viral levels increase to more than 100 IU/mL during treatment to have experienced viral breakthrough. In addition, patients who do not achieve undetectable HCV RNA levels are considered to have experienced viral breakthrough if the patient's HCV RNA level increases by more than 10-fold from its lowest level during therapy. Viral breakthrough is associated with selection of viral variants resistant to the drug regimen being evaluated. In PROVE 1 and PROVE 2 combined, 5% of patients in the telaprevir-based treatment arms experienced viral breakthrough, as described below, in the first 12 weeks of treatment 7% in PROVE 1 and 2% in PROVE 2. Most viral breakthroughs occurred in the first month of treatment, and generally were associated with low interferon blood levels. Less than 2% of patients in the telaprevir-based treatment arms who achieved undetectable HCV RNA levels experienced viral breakthrough while on treatment.

#### ***Viral Relapse***

A patient who has undetectable HCV RNA at the end of treatment, but whose HCV RNA levels increase and are detectable during the post-treatment follow-up period, is said to have experienced viral relapse. Of the patients who experienced viral relapse in our trials to date, most relapsed during the first 12 weeks of follow-up. In PROVE 1 and PROVE 2, the relapse rate for patients who received 24 weeks of telaprevir-based treatment was 9% 2% in PROVE 1 and 14% in PROVE 2. However, the criteria for stopping all treatment after 24 weeks were different in PROVE 2 than in PROVE 1, and some patients who did not achieve an RVR at 4 weeks of treatment are included in the 24-week telaprevir-based treatment group of PROVE 2. If those patients who did not achieve RVR at 4 weeks of treatment are excluded from the calculation of the PROVE 2 viral relapse rate, the resulting relapse rate for patients who stopped all treatment after 24 weeks in that trial is 7%. The rate of viral relapse, measured at 12 weeks after completion of treatment, in the PROVE 1 48-week telaprevir-based treatment arm was 6%. The relapse rate in the PROVE 1 standard-of-care control arm, measured at 12 weeks after completion of treatment, was 23%.

#### **PROVE 3**

In the PROVE 3 clinical trial, we are evaluating SVR rates in approximately 440 patients in North America and the European Union infected with genotype 1 HCV who did not achieve SVR with previous pegylated interferon-based treatments. We refer to these patients as treatment-experienced patients. Patients in the telaprevir arms of the PROVE 3 clinical trial are receiving telaprevir at a dose of 750 mg every eight hours for 12 weeks or 24 weeks. We plan to discuss with regulatory authorities the next steps in the telaprevir development program for treatment-experienced patients after the first interim clinical data become available from the PROVE 3 clinical trial in mid-2008. SVR data from all PROVE 3 treatment arms are expected by the end of 2008.

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A description of each of the clinical trial arms of the PROVE 3 clinical trial, including the intended number of patients in the trial, is set forth in the following table:

	<b>Planned Number Treatment- Experienced Patients</b>
<b>24-week Telaprevir-Based Treatment Arm:</b>	
telaprevir in combination with peg-IFN and RBV for 12 weeks, followed by peg-IFN and RBV alone for 12 weeks	110
<b>24-week Telaprevir-Based Treatment Arm Without RBV:</b>	
telaprevir in combination with only peg-IFN for 24 weeks	110
<b>48-week Telaprevir-Based Treatment Arm:</b>	
telaprevir in combination with peg-IFN and RBV for 24 weeks, followed by peg-IFN and RBV alone for 24 weeks	110
<b>48-week Control Arm:</b>	
peg-IFN and RBV for 48 weeks	110
<b>Total</b>	<b>440</b>

The two principal objectives of the PROVE 3 clinical trial are:

to evaluate the SVR rate that can be achieved with telaprevir therapy in combination with peg-IFN and RBV in patients who have not achieved SVR with previous interferon-based treatments; and

to evaluate the safety profile of telaprevir administered for 12 or 24-weeks in combination with peg-IFN and RBV.

### Tibotec Clinical Trials

In addition to the telaprevir clinical trials that we are conducting, Tibotec is conducting:

a Phase 2 clinical trial in Europe to evaluate twice-daily, or BID, dosing of telaprevir in combination with peg-IFN and RBV;

a Phase 2 viral kinetics clinical trial in Europe to evaluate telaprevir in patients infected with genotype 2 and genotype 3 HCV; and

a Phase 2 viral kinetics clinical trial in Europe to evaluate telaprevir in patients infected with genotype 4 HCV.

We expect that interim 12-week on-treatment data from the BID clinical trial will be available in the second half of 2008. For the genotype 2/3 HCV clinical trial, patients currently are being screened and we expect that interim on-treatment data will be available in late 2008.

### Mitsubishi Tanabe Clinical Program

In 2006, Mitsubishi Tanabe conducted a Phase 1 clinical trial of telaprevir in Japan. In December 2007, Mitsubishi Tanabe commenced a Phase 1 clinical trial in Japan to assess the safety and pharmacokinetics of telaprevir administered as a monotherapy in patients with genotype 1 HCV. Mitsubishi Tanabe also is designing a Phase 2 clinical program for telaprevir in the Far East.

### *VX-500 and VX-813 (second generation investigational oral HCV protease inhibitors for the treatment of chronic HCV infection)*

VX-500 and VX-813 are novel, investigational HCV protease inhibitors we discovered. We have initiated dosing of VX-500 in a Phase 1a clinical trial. The clinical trial is designed to evaluate single, escalating doses of VX-500 in healthy volunteers followed by multiple escalating doses. If the results of the Phase 1a clinical trial support continued development, we expect to initiate a Phase 1b trial of



VX-500. We expect VX-813 to enter clinical development in 2008. We have worldwide development and commercialization rights to VX-500 and VX-813.

### *Cystic Fibrosis*

Cystic fibrosis is an inherited genetic disorder that affects about 30,000 children and adults in the United States and 70,000 worldwide. The underlying cause of CF is a genetically inherited deficiency in the production or activity of the cystic fibrosis transmembrane conductance regulator, or CFTR, protein. The CFTR protein is primarily responsible for controlling the movement of chloride ions from the inside to the outside of cells in the lung, sweat glands, pancreas and other affected organs. Approximately 90% of patients with CF produce CFTR proteins with trafficking defects, which result in significantly decreased concentrations of CFTR proteins on the surface of cells, and/or gating defects, which result in CFTR proteins that are less efficient at transporting chloride ions across the cell membrane. The resulting inadequate chloride ion transport is thought to result in abnormally thick mucus in the lungs and a decrease in pancreatic function, leading to serious lung infections, a gradual decline in lung function and digestive complications. According to the Cystic Fibrosis Foundation in 2006, the predicted median age of survival for patients with cystic fibrosis is 37 years.

We are conducting clinical trials of two drug candidates for the treatment of patients with CF. VX-770 is a potentiator compound intended to enhance the activity of CFTR proteins in patients with gating defects. VX-809 is a corrector compound intended to increase the concentration of CFTR proteins on the cell surface in patients with trafficking defects. 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. We would be required to pay CFFT royalties on any future sales of VX-770 or VX-809.

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

VX-770 is designed to enhance the activity of CFTR proteins with gating defects. Using our expertise in ion channels, including high-throughput cell assays and medicinal chemistry, we have identified selective ion channel modulators for potential application to the treatment of CF. VX-770 may work by increasing the probability that the CFTR channel in patients with CF is open, which could result in an increase in chloride transport across the cell membrane. In laboratory studies involving bronchial epithelial cells isolated from patients with cystic fibrosis whose CFTR proteins were defective in gating, our researchers have demonstrated that potentiator compounds may improve the function of the defective CFTR proteins. In 2006, we filed an Investigational New Drug, or IND, application with the FDA. We subsequently obtained both "Fast Track" and "Orphan Drug" designations for VX-770 from the FDA.

In the second quarter of 2007, we initiated a randomized, double-blind, placebo-controlled Phase 2a clinical trial of VX-770 expected to enroll a total of 36 patients with CF. The trial is designed to provide preliminary safety and pharmacokinetics information about VX-770. In addition, we expect to explore secondary endpoints that may reflect how VX-770 affects the CFTR protein in patients with the G551D mutation in the gene responsible for production of the CFTR protein. Secondary endpoints include VX-770's effect on nasal potential difference, forced expiratory volume and sweat chloride levels. We have completed enrollment in the first part of the Phase 2a clinical trial, which involved 20 patients with CF receiving VX-770 as part of a placebo-controlled 2-way crossover design of 14-day dosing regimens. Upon completion of dosing in these patients, we expect to begin enrollment in the second part of the Phase 2a clinical trial, which will involve enrollment of approximately 16 patients who will be dosed with VX-770 for up to 28 days. Depending on results from the Phase 2a clinical trial, we plan to advance VX-770 into a larger Phase 2b clinical trial.

In 2006, we completed three Phase 1 clinical trials of VX-770 in 63 individuals, including healthy volunteers and patients with CF. Healthy volunteers in the first Phase 1 clinical trial received escalating



doses of VX-770 for treatment durations of up to 14 days, and patients with CF received single doses of VX-770. In the multi-dose arms of the first Phase 1 clinical trial, a rash was observed in some healthy volunteers. The achieved blood levels of VX-770 and the observed tolerability in the Phase 1 clinical trials of VX-770 supported our decision to continue development and conduct the Phase 2a clinical trials of VX-770.

**VX-809 (investigational oral CFTR corrector compound for the treatment of cystic fibrosis)**

VX-809 is a small molecule drug candidate designed to increase the concentration of CFTR proteins on the surface of cells lining the airways of patients with CF with trafficking defects, the defect in most patients with CF. VX-809 may result in an increase in chloride transport across the cell surface in patients with defective CFTR proteins. In 2007, we filed an IND application for VX-809 with the FDA.

In the fourth quarter of 2007, we initiated a Phase 1a clinical trial of VX-809 that will evaluate single and multiple doses of VX-809 in healthy volunteers. Depending on results from the Phase 1a trial, we expect to initiate a subsequent single dose Phase 1b trial, in patients with CF, in mid-2008.

*Cancer*

**MK-0457 (VX-680) and VX-689; Aurora kinase inhibition for the treatment of cancer (Merck & Co., Inc.)**

We are collaborating with Merck in the area of Aurora kinase inhibitors, including MK-0457 (VX-680) and 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. MK-0457 (VX-680) is a potent inhibitor of Aurora kinases and of flt-3 kinase, a receptor tyrosine kinase that is known to be inappropriately activated in several different types of leukemia. We believe that inhibitors of Aurora kinases may be useful as highly targeted treatments for a range of oncology indications.

As part of the collaboration, we conducted a joint research program with Merck to characterize MK-0457 (VX-680) activity across a broad range of cancer types and to identify additional drug candidates targeting the Aurora kinases. Merck holds worldwide development and commercialization rights to MK-0457 (VX-680), VX-689 and certain additional compounds identified during the research program.

*MK-0457 (VX-680)*

In December 2006, Merck initiated a pivotal Phase 2 clinical trial of MK-0457 (VX-680) in patients with treatment-resistant chronic myelogenous leukemia, or CML, and Philadelphia chromosome-positive acute lymphocytic leukemia, or Ph+ ALL, containing the T315I BCR-ABL mutation, based on encouraging results from a Phase 1 clinical trial of MK-0457 (VX-680). This Phase 2 clinical trial was designed to enroll approximately 270 patients. In the trial, MK-0457 (VX-680) is being given as a five-day intravenous infusion every two-to-three weeks to evaluate both safety and efficacy. In November 2007, Merck suspended enrollment in the clinical trial of MK-0457 (VX-680), pending a full analysis of all available safety and efficacy data on the compound. The decision was based on preliminary safety data, in which a clinical safety finding of QTc prolongation was observed in one patient. Patients enrolled in the clinical trials of MK-0457 (VX-680) may continue to be treated with MK-0457 (VX-680) with additional monitoring for QTc prolongation. The safety and efficacy analysis is ongoing.

*VX-689*

Merck also is evaluating VX-689 an Aurora kinase inhibitor, for the treatment of cancer.

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

Our collaborator Avalon Pharmaceuticals is developing 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 hematological 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) also significantly prolonged survival in a model of aggressive mouse leukemia. In a single-dose, dose-escalation Phase 1 clinical trial of AVN-944 (VX-944) in healthy volunteers, data indicated that AVN-944 (VX-944) was orally bioavailable.

In July 2007, Avalon Pharmaceuticals initiated a Phase 2 clinical trial in patients with pancreatic cancer. Avalon announced that the clinical trial is expected to be conducted in two parts, both using an open-label, non-controlled design. Eligible patients include adult patients with advanced newly-diagnosed pancreatic cancer. The first part of the clinical trial is a dose-escalation clinical trial with a primary objective to determine the maximum tolerated dose or effective biologic dose of AVN-944 (VX-944) in combination with gemcitabine. Avalon expects that between 15 and 20 patients will be enrolled in the first part of the clinical trial. The second part of this Phase 2 clinical trial is designed to study the efficacy and safety of the AVN-944 (VX-944) in combination with gemcitabine and is expected to enroll approximately 110-120 patients.

In December 2007, Avalon announced preliminary results from a Phase 1 clinical trial of AVN-944 (VX-944), which Avalon had initiated in the United States in January 2006. Avalon stated that AVN-944 (VX-944) was well-tolerated, with drug exposure increasing with higher dose levels. In addition, Avalon stated that biomarkers showed a dose-dependent increase in activity including binding to the target enzyme IMPDH, depletion of GTP pools in blast cells, and gene expression markers correlating to cell cycle blocks, GTP level and apoptosis.

Avalon holds worldwide development and commercialization rights to AVN-944 (VX-944) in oncology.

***Immune-Mediated Inflammatory Disease***

**VX-702 (oral p38 MAP kinase inhibitor for the treatment of rheumatoid arthritis and other inflammatory diseases)**

VX-702 is our oral p38 mitogen-activated protein, or MAP, kinase inhibitor. In the third quarter of 2007, we completed two clinical trials of VX-702. VX-702 was evaluated in a Phase 2 clinical trial of approximately 130 patients with moderate to severe rheumatoid arthritis. The trial, which took place in Central and Eastern Europe, tested VX-702 as a once-daily medicine in combination with methotrexate for 3 months. The goals of the clinical trial were to evaluate safety, as well as the effect of the combination on clinical signs and symptoms of the disease. VX-702 also was evaluated in a Thorough QTc study. We believe that data from both clinical trials support continued development of VX-702. We hold worldwide development and commercial rights to VX-702. We plan to seek a collaborator to further develop VX-702.

**VX-509 (oral JAK3 inhibitor for the treatment of immune-mediated inflammatory diseases)**

We believe that janus kinase 3, or JAK3, is a promising target for the design of immunosuppressant drugs. VX-509 is one of the novel oral JAK3 inhibitors that we are evaluating in preclinical testing. Based on *in vitro* data, VX-509 appears to be a potent and selective inhibitor of JAK3. We believe that VX-509 has the potential to be used in multiple immune-mediated inflammatory

diseases. We hold worldwide development and commercial rights to VX-509. We expect to begin clinical development of VX-509 in mid-2008.

### ***Bacterial Infection***

#### **VX-883 (gyrase inhibition for the treatment of bacterial infection)**

VX-883 is a novel, Vertex-discovered dual-mechanism investigational antibiotic currently in preclinical development that is one of a class of compounds, including VX-883 and VX-692, that we are investigating that targets both DNA gyrase and topoisomerase IV. DNA gyrase and topoisomerase IV are enzymes that are essential to bacteria during the replication process. DNA gyrase and topoisomerase IV inhibitors already on the market have proven to be potent, broad-spectrum antibiotics and are used to treat a variety of common Gram-positive and Gram-negative bacterial infections in various treatment settings. While existing gyrase and topoisomerase IV inhibitors work by interacting with the GyrA and ParC subunits of DNA gyrase and topoisomerase IV, VX-883 and related compounds that we are investigating target the GyrB and ParE subunits. VX-883 is active, *in vitro*, against Gram-positive and Gram-negative bacterial pathogens prevalent in both community and hospital settings, including certain pathogens that are less susceptible to other classes of antibiotics, such as agents targeting the other subunits of gyrase and topoisomerase IV. Accordingly, we believe that VX-883 and related compounds that we are investigating in preclinical studies may be useful in treating infections caused by drug resistant bacteria, including methicillin-resistant *Staphylococcus aureus*, commonly referred to as MRSA, a major and growing problem with currently marketed antibiotics.

### **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 and leadership 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; immune-mediated inflammatory diseases, or IMID; 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 eventually to build commercial franchises in these therapeutic areas. We selected the therapeutic areas of focus 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 transforming medicines consistent with our core purpose. Within each therapeutic area, we intend to specialize in specific indications.

Our past drug discovery efforts have produced a variety of drug candidates that 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 that are advancing from research and may enter clinical development in 2008.

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 these scientific advisory boards is comprised of individuals with experience in the relevant area who provide input through Peter Mueller, our executive vice president, drug innovation and realization, and chief scientific officer and/or Mark Murcko, our vice president and chief technology officer. Eugene Cordes, one of our directors, is a member of one of these scientific advisory boards. The members of our scientific advisory board 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 labs, foundations and other organizations in order to advance research in the areas of infectious diseases, immune-mediated inflammatory diseases, cancer; and neurological diseases and disorders as well as in areas of basic technological enablement. We are seeking to establish relationships with organizations and to organize 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. In 2007, among other arrangements, we established a relationship with Harvard University's Office of Technology Development under which Harvard University investigators will be able to propose research projects in these areas, and we will selectively provide funding in areas of interest to us.

## **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. At present, we have the following major corporate collaborations.

### ***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, we could receive contingent milestone payments, which could total up to \$380.0 million if telaprevir is successfully developed, approved and launched. As of December 31, 2007, we had received \$45.0 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 a 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 will establish with Tibotec, also a Johnson & Johnson company, a global health initiative to increase the prevention, diagnosis, treatment and cure of HCV infection, to be principally directed toward developing countries.

***Cystic Fibrosis Foundation Therapeutics Incorporated***

In May 2004, we entered into a collaboration agreement with CFFT providing funding for our late-stage cystic fibrosis drug discovery efforts. The agreement subsequently was amended to extend the term of the drug discovery effort to March 31, 2008 and to include additional development stage funding for specified VX-770 development activities through the end of 2007. Under the amended agreement, CFFT paid us \$23.5 million through December 31, 2007 and will pay us up to \$8.9 million in 2008. 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, including VX-770 and VX-809, discovered in the course of the research collaboration, and we will pay a royalty to CFFT on the net sales of any drugs discovered in the collaboration. CFFT also made a \$1.5 million milestone payment to us upon advancement of the first compound from the research program into clinical development.

***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). GlaxoSmithKline pays 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. Currently, there are no drug candidates being developed, and we do not anticipate any additional milestone payments, under this collaboration.

GlaxoSmithKline has the right to terminate its agreement with us without cause upon 12 months' notice. Termination of the agreement by GlaxoSmithKline will relieve it of its obligation to make further commercialization and development milestone and royalty payments, and will end any license granted by us to GlaxoSmithKline under the agreement. In June 1996, we and GlaxoSmithKline obtained a worldwide, non-exclusive license under certain G.D. Searle & Co. (now owned by Pharmacia/Pfizer) patents in the area of HIV protease inhibition. We pay Searle a royalty based on net sales of Lexiva/Telzir.

***Merck & Co., Inc.***

In June 2004, we entered into a global collaboration with Merck to develop and commercialize MK-0457 (VX-680), our lead Aurora kinase inhibitor, for the treatment of cancer, and to conduct research targeting the discovery of an additional Aurora kinase inhibitory compound or compounds to follow MK-0457 (VX-680). Merck made an up-front license payment of \$20 million in June 2004, and provided research funding of \$15.8 million between June 2004 and September 2006. In addition, the agreement provides for as much as \$350 million in milestone payments, including up to \$130 million for the successful development of MK-0457 (VX-680) in the first oncology indication and additional milestone payments for development of MK-0457 (VX-680) and follow-on compounds in subsequent major oncology indications. In November 2007, Merck suspended enrollment in clinical trials of MK-0457 (VX-680), pending a full analysis of all efficacy and safety data for MK-0457 (VX-680). Merck is evaluating VX-689, an additional Aurora kinase inhibitor being developed under the collaboration.

Under the agreement, Merck has made two milestone payments totaling \$19.5 million in 2005, three milestone payments totaling \$36.3 million in 2006 and one milestone payment of \$9.0 million in 2007. Under the agreement, Merck is responsible for worldwide clinical development and commercialization of MK-0457 (VX-680) and follow-on candidates (including VX-689) 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 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.

***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 are entitled to receive up to \$33 million in payments from Mitsubishi Tanabe through 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. Further cost sharing beyond Phase 2 clinical development is subject to negotiation between Mitsubishi Tanabe and us. 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. In 2006, Mitsubishi Tanabe conducted a Phase 1 clinical trial of telaprevir in the Far East.

***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 oncology 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.

**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.

***Patents and Pending Patent Applications***

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 advanced research, development and commercial programs. Our intellectual property holdings include but are not limited to:

United States and foreign patents and pending foreign patent applications covering telaprevir, VX-500, VX-813 and many other HCV protease inhibitors.

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United States patents and pending applications covering assays useful to evaluate potential inhibitors of HCV protease, including patents and applications covering the X-ray crystal structures of HCV protease and the use of those structures to develop 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 patent applications covering bacterial gyrase inhibitors including VX-883 and VX-692 and the use of these compounds for the treatment of bacterial infections.

United States and foreign patents that cover classes of chemical compounds, pharmaceutical formulations and uses of the same for treating HIV infection and AIDS. These patents include specific coverage for fosamprenavir and its pharmaceutical formulations, methods of manufacture and methods to treat HIV infection. In addition we have a non-exclusive, worldwide license under certain patent applications claiming HIV protease inhibitors. We have an issued patent in the United States and foreign patents and foreign applications covering amprenavir and related compounds.

United States and foreign patents and pending United States and foreign patent applications covering inhibitors of multiple kinase proteins, including VX-509.

United States and foreign patents and pending foreign patent applications covering classes of chemical compounds, pharmaceutical compositions containing such compounds, and methods of using those compounds to treat or prevent IMPDH-mediated diseases, including HCV infection. These patents cover AVN-944 (VX-944), its combination with certain other therapeutic agents and their uses for IMPDH-mediated diseases.

United States and foreign patents and foreign patent applications covering a class of chemical compounds that includes VX-702 as well as compositions including VX-702 and similar compounds and the use of those compounds to treat p38 MAP kinase related disorders.

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. For example, we have entered into a non-exclusive license arrangement with Chiron Corporation for rights to technology in the HCV area that may provide Chiron with certain developmental milestone payments and royalty payments based on future sales of telaprevir, if approved.

### **MANUFACTURING**

As we advance our proprietary drug candidates through clinical development toward commercialization, we will be required to continue to build our manufacturing, logistics, supply chain and quality assurance resources. 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 those drugs, if they are approved for sale.

We will be responsible for supplying telaprevir for sale in North America if we are successful in obtaining marketing approval. In 2007, we expended significant efforts to prepare for the commercial supply and marketing of telaprevir, in support of a timely and effective commercial product launch in subsequent years. Establishing the commercial supply chain for telaprevir is a multi-step international endeavor involving the purchase of several raw materials, the application of certain manufacturing processes requiring significant lead times, the conversion of active pharmaceutical ingredient to tablet form and the packaging of tablets for distribution. We expect to source raw materials, drug substance and drug product, including finished packaging, from third parties located in China, the European

Union, Japan and the United States, and we currently are establishing and expanding those third-party relationships. Establishing and managing this global supply chain requires a significant financial commitment, experienced personnel and the creation or expansion of numerous third-party contractual relationships. 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 have successfully completed the technical development work for the Phase 3 and commercial formulation of telaprevir. While we believe that there are multiple third parties that are capable of providing the materials and services we need in order to manufacture and distribute telaprevir, if it is approved for sale, some of these services are in high demand and capacity is constrained. As a result there can be no assurance that we will be able to establish or maintain these relationships on commercially reasonable terms.

We believe that entering into arrangements with multiple third-party manufacturers will reduce our risk of supply chain disruption by limiting our reliance on any one manufacturer. In addition, 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 the active pharmaceutical ingredient for us. There is no assurance, however, that we will be able to establish second sources for each stage of manufacturing of telaprevir or that any second source will be able to produce sufficient quantities of a particular material in the required timeframe to avoid a supply chain disruption if there is a problem with one of our suppliers.

We are focusing resources on the development of systems and processes to track, monitor and oversee our third-party manufacturers' activities. We evaluate the performance of our third-party manufacturers and confirm their continuing capabilities to meet our needs efficiently and economically. Third-party 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. Any failure by any of our third-party manufacturers to pass any inspection could adversely affect our ability to launch telaprevir in a timely manner, if it is approved for sale, or adversely affect our ability to continue to distribute telaprevir 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. We will need to increase our quality assurance resources in connection with the commercial launch of any drug product.

The production of our drug candidates is based in part on technology that we believe to be proprietary. Where applicable, we license this technology to our third-party manufacturers to enable them to manufacture the various forms of our drug candidates for us. However, in the course of their services, a third-party manufacturer may develop process technology related to the manufacture of our drug candidates that the manufacturer owns, either independently or jointly with us. This might increase our reliance on that manufacturer or require us to obtain a license from that manufacturer if we wish to have our drug candidates manufactured by other suppliers utilizing the same process.

## COMPETITION

We are engaged in fields 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 indications as those 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 over the products of our competitors 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 position 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, will 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 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, and 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 that are more effective and/or are associated with a less difficult treatment regimen are developed. In addition, we believe that there are a significant number of patients with HCV who have not achieved SVR with previous interferon-based treatments. As a result, we believe that the first company able to successfully develop and obtain marketing approval for a new treatment for HCV infection with these characteristics may have a significant competitive advantage over later approved therapies for HCV infection. This competitive advantage may include the ability to provide treatment to these patients who have been waiting for alternatives to the current standard of care before any competitive products enter the marketplace, and pricing advantages. We are aware of a number of companies that are developing new treatments for HCV infection, including protease inhibitors and polymerase inhibitors. While we believe that telaprevir has advanced further along the clinical development pathway than any other new and potentially competitive oral HCV therapy, it is possible that one or more competitive therapies could be approved prior to or shortly after we receive approval, if we are successful in obtaining approval. Many of our competitor's drug candidates appear to be on a development timeline that would make them more competitive with the possible timeline for development of our second generation HCV protease inhibitors.

We are aware of numerous companies that are developing HCV protease inhibitors:

Schering-Plough Corporation is developing boceprevir, an HCV protease inhibitor that received "Fast Track" designation from the FDA in January 2006. In October 2007, Schering-Plough reported interim results from an ongoing Phase 2 clinical trial evaluating boceprevir in treatment-naïve patients. In October 2007, Schering-Plough also reported top-line results from a completed Phase 2 clinical trial.

Medivir AB and Tibotec, in collaboration, are developing TMC 435350, an HCV protease inhibitor. Medivir has stated that Tibotec initiated the first Phase 2a clinical trial of TMC 435350 in November 2007.

InterMune, Inc. and Roche, in collaboration, are developing ITMN-191, an HCV protease inhibitor. InterMune has stated that it is conducting a Phase 1b clinical trial of ITMN-191, designed to assess the effect on viral kinetics, viral resistance, pharmacokinetics, safety and tolerability of multiple ascending doses of ITMN-191 given as a monotherapy both two and three times per day.

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In addition to the protease inhibitor drug candidates, there 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. Several competitors discontinued development of HCV polymerase inhibitors during 2007, including Idenix Pharmaceuticals, and ViroPharma Incorporated. However, we are aware of several continuing polymerase inhibitor programs including:

Roche is developing R1626, an HCV polymerase inhibitor, which is in Phase 2b clinical trials. In November 2007, Roche reported results from a Phase 2a study of R1626.

Pharmasset, Inc. is developing R7128, an HCV polymerase inhibitor, in collaboration with Roche. In January 2008, Pharmasset reported preliminary results from a Phase 1 clinical trial.

We are aware of numerous other compounds targeting HCV 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 that we may explore the potential for other combination therapies, and in particular, a combination where all the necessary drugs could be administered orally.

### *CF*

Several companies are engaged in the process of developing treatments for CF. For example, PTC Therapeutics, Inc. has ongoing Phase 2 clinical trials for PTC124, a drug candidate that targets nonsense genetic mutations that can cause cystic fibrosis in some populations. Altus Pharmaceuticals, Inc. is conducting a Phase 3 clinical trial of ALTU-135, an orally-delivered enzyme replacement therapy for the treatment of pancreatic insufficiency, a condition that affects many patients with CF. Inspire Pharmaceuticals Inc. currently is conducting Phase 3 clinical trials of denufosal tetrasodium, an inhaled molecule is designed to stimulate chloride and liquid secretions in the airway of patients with CF.

### *HIV*

The United States market for HIV protease inhibitors is highly competitive, with a number of protease inhibitors currently on the market. The two leading HIV protease inhibitors in the United States are Bristol-Myers Squibb Company's Reyataz® and Abbott Laboratories' Kaletra®. In 2007, Lexiva was the third largest (measured in terms of sales revenue) HIV protease inhibitor in the United States, excluding ritonavir, and it currently holds an approximate 10% share of the United States HIV protease inhibitor market, based on total prescriptions, also excluding ritonavir.

In the field of HIV protease inhibition, Abbott Laboratories, Bristol-Myers Squibb, Gilead Sciences, Inc., Johnson & Johnson and Pfizer Inc., among others, have other HIV protease inhibitor drug candidates in various stages of development. In addition to the currently marketed protease inhibitors, each of these compounds and others that may be in research or development may eventually compete with Lexiva/Telzir.

## **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 IND 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 animal safety and disease model studies are submitted to the FDA as a part of the IND submission, which is submitted 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 safety on a preliminary basis, dosage tolerance, absorption, metabolism, excretion, clinical pharmacology and, if possible, for early information on effectiveness. 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 determine the overall risk-benefit ratio of the drug candidate and to provide an adequate basis for proposed physician labeling. Each trial is conducted in accordance with standards set forth in protocols that detail the 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 as part of the IND submission. Further, each clinical trial must be evaluated by an independent Institutional Review Board, or IRB, at each institution at which the trial will be conducted. The IRBs will consider, among other things, ethical factors, the safety of human subjects and the possible liability of the institution.

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. 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 considerable data collection, verification, analysis and expense, and there can be no assurance that approval will be granted on a timely basis, if at all. The FDA reviews all NDAs submitted 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 establishments, 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 components 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:

<b>Phase:</b>	<b>Objective:</b>	<b>Estimated Duration:</b>
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	Evaluate safety in humans; study how the drug candidate works, metabolizes and interacts with other drugs	1 to 2 years
Phase 2	Establish 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 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, under certain conditions, some of our patents 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 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, a supplemental NDA may be required to be submitted to the FDA.

*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 have begun 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.

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 approval by one or more other, or concerned, member states of an assessment of an application performed by one member state, known as the reference member state. 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.

*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, or causing to be presented, for payment to third-party payors, including Medicare and Medicaid, claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services.

In addition to the statutes and regulations described above, we are also 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, 2007, we had 1,150 employees (1,132 full-time, 18 part-time), including 847 in research and development and 303 in general and administrative functions. The number of our full-time employees increased by 20% during 2007, from 945 on December 31, 2006. We expect to further increase our headcount in 2008 as we invest in expanding our drug development and commercialization capabilities. Of our employees, 90 were located in Europe, 166 were located at our facility in San Diego, California, and 894 were based at our Cambridge, Massachusetts headquarters. Our scientific staff members have diversified experience and expertise in molecular and cell biology, biochemistry, animal pharmacology, 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 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, Iowa City, 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:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Joshua S. Boger, Ph.D.	56	President, Chief Executive Officer and Director
John J. Alam, M.D.	46	Executive Vice President, Medicines Development, and Chief Medical Officer
Kurt C. Graves	40	Executive Vice President, Chief Commercial Officer and Head, Strategic Development
Peter Mueller, Ph.D.	51	Executive Vice President, Drug Innovation and Realization, and Chief Scientific Officer
Ian F. Smith, C.P.A., A.C.A.	42	Executive Vice President and Chief Financial Officer
Kenneth S. Boger, M.B.A., J.D.	61	Senior Vice President and General Counsel
Richard C. Garrison	59	Senior Vice President and Catalyst
Lisa Kelly-Crowell	41	Senior Vice President, Human Resources
Amit K. Sachdev, J.D.	40	Senior Vice President, Public Policy and Government Affairs
Johanna Messina Power, C.P.A.	35	Vice President and Corporate Controller
Charles A. Sanders, M.D.	76	Chairman of the Board
Eric K. Brandt	45	Director
Roger W. Brimblecombe, Ph.D., D.Sc.	78	Director
Stuart J.M. Collinson, Ph.D.	48	Director
Eugene H. Cordes, Ph.D.	71	Director
Matthew W. Emmens	56	Director
Bruce I. Sachs	48	Director
Elaine S. Ullian	60	Director

Dr. Joshua Boger is the founder of Vertex. He has been our Chief Executive Officer since 1992. He was our Chairman of the Board from 1997 until May 2006. He was our President from our inception in 1989 until December 2000, and was again appointed our President in 2005. 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 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.

Dr. Alam is our Executive Vice President, Medicines Development, and Chief Medical Officer, a position he has held since February 2006. From January 2001 to February 2006, he served as our Senior Vice President of Drug Evaluation and Approval. From October 1997 to January 2001, he was our Vice President of Clinical Development. From 1991 to 1997, Dr. Alam held a variety of positions with Biogen, Inc., including Director of Medical Research and Program Executive (beta interferon) for Avonex. Prior to joining Biogen, Dr. Alam was a Research Fellow at the Dana Farber Cancer Institute and completed an internal medicine residency at The Brigham and Women's Hospital in Boston. Dr. Alam holds an M.D. from Northwestern University Medical School and an S.B. in chemical engineering from the Massachusetts Institute of Technology.



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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 from prestigious institutions, including 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. 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 Board of Directors of Acorda Therapeutics, Inc., Epix 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 Kirkpatrick & Lockhart Preston Gates Ellis LLP, 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 President and 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 the Chairman and CEO of Ingalls, Quinn & Johnson, one of New England's largest advertising agencies, for 18 years. Mr. Garrison holds a B.A. in English from Princeton University.

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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, Public Policy and Government Affairs, 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 U.S. Food and Drug Administration (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.

Ms. Messina Power is our Vice President and Corporate Controller, a position she has held since February, 2006. Ms. Messina Power joined us in 1999 and served as our Assistant Corporate Controller from 1999 to 2000 and as our Corporate Controller from 2000 to February, 2006. Prior to joining us, Ms. Messina Power was employed as an accountant by PricewaterhouseCoopers LLP, an accounting firm, from 1995 to 1999. She holds a B.S. in accounting from Boston College, and is a Certified Public Accountant.

Dr. Sanders has been a member of our Board of Directors since 1996, has served as our lead outside director since 2003 and has served as our Chairman since May 2006. 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., Fisher Scientific International and Biopure Corporation. He is currently a director of Biodel Inc., Cephalon Corporation, 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.

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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 and a director of Tissue Science Laboratories plc (listed on the AIM market in the United Kingdom). 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. Emmens has been a member of our Board of Directors since 2004. Mr. Emmens is the Chief Executive Officer, Chairman of the Executive Committee and a member of the Board of Directors 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 also currently serves as a director of Incyte Corporation. Mr. Emmens received a B.S. degree in business management from Farleigh Dickinson 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 CEO 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 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 \$391.3 million, \$206.9 million and \$203.4 million during 2007, 2006 and 2005, respectively, and expect to incur a significant operating loss in 2008. We believe that operating losses will continue beyond 2008, because we are planning to make significant investments in research and development and in building commercial supply of telaprevir to prepare for the potential launch of telaprevir, and because we will incur significant selling, general and administrative expenses in the course of researching, developing and commercializing our drug candidates, particularly telaprevir. We are investing significant research and development resources across a relatively broad array of therapeutic areas, due in part to the high risks associated with the biotechnology and pharmaceutical business and the relatively high potential for failure of any specific effort. This diversification strategy requires more significant financial resources than would be required if we pursued a more limited approach or focused exclusively on telaprevir. In particular, in 2008 we expect to invest significant resources in order to advance the development of VX-770, VX-809, VX-500, VX-813 and VX-509, and to start clinical trials of one or more additional compounds that are currently emerging from our research activities. 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 at all.

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

We expect to incur substantial research and development and related supporting 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 are making significant capital investments in building our drug product supply chain and creating pre-launch inventory and may need to make additional significant capital investments for one or more of our other drug candidates. We anticipate that we will finance these substantial cash needs with:

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 new collaborative agreements or from the sale of existing assets, such as royalty streams from drugs and drug candidates being developed and commercialized by third parties;

existing cash reserves, together with interest earned on those reserves; or

future product sales to the extent that we market drugs directly.

While we believe that our current cash, cash equivalents and marketable securities, together with amounts we expect to receive from our collaborators under existing contractual agreements, would be sufficient to fund our operations through 2008, we will need to raise additional capital in 2008 through public offerings or private placements of our debt or equity securities, agreements with third-parties with respect to certain of our assets or through other methods of financing in order to continue our operations through 2009. Any such capital transactions may or may not be similar to transactions in which we have engaged 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. Additional financing may not be available on acceptable terms, if at all.

**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, WE COULD BE REQUIRED TO SEEK ADDITIONAL FINANCING AND OUR BUSINESS WILL BE MATERIALLY HARMED.**

We are investing a significant portion of our time, personnel and financial resources in the development of telaprevir, and we expect to commence a Phase 3 clinical trial of telaprevir in March 2008. The clinical development and commercial success of telaprevir will depend on several factors, including the following:

successful completion and favorable outcomes of clinical trials;

ongoing discussions with the FDA and comparable foreign authorities regarding the scope and design of our clinical trials, the quality of our manufacturing process for telaprevir and our clinical trial results;

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;

our ability to conduct clinical trials with respect to telaprevir in a timely manner to support a potential application for marketing approval;

establishing and maintaining commercial manufacturing arrangements for telaprevir with third-party manufacturers that are subject to extensive regulation by the FDA;

launching commercial sales of telaprevir by us and our collaborators;

the efficacy and other characteristics of telaprevir relative to existing and future treatments for HCV; and

our ability to increase awareness of the benefits of early treatment for HCV if telaprevir is approved;

acceptance of telaprevir, if approved, 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. Even if we obtain marketing approval and successfully commercialized telaprevir, we are investing significant amounts of cash in the development and commercialization process, and any significant delay in realizing a return on the investment would require us to engage in additional financing activities to recoup that investment, which may not be available on satisfactory terms, if at all. 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, do not meet the expectations of investors or public market analysts, the market price of our common stock would likely decline.

**MANY OF OUR DRUG CANDIDATES ARE STILL IN THE EARLY STAGES OF DEVELOPMENT, AND 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 develop a successful franchise 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 lengthy and 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 commercialized.

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 drug candidate. 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 early-stage development. 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 the PROVE 1 and PROVE 2 clinical trials of telaprevir. Interim data is subject to change as final data are confirmed, and there can be no assurances that interim data will be confirmed upon the analysis of final data.

**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 unexpected limitations on the indicated uses for which we may market the drug. These limitations may 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.

**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;

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. In November 2007, Merck suspended enrollment in clinical trials of MK-0457 (VX-680), pending a full analysis of all efficacy and safety data of MK-0457 (VX-680). Any such suspension could materially adversely impact 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.

**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, 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 GlaxoSmithKline, Wyeth, Pfizer, Roche, Amgen, Novartis, Johnson & Johnson and Schering-Plough 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 believe that the first company that is able to successfully develop and obtain marketing approval for a new treatment for chronic HCV infection with significant advantages over the current standard of care may have a significant competitive advantage over later-approved therapies for HCV infection. We are aware of a number of companies that are developing new treatments for HCV infection including protease inhibitor compounds like telaprevir, 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 could negatively impact telaprevir sales.

**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. Since drugs are more widely used by patients once approval has been obtained, 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 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. 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 ARE UNABLE TO ATTRACT AND RETAIN COLLABORATORS FOR THE DEVELOPMENT AND COMMERCIALIZATION OF OUR DRUGS AND DRUG CANDIDATES, WE MAY NOT BE ABLE TO 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, including MK-0457 (VX-680) and VX-689, 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. 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 oral MAP kinase inhibitor VX-702 for the treatment of rheumatoid arthritis and other inflammatory diseases. 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. In 2006 and 2007, we increased our investment in telaprevir to support our Phase 2b clinical development program and in 2008 we will be investing in our global registration program, including our Phase 3 clinical trial. 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 expect to incur significant costs in 2008 to manufacture registration batches and invest in telaprevir commercial supply. Our engagement in these resource-intensive activities could make it more difficult for us to maintain our portfolio focus, and 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 DISRUPTIONS OUTSIDE OF OUR CONTROL.**

We currently are relying 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.

We will be responsible for supplying telaprevir for sale in North America if we are successful in obtaining marketing approval. Establishing the commercial supply chain for telaprevir is a multi-step international endeavor involving the purchase of several raw materials, the application of certain manufacturing processes requiring significant lead times, the conversion of active pharmaceutical ingredient to tablet form and the packaging of tablets for distribution. We expect to source raw materials, drug substance and drug product, including finished packaging, from third parties located in China, the European Union, Japan and the United States, and we currently are establishing and expanding those third-party relationships. Establishing and providing quality assurance for this global supply chain requires a significant financial commitment, experienced personnel and the creation or expansion of numerous third-party contractual relationships. While we believe that there are multiple third parties that are capable of providing the materials and services that we need in order to manufacture and distribute telaprevir, if it is approved for sale, some of these services are in high demand and capacity is constrained. Because of the significant lead times involved in the manufacture and supply of telaprevir, we may have less flexibility to adjust our supply in response to changes in demand than if we had shorter lead times. There can be no assurance that we will be able to establish

and maintain this commercial supply chain on commercially reasonable terms in order to support a timely launch of telaprevir or at all.

We plan to identify and enter into commercial relationships with multiple third-party manufacturers in order to reduce the risk of supply chain disruption by limiting our reliance on any one manufacturer. In addition, 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 source for us. There is no assurance, however, that we will be able to establish second sources for each stage of manufacturing of telaprevir, or any other drug or drug candidate, or that any second source will be able to produce sufficient quantities in the required timeframe to avoid a supply chain disruption if there is a problem with one of our suppliers.

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 reevaluate 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, 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. Accordingly, our efforts to obtain regulatory approvals for and commercialize our drug candidates could be delayed.

**IF WE ARE UNABLE TO DEVELOP 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 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. GlaxoSmithKline currently markets Lexiva/Telzir. We will need to either develop marketing capabilities and an independent sales force or enter into arrangements with third parties to sell and market any of 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 direct sales force, which will require substantial efforts and significant management and financial resources. During 2008, we intend to commit significant personnel and financial resources to this effort, staging our commitments to the extent possible in consideration of the ongoing telaprevir development timeline. 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 intense 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 (Janssen worldwide except for North America and the Far East, and Mitsubishi Tanabe in the Far East), Aurora kinase inhibitors (Merck worldwide) and AVN-944 (VX-944) (Avalon worldwide). 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.

**WE DO NOT KNOW WHETHER LEXIVA/TELZIR WILL CONTINUE TO BE COMPETITIVE IN THE MARKET FOR HIV PROTEASE INHIBITORS.**

We currently receive royalties from net sales of Lexiva/Telzir under our collaboration with GlaxoSmithKline. Lexiva/Telzir's share of the worldwide protease inhibitor market may decrease due to competitive forces and market dynamics. Other HIV protease inhibitors including Bristol-Myers Squibbs' Reyataz® and Abbott Laboratories' Kaletra®, and a number of other products are on the market for the treatment of HIV infection and AIDS. Other drugs are still in development by our competitors, including Bristol-Myers Squibb, Boehringer Ingelheim Merck, and Johnson & Johnson, which may have better efficacy, fewer side effects, easier administration and/or lower costs than Lexiva/Telzir. Moreover, the growth in the worldwide market for HIV protease inhibitors has, to a certain extent, occurred as a result of early and aggressive treatment of HIV infection with a protease inhibitor-based regimen. Changes in treatment strategy, in which treatment is initiated later in the course of infection, or in which treatment is more often initiated with a regimen that does not include a protease inhibitor, may result in reduced use of HIV protease inhibitors. As a result, the total market for HIV protease inhibitors may decline, decreasing the sales potential of Lexiva/Telzir. Further, GlaxoSmithKline directs the marketing and sales efforts and the positioning of Lexiva/Telzir in the overall market, and we have little control over the direction or success of those efforts. GlaxoSmithKline has the right to terminate its agreement with us without cause upon twelve months' notice, and would have no obligation to pay further royalties to us upon any such termination.

**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 China, Japan and 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, 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 20% in 2007, and we expect to experience significant growth in 2008. 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 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 HIRE QUALIFIED EMPLOYEES WOULD NEGATIVELY IMPACT OUR BUSINESS AND FUTURE GROWTH.**

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 will need to attract and retain employees with experience in these fields. Our future success will depend in large part on the continued services of our key scientific and management personnel. 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.

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. A failure to retain, as well as hire, train and effectively integrate into our organization a sufficient number of qualified scientists, professionals and sales personnel 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.

**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. Physicians may elect not to recommend our drugs for a variety of reasons including:

the timing of the 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.

**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 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 the 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 February 8, 2008, our common stock traded between \$17.59 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; and

developments relating specifically to other companies and market conditions for pharmaceutical and biotechnology stocks or stocks in general.

**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 occupying approximately 120,000 square feet of the 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 portion 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.

**GOVERNMENT INVESTIGATIONS OR LITIGATION AGAINST OUR COLLABORATORS COULD ADVERSLY AFFECT OUR BUSINESS.**

The federal government, certain state governments and private payors are investigating and have begun to file actions against numerous pharmaceutical and biotechnology companies alleging that the reporting of prices for pharmaceutical products has resulted in a false and overstated Average Wholesale Price, or AWP, which in turn is alleged to have improperly inflated the reimbursement paid by Medicare beneficiaries, insurers, state Medicaid programs, medical plans and others to health care providers who prescribed and administered those products. Some payors are also alleging that pharmaceutical and biotechnology companies are not reporting their "best price" to the states under the Medicaid program. In addition, recent government litigation against pharmaceutical companies has focused on allegations of off-label promotion in connection with the filing of false claims for government reimbursement. In any AWP cases or other cases brought by the government where our collaborators or licensees are named as defendants with respect to any products licensed from us, the outcome of the case could have a material adverse effect on our financial results.

**SALES 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, 2007, we had approximately 132.9 million shares of common stock issued and outstanding. We also had outstanding options to purchase approximately 15.4 million shares of common stock with a weighted-average exercise price of \$28.70 per share. Outstanding options may be exercised if the market price of our common stock exceeds the applicable exercise price. We may issue additional common stock or restricted securities in the future as part of our financing activities and any such issuances may have a dilutive effect on existing shareholders.

***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 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 commence and/or be completed and the expected date by which SVR data and/or interim data will be available for our Phase 3 clinical trial of telaprevir, the planned clinical trial to evaluate 48-week telaprevir-based treatment regimens in approximately 400 patients, the PROVE 1, PROVE 2 and PROVE 3 clinical trials, the Phase 2b clinical trials of telaprevir being conducted by Tibotec, the Phase 2a and planned Phase 2b clinical trial of VX-770, the Phase 1a and planned Phase 1b clinical trial of VX-809, the Phase 1a clinical trial of VX-500, the planned clinical trial of VX-813, and the clinical trials being conducted by our collaborators of drug candidates for the treatment of cancer;

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 an NDA for telaprevir;

our expectations regarding the potential of our ongoing and planned clinical trials of telaprevir to meet the anticipated registration requirements with respect to the number and design of the clinical trials and the number of patients that will be part of the safety database of patients that have received 12 weeks of telaprevir;

the design of our global clinical program for telaprevir and our ability to potentially register telaprevir across a range of genotypes and patient populations;

our expectations regarding the future market demand and medical need for telaprevir and our other drug candidates;

our ability to retain greater development control of, and commercial rights to, drug candidates by funding a greater portion of our research programs;

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 capitalize on the advances in our telaprevir clinical program by building our drug development, supply chain management and commercialization organizations in order to prepare for the potential commercial launch of telaprevir and to support the development of our other drug candidates;

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our business strategy, including: our plan to invest in our development of telaprevir in order to maintain the time-to-market advantage we believe we have in relation to drug candidates being developed by our competitors; our ability to establish a leadership position with respect to treatment of HCV infection; and our ability to expand the value of our portfolio of drug candidates;

the focus of our drug development efforts;

the establishment, development and maintenance of collaborative relationships;

our ability to use our research programs to identify and develop new drug candidates to address serious diseases and significant unmet medical needs;

our ability to increase our headcount and scale up our drug development and commercialization capabilities;

our estimates regarding obligations associated with a lease of a facility in Kendall Square, Cambridge, Massachusetts;

the potential for the acquisition of new and complementary technologies, resources and drugs or drug candidates; and

our liquidity.

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" in Item 1A of this Annual Report. These are factors that we think could cause our actual results to differ materially from expected results. Other factors 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 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 set forth under "Risk Factors" in Item 1A of this Annual Report on Form 10-K. 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, 2007 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 756,000 square feet of laboratory and office space in facilities located in Cambridge, Massachusetts, San Diego, California, Washington, DC and the United Kingdom. We believe our facilities are adequate for our current needs.

*Cambridge, Massachusetts*

We lease an aggregate of 648,000 square feet of space in eight facilities situated in close proximity to our corporate headquarters facility located at 130 Waverly Street in Cambridge, Massachusetts. In addition, we use approximately 120,000 square feet of space in our Kendall Square facility, which is located approximately 2.5 miles from our corporate headquarters. The leases for the buildings located in Cambridge, Massachusetts have expiration dates ranging from 2010 to 2018.

We lease approximately 100,000 square feet of laboratory and office space in our 130 Waverly Street corporate headquarters. The lease for this facility is divided into two portions, both of which expire in 2010. We have the option to extend the lease for this portion of the building up to two additional terms of five years, ending in 2020. For the other portion of the building, we have the option to extend the lease for one additional term of five years, ending in 2015. The lease for approximately 192,000 square feet of laboratory and office space at 200 Sidney Street, located adjacent to our corporate headquarters, expires in 2010, with an option to extend for up to two additional consecutive ten-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.

We plan continuing operations at our existing Massachusetts facilities at least through 2010, when the current lease terms for many of our facilities will expire. We currently are considering alternatives with respect to appropriate facilities for our operations beyond 2010, and may elect to extend our current leases, or to consolidate our Massachusetts operations into a single new facility or complex.

*San Diego, California*

We lease approximately 81,200 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.

**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.

**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, 2007.



## 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, 2006:	High	Low
First quarter	\$ 44.71	\$ 26.50
Second quarter	40.00	29.00
Third quarter	37.10	29.75
Fourth quarter	45.38	32.50
Year Ended December 31, 2007:		
First quarter	\$ 38.95	\$ 26.98
Second quarter	32.51	25.61
Third quarter	41.42	27.55
Fourth quarter	39.48	22.80

As of February 6, 2008, there were 1,534 holders of record of our common stock.

## Performance Graph

## CUMULATIVE TOTAL RETURN

Based on initial investment of \$100 on December 31, 2002  
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, 2007:

<b>Period</b>	<b>Total Number of Shares Purchased</b>	<b>Average Price Paid per Share</b>	<b>Total Number of Shares Purchased as part of publicly announced Plans or Programs</b>	<b>Maximum Number of Shares that may yet be purchased under publicly announced Plans or Programs</b>
Oct. 1, 2007 to Oct. 31, 2007	9,752	\$ 7.28		
Nov. 1, 2007 to Nov. 30, 2007	31,705	\$ 0.01		
Dec. 1, 2007 to Dec. 31, 2007	8,141	\$ 4.12		

The repurchases were made under the following two programs:

Under the terms of our 1996 Stock and Option Plan and 2006 Stock and Option Plan, 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.

With respect to certain outstanding grants of restricted stock that vested during such period, we repurchased shares of restricted stock from our employees. Under this program, we offered to repurchase from certain of our employees a number of shares of restricted stock with a value, based on the fair market value on the vesting date, equal to our minimum statutory income tax withholding obligation on account of the employees' newly vested shares. In the fourth quarter of 2007, we repurchased 3,222 shares under this program at an average price of \$32.39 per share. Shares repurchased under this program are not available for future awards under the 2006 Stock and Option 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, 2007 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.

	Year Ended December 31,				
	2007	2006	2005	2004	2003
(In thousands, except per share amounts)					
<b>Consolidated Statements of Operations Data:</b>					
Revenues:					
Royalties	\$ 47,973	\$ 41,208	\$ 32,829	\$ 17,322	\$ 9,002
Collaborative and other research and development revenues	151,039	175,148	128,061	85,395	60,139
<b>Total revenues</b>	<b>199,012</b>	<b>216,356</b>	<b>160,890</b>	<b>102,717</b>	<b>69,141</b>
Costs and expenses:					
Royalty payments	13,904	12,170	10,098	5,649	3,126
Research and development expenses	513,054	371,713	248,540	192,162	199,636
Sales, general and administrative expenses	84,727	57,860	43,990	42,139	39,082
Restructuring and other expense	7,119	3,651	8,134	17,574	91,824
<b>Total costs and expenses</b>	<b>618,804</b>	<b>445,394</b>	<b>310,762</b>	<b>257,524</b>	<b>333,668</b>
Loss from operations	(419,792)	(229,038)	(149,872)	(154,807)	(264,527)
Other income/(expense), net	28,513	15,069	(5,332)	(7,994)	(1,886)
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)	
<b>Loss from continuing operations before cumulative effect of a change in accounting principle</b>	<b>(391,279)</b>	<b>(207,937)</b>	<b>(203,417)</b>	<b>(166,247)</b>	<b>(266,413)</b>
Income from discontinued operations(5):					
Gain on sales of assets					70,339
Loss from discontinued operations					(693)
<b>Total income from discontinued operations</b>					<b>69,646</b>
<b>Loss before cumulative effect of change in accounting principle</b>	<b>\$ (391,279)</b>	<b>\$ (207,937)</b>	<b>\$ (203,417)</b>	<b>\$ (166,247)</b>	<b>\$ (196,767)</b>
Cumulative effect of a change in accounting principle SFAS 123(R)(6)					
		1,046			
<b>Net loss</b>	<b>\$ (391,279)</b>	<b>\$ (206,891)</b>	<b>\$ (203,417)</b>	<b>\$ (166,247)</b>	<b>\$ (196,767)</b>
	<b>\$ (3.03)</b>	<b>\$ (1.84)</b>	<b>\$ (2.28)</b>	<b>\$ (2.12)</b>	<b>\$ (2.56)</b>

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Year Ended December 31,

Basic and diluted loss per common share before cumulative effect of a change in accounting principle					
Basic and diluted cumulative effect of a change in accounting principle per common share.		0.01			
Basic and diluted net loss per common share	\$ (3.03)	\$ (1.83)	\$ (2.28)	\$ (2.12)	\$ (2.56)
Basic and diluted weighted-average number of common shares outstanding	128,986	113,221	89,241	78,571	77,004

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	December 31,				
	2007	2006	2005	2004	2003
	(In thousands)				
<b>Consolidated Balance Sheets Data:</b>					
Cash, cash equivalents and marketable securities	\$ 467,796	\$ 761,752	\$ 407,510	\$ 392,320	\$ 583,164
Other current assets	35,980	66,780	23,898	14,392	10,642
Restricted cash	30,258	30,258	41,482	49,847	26,061
Property and equipment, net	66,509	61,535	54,533	64,225	80,083
Other non-current assets	934	1,254	21,575	24,669	24,461
<b>Total assets</b>	<b>\$ 601,477</b>	<b>\$ 921,579</b>	<b>\$ 548,998</b>	<b>\$ 545,453</b>	<b>\$ 724,411</b>
Deferred revenues	\$ 126,745	\$ 150,184	\$ 32,300	\$ 66,086	\$ 59,517
Accrued restructuring and other expense	35,292	33,073	42,982	55,843	69,526
Other current liabilities	148,148	110,640	54,443	50,161	47,795
Collaborator development loan (due 2008)	19,997	19,997	19,997	19,997	32,460
Other long-term obligations				2,925	7,268
Convertible subordinated notes(2)(4)(7)		42,102	42,102	82,552	315,000
Convertible senior subordinated notes(2)(3)(4)(8)		59,648	117,998	232,448	
Stockholders' equity	271,295	505,935	239,176	35,441	192,845
<b>Total liabilities and stockholders' equity</b>	<b>\$ 601,477</b>	<b>\$ 921,579</b>	<b>\$ 548,998</b>	<b>\$ 545,453</b>	<b>\$ 724,411</b>

- (1) In 2006, we sold 817,749 shares of Altus Pharmaceuticals 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 accrued 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 incremental 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) We sold certain assets and liabilities of our Discovery Tools and Services business in two independent transactions in March and December 2003. The Statements of Operations data shown above give effect to the disposition of the assets sold, accounting for such assets as discontinued operations pursuant to Financial Accounting Standards Board Statement No. 144, "Accounting for the Impairment of Long-Lived Assets."

- (6) 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.
- (7) In 2007, we repaid the outstanding principal of \$42.1 million and accrued interest on the 2007 Notes.
- (8) 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.

**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, a life-threatening disease. We expect to begin a Phase 3 clinical trial of telaprevir in March 2008 to evaluate 24-week telaprevir-based treatment regimens in treatment-naïve patients with genotype 1 HCV. 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 identify promising drug candidates to address significant unmet medical needs. Using this drug discovery capability we have identified among other drug candidates: VX-770 and VX-809, two novel drug candidates targeting cystic fibrosis; VX-500 and VX-813, two second generation HCV protease inhibitors; and VX-509, a novel JAK3 inhibitor that targets immune-mediated inflammatory diseases. We have a number of other drug candidates in clinical trials or preclinical studies being developed either by us or in collaboration with other pharmaceutical companies, including drug candidates targeting cancer, IMID and pain and other neurological diseases and disorders. We are building our drug development, supply chain management and commercialization organizations to prepare for the potential commercial launch of telaprevir and to support the development of other drug candidates in our pipeline.

We are conducting a comprehensive global clinical development program for telaprevir in collaboration with Janssen and Mitsubishi Tanabe. This program is designed to support potential registration of telaprevir by us in North America and our collaborators in international markets for treatment-naïve and treatment-experienced patients across a range of HCV genotypes. In March 2008, we expect to begin a Phase 3 clinical trial that is designed to enroll 1,050 patients and evaluate 24-week telaprevir-based treatment regimens. In addition, in the third quarter of 2008 we expect to begin enrollment in a clinical trial to evaluate a 48-week telaprevir-based treatment regimen. This clinical trial is expected to enroll approximately 400 treatment-naïve patients with genotype 1 HCV. We have a number of ongoing telaprevir clinical trials, including the three Phase 2b PROVE clinical trials we are conducting and several other clinical trials being conducted by our collaborators.

We are conducting a Phase 2a clinical trial of VX-770 and Phase 1a clinical trials of VX-809 and VX-500. We expect to begin a Phase 1a clinical trial of VX-509, a JAK3 inhibitor in mid-2008. Our pipeline also includes several cancer drug candidates that are being developed by our collaborators, and fosamprenavir calcium, our HIV protease inhibitor, which is being marketed by our collaborator GlaxoSmithKline plc as Lexiva in the United States and Telzir in Europe.

Our net loss for 2007 was \$391.3 million, which included stock-based compensation expense of \$59.4 million and restructuring expense of \$7.1 million. Our cash, cash equivalents and marketable securities decreased by \$294.0 million during 2007 to \$467.8 million on December 31, 2007. We expect to incur substantial operating losses in the future. We will need significant additional capital in order to complete the development and commercialization of telaprevir and to continue the development of our other drug candidates.

*Business Focus*

We currently are focusing a high proportion of our financial and management resources on telaprevir. Prior to our development of telaprevir, we relied on pharmaceutical company collaborators to develop and market our drug candidates that advanced to late-stage clinical trials or commercialization. We are developing telaprevir ourselves in North America, while we share development costs and responsibilities with Janssen in the development and commercialization of telaprevir in the rest of the world except the Far East. Although we believe that our development activities and the clinical trial data we have obtained to date have significantly reduced the risks



associated with ultimately obtaining marketing approval for telaprevir, completing development and successfully commercializing telaprevir will require a substantial additional financial investment over the next several years. In 2008 and the following years, we expect to invest significant resources to expand our capabilities in clinical development, regulatory affairs, quality control and commercial operations and to build and manage a commercial supply chain as we continue development and prepare for the potential commercial launch of telaprevir. We cannot be sure that our development of telaprevir will lead successfully to regulatory approval, or that obtaining regulatory approval will lead to commercial success.

In addition to telaprevir, we are investing significant research and development resources across a relatively broad array of therapeutic areas, due in part to the high risks associated with the biotechnology and pharmaceutical business and the relatively high potential for failure of any specific effort. This diversification strategy requires more significant financial resources than would be required if we pursued a more limited approach or focused exclusively on telaprevir. In particular, in 2008 we expect to invest significant resources in order to advance the development of VX-770, VX-809, VX-500, VX-813 and VX-509, and to start clinical trials of one or more additional compounds that are currently emerging from our research activities. We believe that we will be able to take advantage of the expansion of our drug development and commercialization investments for telaprevir as we progress these other opportunities.

In the past, we have sought collaborator funding for a significant portion of our research activities, which required that we grant to those collaborators exclusive rights to develop and commercialize drug candidates generated by that research. In recent years, we have funded a greater proportion of our research programs using internal funds rather than collaborator funds. We expect to continue this approach to the extent we are able to do so in light of our financial and personnel resources. We adopted this strategy with the aim of retaining greater development control of, and commercial rights with respect to, those proprietary drug candidates that may meet our strategic internal investment criteria as in effect from time to time.

#### *Discovery and Development Process*

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, 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. 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.

Given the uncertainties of the research and development process, it is not possible to predict with confidence which, if any, of our current research and development efforts will result in a marketable pharmaceutical product. We monitor the results of our discovery research and our nonclinical and clinical trials 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.

*Clinical Development*

Designing and coordinating large-scale clinical trials to determine the efficacy and safety of drug candidates and 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 a 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 or 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 non-clinical studies regarding the safety or efficacy of our drug candidates, and in particular telaprevir, are not favorable, we may be forced to delay or terminate the clinical development program, 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 the drug will be commercially successful in the pharmaceutical market.

Each of our programs requires a significant investment of financial and personnel resources, time and expertise by us and/or any program collaborators to realize its full clinical and commercial value. Development investment at this stage is subject to the considerable risk that any one or more of these drug candidates will not progress to product registration due to a wide range of adverse experimental outcomes. This could place our entire investment in the drug candidate at risk. While we attempt to stage our investments to mitigate these financial risks, drug discovery and development by its nature is a very risky undertaking and staging of investment is not always possible or desirable. We expect to continue to evaluate and prioritize investment in our clinical development programs based on the emergence of new clinical and nonclinical data in each program throughout 2008 and in subsequent years.

*Drug Candidates*

**HCV**

Telaprevir is an HCV protease inhibitor being investigated for the treatment of HCV infection. We are conducting a comprehensive global clinical development program with our collaborators that is designed to support potential registration of telaprevir for treatment-naïve and treatment-experienced patients across a range of HCV genotypes. In March 2008, we expect to begin a Phase 3 clinical trial that is designed to enroll 1,050 patients and evaluate 24-week telaprevir-based treatment regimens. In addition, in the third quarter of 2008 we expect to begin enrollment of approximately 400 treatment-naïve patients in a clinical trial to evaluate a 48-week telaprevir-based treatment regimen. We expect SVR data from all treatment arms of the Phase 3 clinical trial by the first half of 2010 and from the other clinical trial by mid-2010.

In addition, three major Phase 2b clinical trials of telaprevir are ongoing in our PROVE program: PROVE 1 in the United States and PROVE 2 in European Union, both in treatment-naïve patients, and PROVE 3 in both North America and the European Union, in patients who did not achieve SVR with previous pegylated interferon-based treatments. All three PROVE trials are fully enrolled, and patient dosing has been completed in PROVE 1 and PROVE 2. In addition, our collaborator Tibotec is conducting a Phase 2 clinical trial to evaluate twice-daily dosing of telaprevir, a Phase 2 clinical trial to evaluate telaprevir in patients with genotype 2 and genotype 3 HCV and a Phase 2 clinical trial to evaluate telaprevir in patients with genotype 4 HCV.

We face competition in the area of treatment of HCV infection based, among other things, on the safety and efficacy of our drug candidates and the timing and scope of regulatory approvals. We believe that the first company that is able to successfully develop and obtain marketing approval for a new orally available treatment for HCV infection that increases the portion of patients who achieve SVR and decreases the duration of treatment may have a significant competitive advantage over later

approved therapies for HCV infection. We believe that telaprevir has advanced further along the clinical development pathway than any other new and potentially competing oral HCV therapy. SVR data from the trials we expect to enroll in 2008 will not be available until approximately 18 months after the last patient is enrolled in the trial. We will try to dose and complete the analysis of the data from our planned clinical trials as rapidly as possible, in order to maintain the time-to-market advantage we believe that we have in relation to drug candidates being developed by our competitors. We also are making significant progress in completing manufacturing process and procedures, and accumulating product inventory necessary for a successful product launch.

We also have initiated a Phase 1a clinical trial of VX-500, a second-generation oral HCV protease inhibitor, and expect to start clinical trials of VX-813 in 2008.

### **Cystic Fibrosis**

We are conducting clinical trials of two drug candidates for the treatment of patients with CF:

VX-770, an investigational potentiator compound designed to enhance the activity of CFTR proteins in patients with gating defects, which we are evaluating in a Phase 2a clinical trial; and

VX-809, an investigational corrector compound designed to increase the concentration of CFTR proteins on the cell surface in patients with trafficking defects, which we are evaluating in a Phase 1a clinical trial.

### **Immune-Mediated Inflammatory Disease**

VX-509 is one of the novel oral JAK3 inhibitors that we are evaluating in preclinical testing. We believe that VX-509 has the potential to be used in multiple immune-mediated inflammatory disease indications. We expect to begin a Phase 1a clinical trial of VX-509 in mid-2008.

### *Manufacturing and Commercialization Strategy*

We will be responsible for supplying and commercializing telaprevir for sale in North America if we are successful in obtaining marketing approval. In 2007, we made significant progress in preparing for the commercial supply and marketing of telaprevir in support of a timely and effective commercial product launch in subsequent years, if we are successful in obtaining regulatory marketing approval. Establishing the commercial supply chain for telaprevir is a multi-step international endeavor involving the purchase of several raw materials, the application of certain manufacturing processes requiring significant lead times to the manufacture of the active pharmaceutical ingredient, the conversion of the active pharmaceutical ingredient to tablet form and the packaging of tablets for distribution. We expect to source raw materials, drug substance and drug product, including finished packaging, from third-parties located in China, the European Union, Japan and the United States, and we have established and currently are expanding those third-party relationships. Establishing and providing quality assurance for this global supply chain requires a significant financial commitment, experienced personnel and the creation or expansion of numerous third-party contractual relationships. 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 have successfully completed the technical development work for the Phase 3 and commercial formulation of telaprevir. We expect that the level of our investment in commercial supply of telaprevir, including costs related to building our internal infrastructure and costs related to third-party manufacturing relationships, will increase significantly in 2008. While most of this investment will relate specifically to telaprevir, and is at risk if telaprevir does not advance successfully to registration, we expect that the organization and expertise that we build as part of this process will contribute to our development as a pharmaceutical company, and that these capabilities could help us advance our other, earlier-stage drug candidates if they progress to a commercial manufacturing stage.

Similarly, we have limited experience as a company in sales and marketing or with respect to pricing and obtaining adequate third-party reimbursement for drugs. We successfully concluded a search in 2007 for the head of commercial and strategic development. In order to market telaprevir in North America if it is approved, we intend to build a marketing organization and a direct sales force, which will require substantial effort and significant management and financial resources. During 2008, we intend to commit significant personnel and financial resources to this effort, staging our commitments to the extent possible in consideration of the telaprevir development timeline. We continue 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 intense. Although our investment in this infrastructure might be lost if telaprevir is not approved or if approval is significantly delayed, we would expect our sales and marketing infrastructure for telaprevir, if telaprevir is successfully developed and commercialized, to be useful to us if and when we commercialize any additional drugs.

#### *Financing Strategy*

At December 31, 2007, we had \$467.8 million of cash, cash equivalents and marketable securities. Because we have incurred losses from our inception and expect to incur losses for the foreseeable future, we are dependent in large part on our continued ability to raise significant funding to finance our research and development operations, our creation of a product supply and commercial infrastructure and our overhead, and to meet our long-term contractual commitments and obligations. In the past, we have secured funds principally through capital market transactions, strategic collaborative agreements, proceeds from the disposition of assets, investment income and the issuance of stock under our employee benefit programs.

While we expect that our current cash, cash equivalents and marketable securities in addition to amounts we expect to receive from our collaborators under existing contractual agreements would be sufficient to fund our operations through 2008, we expect that we will need to raise additional capital in 2008 from public offerings or private placements of our securities, agreements with third-parties with respect to certain of our assets or other methods of financing in order to continue our operations through 2009. 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 us to relinquish rights to certain of our technologies, drugs or drug candidates.

#### *Corporate Collaborations*

Corporate collaborations have been and will continue to be an important component of our business strategy. In June 2006, we entered into a collaboration agreement with Janssen Pharmaceutica, N.V., a Johnson & Johnson company, relating to telaprevir. In July 2006, Janssen paid us a non-refundable license payment of \$165.0 million. 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 has agreed to be responsible for 50% of the drug development costs under the planned 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, and to be responsible for the commercialization of telaprevir outside of North America and the Far East. Janssen will also pay us significant royalties on any telaprevir product sales in Janssen's territory.

Our pipeline also includes several drug candidates that are being developed by our collaborators:

MK-0457 (VX-680) and VX-689 which are being investigated by Merck for oncology indications; and

AVN-944 (VX-944), which is being investigated by Avalon Pharmaceuticals for oncology indications.

### **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, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reported periods. These items are monitored and analyzed by management for changes in facts and circumstances, and material changes in these estimates could occur in the future. Changes in estimates are reflected in reported results for the period in which they become known. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from our estimates if past experience or other assumptions do not turn out to be substantially accurate.

We believe that our application of the accounting policies for revenue recognition, research and development expenses, restructuring expense, stock-based compensation expense and investments, all of which are important to our financial condition and results of operations, require significant judgments and estimates on the part of management. Our accounting policies, 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*

We recognize revenues in accordance with the Securities and Exchange Commission's ("SEC") 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, Emerging Issues Task Force Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21").

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: non-refundable, 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 customer 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 based on each unit's fair value or using the residual method, and the applicable revenue recognition criteria are applied to each of the separate units.

We recognize revenues from non-refundable, 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 we have obligations remaining after achievement of the milestone:

In those circumstances where collection of a substantive milestone payment is reasonably assured, we have remaining obligations to perform under the collaboration arrangement and we have sufficient evidence of fair value for our remaining obligations, we consider the milestone payment and the remaining obligations to be separate units of accounting. In these

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circumstances, we use the residual method under EITF 00-21 to allocate revenue among the milestones and the remaining obligations.

In those circumstances where collection of a substantive milestone payment is reasonably assured, we have remaining obligations to perform under the collaboration arrangement, and we do not have sufficient evidence of fair value for our remaining obligations, we consider the milestone payment and the remaining obligations under the contract as a single unit of accounting. In those circumstances where the collaboration does not require specific deliverables at specific times or at the end of the contract term, but rather our 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 the agreement, we evaluate whether milestones are substantive based on 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 revenue.

Royalty revenues are recognized based upon actual and estimated net sales of licensed products in licensed territories as provided by the licensee and are recognized in the period the sales occur. We reconcile and adjust for differences between actual royalty revenues and estimated royalty revenues in the quarter they become known and these differences have not historically been significant.

### *Research and Development Expenses*

All research and development expenses, including amounts funded by 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.

### *Restructuring Expense*

We record liabilities associated with restructuring activities based on estimates of fair value in the period the liabilities are incurred, in accordance with Financial Accounting Standards Board Statement No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS 146"). The liability for accrued restructuring expense of \$35.3 million at December 31, 2007 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. As prescribed by SFAS 146, we use a probability-weighted 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 three and five 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 adopted the provisions of Statement of Financial Accounting Standards Board No. 123(R), "Share-Based Payment" ("SFAS 123(R)"), on January 1, 2006. SFAS 123(R) requires us to measure compensation cost of stock-based compensation at the grant date, based on the fair value of the award, including estimated forfeitures, and to recognize that cost as an expense ratably over the employees' service periods (generally the vesting period of the equity award) or the derived service period for awards with market conditions. Prior to January 1, 2006, we accounted for stock-based compensation to employees in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), and related interpretations. We also followed the disclosure requirements of Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"). We elected to adopt the modified prospective transition method as provided by SFAS 123(R) and accordingly, financial statement amounts for the periods prior to January 1, 2006 that are presented in this Form 10-K have not been restated to reflect the fair value method.

Under SFAS 123(R), 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.

#### *Altus Investment*

In 2004 and 2005, we assessed our investment in Altus Pharmaceuticals Inc., which we accounted for using the cost method, on a quarterly basis to determine if there had been any decrease in the estimated fair value of that investment below its \$18.9 million carrying value that might have required us to write down the cost basis of the asset. In 2004 and 2005, we did not identify facts or circumstances that would cause us to determine that the cost basis of our interest in Altus should have been changed. If any adjustment to the estimated fair value of the investment had reflected a decline in the value of the investment below its cost, we would have considered the evidence available to us, including the duration and extent to which the decline was other-than-temporary. If the decline had

been considered other-than-temporary, the cost basis of the investment would have been written down to fair value as a new cost basis and the amount of the write-down would have been included in the consolidated statements of operations. Altus completed an initial public offering of its common stock in January 2006. In 2006, we sold 817,749 shares of Altus common stock and warrants to purchase 1,962,494 shares of Altus common stock for \$30.0 million, resulting in realized net gain of \$11.2 million, based on the difference between the proceeds of the sales and the carrying value of the asset.

## RESULTS OF OPERATIONS

### *Year Ended December 31, 2007 Compared with Year Ended December 31, 2006*

Our net loss for 2007 was \$391.3 million, or \$3.03 per basic and diluted common share, compared to a net loss for 2006 of \$206.9 million, or \$1.83 per basic and diluted common share. Included in our net loss for 2007 was stock-based compensation expense of \$59.4 million and restructuring expense of \$7.1 million. Included in our net loss for 2006 was stock-based compensation expense of \$39.1 million, restructuring expense of \$3.7 million, loss on exchange of convertible subordinated notes of \$5.2 million, gains related to an investment of \$11.2 million and the effect of a cumulative benefit of an accounting change, related to the adoption of SFAS 123(R) of \$1.0 million.

Our net loss for 2007 increased by \$184.4 million as compared to 2006, and our expenses changed significantly period to period. In particular, our research and development expenses increased by \$141.3 million from 2006 to 2007, including a \$16.8 million increase in stock-based compensation expense. Overall, our total costs and expenses increased by \$173.4 million from 2006 to 2007. In addition, our total revenues decreased by \$17.3 million from 2006 to 2007. Our net loss per basic and diluted common share increased in 2007 from 2006 as a result of an increase in the net loss partially offset by an increase in the basic and diluted weighted-average number of common shares outstanding from 113.2 million shares in 2006 to 129.0 million shares in 2007.

### Revenues

Total revenues decreased to \$199.0 million in 2007 from \$216.4 million in 2006. In 2007, revenues were comprised of \$48.0 million in royalties and \$151.0 million in collaborative and other research and development revenues as compared to \$41.2 million in royalties and \$175.1 million in collaborative and other research and development revenues in 2006.

Royalties consist of Lexiva/Telzir (fosamprenavir calcium) royalty revenues and a small amount of Agenerase (amprenavir) royalty revenues. Royalty revenues are based on actual and estimated worldwide net sales of Lexiva/Telzir and Agenerase. The \$6.8 million, or 16%, increase in royalty revenues from 2006 to 2007 was due to the increase in Lexiva/Telzir net sales.

Collaborative and other research and development revenues decreased \$24.1 million, or 14%, from 2006 to 2007. The table presented below is a summary of revenues from collaborative arrangements for 2007 and 2006.

	<u>2007</u>	<u>2006</u>
	(In thousands)	
Collaborative and other research and development revenues:		
Janssen	\$ 117,739	\$ 68,004
Merck	9,000	58,705
Novartis		17,585
CFRT	15,883	12,636
Other	8,417	18,218
	<u>          </u>	<u>          </u>
Total collaborative and other research and development revenues	\$ 151,039	\$ 175,148
	<u>          </u>	<u>          </u>



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In June 2006, we entered into a major collaboration agreement with Janssen that resulted in \$117.7 million and \$68.0 million of revenues in 2007 and 2006, respectively, including:

in each period, an amortized portion of the \$165.0 million up-front payment;

in each period, net reimbursements from Janssen for telaprevir development costs; and

in 2007, a milestone of \$15.0 million in connection with commencement of patient enrollment in PROVE 3, and a milestone of \$15.0 million for achieving specified interim results from our Phase 2 clinical trials of telaprevir in treatment-naïve patients; in 2006, a milestone of \$15.0 million for achieving specified interim results in PROVE 1.

Our revenues from Merck decreased by \$49.7 million in 2007 as compared to 2006. In 2007, all of our revenues related to the Merck collaboration were the result of recognizing a milestone payment. In 2006, we recognized revenues related to both milestone payments and in connection with funding for the research program with Merck, which was completed during 2006.

Revenues from other collaborations decreased in 2007 as compared to 2006 primarily as the result of the expiration during the second quarter of 2006 of the research collaboration with Novartis Pharma AG, together with the corresponding research funding.

In 2008, we expect that our revenues from Janssen will increase. We expect that for the foreseeable future the revenues and funding from collaborations that support our development-stage compounds, such as the Janssen collaboration, will provide a proportionately higher level of financial support for our research and development activities than revenues and funding from research collaboration agreements.

### **Costs and Expenses**

#### *Royalty Payments*

Royalty payments increased \$1.7 million, or 14%, to \$13.9 million in 2007 from \$12.2 million in 2006. Royalty payments relate to a royalty we pay to a third-party on net sales of Lexiva/Telzir and Agenerase.

#### *Research and Development Expenses*

Research and development expenses increased \$141.3 million, or 38%, to \$513.1 million in 2007, including stock-based compensation expense of \$48.8 million, from \$371.7 million in 2006, including stock-based compensation expense of \$32.0 million. The increase in research and development expenses was primarily the result of increased development investment to support the global Phase 2b clinical development program for telaprevir, as well as a \$48.1 million increase in our investment in building commercial supply of telaprevir for use if telaprevir receives marketing approval, together with a \$16.8 million increase in stock-based compensation expense. The cost of developing the commercial supply for telaprevir is considered a research and development expense due to telaprevir's stage of development. Development expenses increased by \$119.6 million, accounting for 85% of the aggregate increase in research and development expenses. Research expenses increased by \$21.8 million, of which \$6.4 million was increased stock-based compensation expense.

Research and development expenses consist primarily of 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. Set forth below is a summary that reconciles our total research and development expenses for 2007 and 2006:

	2007	2006	\$ Change	% Change
(in thousands)				
<b>Research Expenses:</b>				
Salary and benefits	\$ 50,649	\$ 45,546	\$ 5,103	11%
Stock-based compensation expense	22,278	15,879	6,399	40%
Laboratory supplies and other direct expenses	23,844	23,103	741	3%
Contractual services	7,555	6,640	915	14%
Infrastructure costs	60,076	51,479	8,597	17%
<b>Total research expenses</b>	<b>\$ 164,402</b>	<b>\$ 142,647</b>	<b>\$ 21,755</b>	
<b>Development Expenses:</b>				
Salary and benefits	\$ 50,507	\$ 40,424	\$ 10,083	25%
Stock-based compensation expense	26,555	16,123	10,432	65%
Laboratory supplies and other direct expenses	28,313	19,041	9,272	49%
Contractual services	112,590	86,146	26,444	31%
Commercial supply investment in telaprevir	75,420	27,332	48,088	176%
Infrastructure costs	55,267	40,000	15,267	38%
<b>Total development expenses</b>	<b>\$ 348,652</b>	<b>\$ 229,066</b>	<b>\$ 119,586</b>	
<b>Total Research and Development Expenses:</b>				
Salary and benefits	\$ 101,156	\$ 85,970	\$ 15,186	18%
Stock-based compensation expense	48,833	32,002	16,831	53%
Laboratory supplies and other direct expenses	52,157	42,144	10,013	24%
Contractual services	120,145	92,786	27,359	29%
Commercial supply investment in telaprevir	75,420	27,332	48,088	176%
Infrastructure costs	115,343	91,479	23,864	26%
<b>Total research and development expenses</b>	<b>\$ 513,054</b>	<b>\$ 371,713</b>	<b>\$ 141,341</b>	

To date we have incurred in excess of \$2.2 billion in research and development costs associated with drug discovery and development. In 2008, we expect to focus our development investment on telaprevir, while continuing to advance the development of VX-770, VX-809 and VX-500. We expect research and development expenses in 2008 to be greater than in 2007 due to increased investment in clinical development, as well as increased costs for the investment in commercial supply of telaprevir drug product in advance of obtaining regulatory marketing approval. In addition, we expect that our combined research and development expenses will increase in future periods as we add personnel and capabilities to support the planned development of our lead drug candidates.

The successful development of our drug candidates is highly uncertain and subject to a number of risk factors. 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 are currently unable to reliably estimate when, if ever, our drug candidates will generate revenue and net cash inflows.

*Sales, General and Administrative Expenses*

Sales, general and administrative expenses increased \$26.9 million, or 46%, to \$84.7 million in 2007 from \$57.9 million in 2006. This increase is the result of increased headcount to support our growth as we advance our drug candidates, particularly telaprevir, into late-stage development. We expect that our sales, general and administration expenses in 2008 will be significantly higher than in 2007, because we are planning to build our capabilities in late-stage development, drug supply, quality control and safety monitoring and registration and commercialization of pharmaceutical products.

*Restructuring Expense*

We recorded restructuring expense of \$7.1 million in 2007 compared to \$3.7 million in 2006. The increase in restructuring expense for 2007 compared to 2006 was primarily the result of revising certain key estimates and assumptions about building operating costs for the remaining period of the lease commitment for our Kendall Square facility. The charge in both periods included imputed interest cost related to the restructuring liability.

The activity related to the restructuring liability for 2007 is as follows (in thousands):

	Liability as of December 31, 2006	Cash payments in 2007	Cash received from subleases in 2007	Additional charge in 2007	Liability as of December 31, 2007
Lease restructuring liability	\$ 33,073	\$ (12,854)	\$ 7,954	\$ 7,119	\$ 35,292

The activity related to the restructuring liability for 2006 is as follows (in thousands):

	Liability as of December 31, 2005	Cash payments in 2006	Cash received from subleases in 2006	Additional charge in 2006	Liability as of December 31, 2006
Lease restructuring liability	\$ 42,982	\$ (21,607)	\$ 8,047	\$ 3,651	\$ 33,073

In accordance with SFAS 146, 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 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 liability, and the effect of any such adjustments could be material. Because our estimate of the liability includes the application of a discount rate to reflect the time-value of money, the estimate of the liability will increase each quarter simply as a result of the passage of time.

**Non-Operating Items**

Interest income increased \$7.8 million, or 34%, to \$30.8 million for 2007 from \$23.0 million for 2006. The increase is a result of higher levels of invested funds and higher portfolio yields during 2007 as compared to 2006.

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Interest expense decreased \$5.7 million, or 71%, to \$2.3 million for 2007 from \$8.0 million for 2006. The decrease resulted from 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 charge corresponded to value of the incremental shares issued in the transactions 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.

### *Year Ended December 31, 2006 Compared with Year Ended December 31, 2005*

Our net loss for 2006 was \$206.9 million, or \$1.83 per basic and diluted common share, compared to a net loss for 2005 of \$203.4 million, or \$2.28 per basic and diluted common share. Included in our net loss for 2006 was stock-based compensation expense of \$39.1 million, restructuring expense of \$3.7 million, loss on exchange of convertible subordinated notes of \$5.2 million, gains related to an investment of \$11.2 million and the effect of a cumulative benefit of accounting change, related to the adoption of SFAS 123(R), of \$1.0 million. Included in our net loss for 2005 was stock-based compensation expense of \$4.6 million, net restructuring expense of \$8.1 million and loss on exchange of convertible subordinated notes of \$48.2 million.

While our net loss for 2006 increased by only \$3.5 million as compared to 2005, our revenues and expenses changed significantly period to period. In particular, our research and development expenses increased by \$123.2 million from 2005 to 2006, including a \$28.4 million increase in stock-based compensation expense. Overall, our total costs and expenses increased by \$134.6 million from 2005 to 2006. These increased costs and expenses were partially offset by the \$55.5 million increase in revenues from 2005 to 2006. Our net loss per basic and diluted common share decreased in 2006 from 2005 as a result of an increase in the basic and diluted weighted-average number of common shares outstanding from 89.2 million shares to 113.2 million shares, which offset the increase in the net loss.

### **Revenues**

Total revenues increased to \$216.4 million in 2006 compared to \$160.9 million in 2005. In 2006, revenues were comprised of \$41.2 million in royalties and \$175.1 million in collaborative and other research and development revenues, as compared with \$32.8 million in royalties and \$128.1 million in collaborative and other research and development revenues in 2005.

Royalty revenues increased by \$8.4 million, or 26%, from 2005 to 2006. Royalties consisted of Lexiva/Telzir (fosamprenavir calcium) royalty revenues and a small amount of Agenerase (amprenavir) royalty revenues. The increase in royalty revenues was due to the increase in Lexiva/Telzir net sales.

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Collaborative and other research and development revenues increased \$47.1 million, or 37%, from 2005 to 2006. The table presented below is a summary of revenues from collaborative arrangements for 2006 as compared with 2005.

	2006	2005
(In thousands)		
<b>Collaborative and other research and development revenues:</b>		
Janssen	\$ 68,004	\$ -
Merck	58,705	24,428
Novartis	17,585	53,082
CFFT	12,636	14,490
GlaxoSmithKline	2,434	20,000
Other	15,784	16,061
<hr style="border: none; border-top: 1px solid black;"/>		
Total collaborative and other research and development revenues	\$ 175,148	\$ 128,061
<hr style="border: none; border-top: 1px solid black;"/>		

In 2006, we entered into one new major collaboration agreement, with Janssen, which resulted in \$68.0 million of revenues in 2006, including:

an amortized portion of the \$165.0 million up-front payment;

net reimbursements from Janssen for telaprevir development costs; and

a milestone of \$15.0 million.

Our revenues from Merck increased by \$34.3 million in 2006 over 2005 levels as the result of increased revenues recognized from milestone payments offset by decreased research funding. We recognized lower revenues from Novartis due to the completion of our research collaboration with Novartis. Our revenues from our GlaxoSmithKline collaboration were higher in 2005 due to our full recognition in 2005 of the \$20.0 million up-front license payment under that agreement.

### Costs and Expenses

#### *Royalty Payments*

Royalty payments increased \$2.1 million, or 21%, to \$12.2 million in 2006 from \$10.1 million in 2005. Royalty payments relate to a royalty we pay to a third-party on net sales of Lexiva/Telzir and Agenerase. The increased royalty payments relate to the increased royalty revenues we received in 2006 as compared to 2005.

#### *Research and Development Expenses*

Research and development expenses increased \$123.2 million, or 50%, to \$371.7 million in 2006, including stock-based compensation expense of \$32.0 million, from \$248.5 million in 2005, including stock-based compensation of \$3.6 million. The increase in research and development expenses was primarily the result of increased development investment to support the global Phase 2b clinical development program for telaprevir, as well as \$27.3 million of investment in commercial supply of telaprevir, together with a \$28.4 million increase in stock-based compensation expense. The cost of developing the commercial supply for telaprevir is considered a research and development expense due to telaprevir's stage of development. Development expenses increased by \$101.3 million, accounting for 82% of the aggregate increase in research and development expenses. Research expenses increased by \$21.9 million, of which \$13.9 million was increased stock-based compensation expense.

Research and development expenses consist primarily of 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



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infrastructure costs, including facilities costs and depreciation. Set forth below is a summary that reconciles our total research and development expenses for 2006 and 2005:

	<u>2006</u>	<u>2005</u>	<u>\$ Change</u>	<u>% Change</u>
	(in thousands)			
<b>Research Expenses:</b>				
Salary and benefits	\$ 45,546	\$ 40,019	\$ 5,527	14%
Stock-based compensation expense	15,879	1,979	13,900	702%
Laboratory supplies and other direct expenses	23,103	20,877	2,226	11%
Contractual services	6,640	7,619	(979)	(13)%
Infrastructure costs	51,479	50,285	1,194	2%
	<u>          </u>	<u>          </u>	<u>          </u>	
Total research expenses	\$ 142,647	\$ 120,779	\$ 21,868	
<b>Development Expenses:</b>				
Salary and benefits	\$ 40,424	\$ 27,202	\$ 13,222	49%
Stock-based compensation expense	16,123	1,588	14,535	915%
Laboratory supplies and other direct expenses	19,041	11,674	7,367	63%
Contractual services	86,146	61,188	24,958	41%
Commercial supply investment in telaprevir	27,332		27,332	100%
Infrastructure costs	40,000	26,109	13,891	53%
	<u>          </u>	<u>          </u>	<u>          </u>	
Total development expenses	\$ 229,066	\$ 127,761	\$ 101,305	
<b>Total Research and Development Expenses:</b>				
Salary and benefits	\$ 85,970	\$ 67,221	\$ 18,749	28%
Stock-based compensation expense	32,002	3,567	28,435	797%
Laboratory supplies and other direct expenses	42,144	32,551	9,593	29%
Contractual services	92,786	68,807	23,979	35%
Commercial supply investment in telaprevir	27,332		27,332	100%
Infrastructure costs	91,479	76,394	15,085	20%
	<u>          </u>	<u>          </u>	<u>          </u>	
Total research and development expenses	\$ 371,713	\$ 248,540	\$ 123,173	

*Sales, General and Administrative Expenses*

Sales, general and administrative expenses increased \$13.9 million, or 32%, to \$57.9 million in 2006 from \$44.0 million in 2005. This increase is the result of increased headcount to support our growth as we advance our drug candidates, particularly telaprevir, into late-stage development.

*Restructuring Expense*

We recorded restructuring expense of \$3.7 million in 2006 compared to net restructuring expense of \$8.1 million in 2005. The expense in 2006 resulted primarily from imputed interest and build-out costs related to the restructuring liability. The expense for 2005 included a credit against the portion of restructuring liability relating to the portion of the Kendall Square facility that we decided in 2005 to occupy, offset by (i) the estimated incremental net ongoing lease obligation associated with the portion of the Kendall Square facility that we are not occupying and did not intend to occupy and (ii) imputed interest costs relating to the restructuring liability.

The activity related to the restructuring liability for 2006 is as follows (in thousands):

	<u>Liability as of December 31, 2005</u>	<u>Cash payments in 2006</u>	<u>Cash received from subleases in 2006</u>	<u>Additional charge in 2006</u>	<u>Liability as of December 31, 2006</u>
Lease restructuring liability	\$ 42,982	\$ (21,607)	\$ 8,047	\$ 3,651	\$ 33,073

<b>Liability as of December 31, 2005</b>	<b>Cash payments in 2006</b>	<b>Cash received from subleases in 2006</b>	<b>Additional charge in 2006</b>	<b>Liability as of December 31, 2006</b>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>



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The activity related to the restructuring liability for 2005 is as follows (in thousands):

	<u>Liability as of December 31, 2004</u>	<u>Cash payments in 2005</u>	<u>Cash received from subleases in 2005</u>	<u>Credit for portion of facility Vertex decided to occupy</u>	<u>Additional charge in 2005</u>	<u>Liability as of December 31, 2005</u>
Lease restructuring liability	\$ 55,843	\$ (24,229)	\$ 3,234	\$ (10,018)	\$ 18,152	\$ 42,982

### Non-Operating Items

Interest income increased \$11.0 million, or 92%, to \$23.0 million in 2006 from \$12.0 million in 2005. The increase was the result of higher invested funds and portfolio yields in 2006 as compared to 2005.

Interest expense decreased \$9.4 million, or 54%, to \$8.0 million in 2006 from \$17.3 million in 2005, because we reduced the level of our outstanding debt in 2006 from 2005.

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 addition, as a result of the issuance during 2005 and 2006 of common stock in exchange for a portion of our 2007 Notes and 2011 Notes, we recorded non-cash charges of \$5.2 million in 2006 and \$48.2 million in 2005. These charges related to the incremental shares issued in the transactions 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 historically 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, investment income and proceeds from the issuance of stock under our employee benefit programs. We expect to require significant additional capital in order to commercialize telaprevir and continue our planned activities in other areas. There can be no assurance that financing opportunities will be available on acceptable terms, and if adequate funds are not available we may be required to curtail our operations or relinquish our rights to significant assets.

At December 31, 2007, we had cash, cash equivalents and marketable securities of \$467.8 million, which was a decrease of \$294.0 million from \$761.8 million at December 31, 2006. The decrease was primarily a result of:

cash expenditures we made in 2007 related to research and development expenses and sales, general and administrative expenses; and

\$42.1 million of cash that was used to repay our 2007 Notes at maturity.

These cash outflows were partially offset by royalty, milestone and other payments from our collaborators and by \$32.0 million from the issuance of common stock under our employee benefits plans. Capital expenditures for property and equipment during 2007 were \$32.4 million.

At December 31, 2007, we had \$20.0 million in loans outstanding under the loan facility established under our collaboration with Novartis, which is repayable, without interest, in May 2008. In

the third quarter of 2007, we repaid \$42.1 million in aggregate principal amount of 5% Convertible Subordinated Notes due September 2007. During the first quarter of 2007, holders of \$59.6 million in aggregate principal amount of our 5.75% Convertible Senior Subordinated Notes due February 2011 converted their 2011 Notes into 3,992,473 shares of our common stock at a price of \$14.94 in principal amount per share. As a result of the conversion of the 2011 Notes in the first quarter of 2007 and the repayment of the 2007 Notes in the third quarter of 2007, no convertible debt was outstanding as of December 31, 2007.

Our accrued restructuring expense of \$35.3 million at December 31, 2007 relates to the portion of the Kendall Square facility that we do not intend to occupy and includes other related lease obligations, recorded at net present value. In 2007, we made cash payments of \$12.9 million against the accrued expense and received \$8.0 million in sublease rental payments. We expect to make cash payments of \$13.0 million against the accrued expense in 2008 and receive \$8.3 million in sublease rental payments. We review our estimates underlying our accrued restructuring expense on at least a quarterly basis, and the amount of the accrued expense, and consequently any expected future payment, could change with any change in our estimates.

We expect to maintain our substantial investment in research at levels generally comparable to our level of investment in 2007. We expect also 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 second generation HCV drug candidate VX-500, and for VX-770 and VX-809, our CF drug candidates. We also expect to continue to make a significant investment in the commercial supply of telaprevir in order to have our third-party manufacturers supply sufficient quantities of drug product in advance of obtaining regulatory marketing approval, to support a timely commercial product launch if we are successful in completing the development of telaprevir and obtaining marketing approval. We expect to incur losses on a quarterly and annual basis for the foreseeable future.

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. Collaborations have been and will continue to be an important component of our business strategy.

While we believe that our current cash, cash equivalents and marketable securities in addition to amounts we expect to receive our collaborators under existing contractual obligations would be sufficient to fund our operations through 2008, we expect we will need to raise additional capital in 2008 through public offerings or private placements of our securities, securing new collaborative agreements, or other methods of financing in order to continue our planned business activities through 2009. 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, drugs 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, 2007. 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 table below in order to present a more complete picture of our financial position and liquidity.

	<u>2008</u>	<u>2009-2010</u>	<u>2011-2012</u>	<u>2013 and later</u>	<u>Total</u>
	(in thousands)				
<i>Commitments and Obligations Recorded on the Consolidated Balance Sheets at December 31, 2007:</i>					
Collaborator development loan	\$ 19,997	\$	\$	\$	\$ 19,997
<i>Additional Commitments and Obligations at December 31, 2007:</i>					
Facilities operating leases	41,814	85,206	57,368	144,628	329,016
Research and development and other commitments	4,488	500			4,988
Total contractual commitments and obligations	<u>\$ 66,299</u>	<u>\$ 85,706</u>	<u>\$ 57,368</u>	<u>\$ 144,628</u>	<u>\$ 354,001</u>

*Commitments and Obligations Recorded on the Consolidated Balance Sheets at December 31, 2007*

The collaborator development loan in the table above represent indebtedness to Novartis in the amount of \$20.0 million, which will be repayable without interest in May 2008.

*Additional Commitments and Obligations Not Required to be Recorded on Consolidated Balance Sheets at December 31, 2007*

At December 31, 2007, our future minimum commitments and contractual obligations included facilities operating leases 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 and described more fully in the following paragraphs in order to provide a more complete picture of our financial position and liquidity at December 31, 2007.

Our future minimum commitments under our Kendall Square lease for the period commencing January 1, 2008, including lease payments, are \$24.0 million for 2008, \$49.5 million for 2009 and 2010, \$49.5 million for 2011 and 2012 and \$142.0 million through the expiration of the lease in 2018. These amounts are included in the table above. Rent payments will be subject to increase in May 2008 and May 2013, based on changes in an inflation factor. These increases are treated as contingent rentals. 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 2008, \$16.3 million for 2009 and 2010 and \$6.2 million for 2011 and 2012. These amounts are not offset against our obligations set forth in the table above. See Note E, "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 December 2007, FASB ratified the consensus reached by the Emerging Issues Task Force ("EITF") on EITF Issue 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 that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 will be effective for us beginning on January 1, 2009. We are currently evaluating the effect of EITF 07-1 on our consolidated financial statements.

In June 2007, FASB ratified the consensus reached by the EITF on 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"). EITF 07-3 addresses the diversity that exists with respect to the accounting for the non-refundable portion of a payment made by a research and development entity for future research and development activities. Under EITF 07-3, an entity would defer and capitalize non-refundable advance payments made for research and development activities until the related goods are delivered or the related services are performed. EITF 07-3 will be effective for us beginning on January 1, 2008. We are currently evaluating the effect of EITF 07-3 on our consolidated financial statements.

In February 2007, FASB issued 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 provides companies with an option to report selected financial assets and liabilities at fair value. Furthermore, SFAS 159 establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS 159 will be effective for us beginning on January 1, 2008. The adoption of SFAS 159 is not expected to have a material effect on our consolidated financial statements.

In September 2006, FASB issued Statement No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 provides guidance for using fair value to measure assets and liabilities and requires additional disclosure about the use of fair value measures, the information used to measure fair value, and the effect fair value measurements have on earnings. SFAS 157 does not require any new fair value measurements. SFAS 157 will be effective for us beginning on January 1, 2008. The adoption of SFAS 157 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-40 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 Exchange Act Rule 13a-15(c)) 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 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, 2007. 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, 2007, 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, 2007, 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**

**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, 2007, 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, 2007, 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, 2007 and 2006, 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, 2007 of Vertex Pharmaceuticals Incorporated and our report dated February 11, 2008 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts  
February 11, 2008

**ITEM 9B. OTHER INFORMATION**

On February 7, 2008, our board of directors approved an amendment to our 2006 Stock and Option Plan increasing the number of shares of common stock authorized under the plan by 536,625. On February 7, 2008, we issued non-qualified stock options to purchase these shares to members of our executive team. In accordance with the terms of the amendment and applicable NASDAQ marketplace rules, these stock options are being issued contingent upon obtaining shareholder approval of the amendment to our 2006 Stock and Option Plan, will not vest with respect to any shares prior to the receipt of such approval and will terminate if approval is not obtained at or before our 2009 Annual Meeting of Stockholders.

On February 11, 2008:

We entered into employment agreements and amendments to change of control agreements with John J. Alam and Peter Mueller which provided for, among other things, severance payments and acceleration of each executive's outstanding stock options and restricted stock upon specified terminations of employment by us without cause or by the executive with good reason (subject to the terms of the agreement, which is attached to this Annual Report on 10-K as an exhibit).

We entered into an amendment to our employment agreement with Kenneth Boger providing for full acceleration of his outstanding stock options and restricted stock upon specified terminations of employment by us without cause or by him with good reason in connection with a change-of-control of Vertex (subject to the terms of the agreement, which is attached to this Annual Report on 10-K as an exhibit).

On February 7, 2008, our board of directors approved year-end discretionary bonuses. The year-end discretionary bonuses for our named executive officers are set forth in an exhibit which is attached to this Annual Report on 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 2008 Annual Meeting of Stockholders, or 2008 Proxy Statement, under "Election of Directors," "Information Regarding our Board of Directors and its Committees," "Stockholder Proposals for the 2009 Annual Meeting and Nominations for Directors" and is incorporated herein by reference. Other information required by this Item 10 will be included in the 2008 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 2008 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 2008 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 2008 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 2008 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:

	<b>Page Number in this Form 10-K</b>
<u>Report of Independent Registered Public Accounting Firm</u>	F-1
<u>Consolidated Balance Sheets as of December 31, 2007 and 2006</u>	F-2
<u>Consolidated Statements of Operations for the years ended December 31, 2007, 2006 and 2005</u>	F-3
<u>Consolidated Statements of Stockholders' Equity and Comprehensive Loss for the years ended December 31, 2007, 2006 and 2005</u>	F-4
<u>Consolidated Statements of Cash Flows for the years ended December 31, 2007, 2006 and 2005</u>	F-5
<u>Notes to Consolidated Financial Statements</u>	F-6

(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, filed with the Secretary of State of The Commonwealth of Massachusetts on July 31, 1991.		10-K (Exhibit 3.1)	March 26, 1998	000-19319
3.2	Certificate of Vote of Directors Establishing a Series of a Class of Stock, filed with the Secretary of State of The Commonwealth of Massachusetts on July 31, 1991.		10-K (Exhibit 3.3)	March 26, 1998	000-19319
3.3	Articles of Amendment of the Articles of Organization of Vertex, filed with the Secretary of State of The Commonwealth of Massachusetts on May 17, 1995.		S-3 (Exhibit 3.3)	April 1, 2005	333-123731
3.4	Articles of Amendment of the Articles of Organization of Vertex, filed with the Secretary of State of The Commonwealth of Massachusetts on June 4, 1997.		10-K (Exhibit 3.2)	March 26, 1998	000-19319
3.5	Articles of Amendment of the Articles of Organization of Vertex, filed with the Secretary of State of The Commonwealth of Massachusetts on May 21, 2001		S-4 (Exhibit 3.4)	May 23, 2001	333- 61480
3.6	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
10.1	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



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10.2	License, Development and Commercialization Agreement, dated as of June 11, 2004, between Vertex and Mitsubishi Pharma Corporation.	10-Q (Exhibit 10.2)	July 9, 2007	000-19319
10.3	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
10.4	Amendment 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
10.5	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
10.6	Exclusive Research Collaboration, License and Commercialization Agreement, dated as of June 21, 2004, between Vertex Pharmaceuticals Incorporated and Merck & Co., Inc.	8-K/A (Exhibit 99.4)	September 10, 2004	000-19319
10.7	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
10.8	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
10.9	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
10.10	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
10.11	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
10.12	Third, Fourth and Fifth Amendments to Lease between Fort Washington Realty Trust and Vertex.	10-K (Exhibit 10.14)	March 26, 2001	000-19319
10.13	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
10.14	Lease, dated as of January 18, 2001, between Kendall Square, LLC and Vertex.	10-K (Exhibit 10.16)	March 26, 2001	000-19319
10.15	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
10.16	1991 Stock Option Plan, as amended and restated as of September 14, 1999.*	10-K (Exhibit 10.1)	March 3, 2000	000-19319
10.17	1994 Stock and Option Plan, as amended and restated as of September 14, 1999.*	10-K (Exhibit 10.2)	March 3, 2000	000-19319
10.18	1996 Stock and Option Plan, as amended and restated as of March 14, 2005.*	10-K (Exhibit 10.3)	March 16, 2005	000-19319
10.19	Form of Stock Option Agreement under 1996 Stock and Option Plan.*	8-K (Exhibit 10.1)	February 9, 2005	000-19319
10.20	Form of Restricted Stock Agreement under 1996 Stock and Option Plan Annual Vesting.*	8-K (Exhibit 10.2)	February 9, 2005	000-19319
10.21	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
10.22	Vertex Pharmaceuticals Incorporated 2006 Stock and Option Plan.*	8-K (Exhibit 10.1)	May 15, 2006	000-19319

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10.23	Amendment No. 1 to 2006 Stock and Option Plan	X			
10.24	Form of Stock Option Grant under 2006 Stock and Option Plan.*		8-K (Exhibit 10.2)	May 15, 2006	000-19319
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 2007 New Hire Stock and Option Plan.*		10-Q (Exhibit 10.1)	November 9, 2007	000-19319
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	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
10.31	Employment Agreement, between Vertex Pharmaceuticals Incorporated and Kurt Graves, dated June 29, 2007.*		10-Q (Exhibit 10.11)	November 9, 2004	000-19319
10.32	Amendment No. 1 to Amended and Restated Employment Agreement, dated February 11, 2008, between Vertex and Kenneth S. Boger.*	X			
10.33	Employment Agreement, dated February 11, 2008, between John J. Alam and Vertex.*	X			
10.34	Employment Agreement, dated February 11, 2008, between Peter Mueller and Vertex.*	X			
10.35	Form of Letter Agreement, dated as of March 7, 2003, between Vertex and each of John J. Alam and Peter Mueller.*		10-K (Exhibit 10.32)	March 31, 2003	000-19319
10.36	Form of Amendment to Letter Agreement, dated as of November 8, 2004, between Vertex and each of John J. Alam and Peter Mueller.*		10-Q (Exhibit 10.7)	November 9, 2004	000-19319
10.37	Second Amendment to Letter Agreement, dated February 11, 2008, between John J. Alam and Vertex.*	X			
10.38	Second Amendment to Letter Agreement, dated February 11, 2008, between Peter Mueller and Vertex.*	X			
10.39	Form of Restricted Stock Agreement for 2007 Restricted Stock Awards to John J. Alam, Peter Mueller and Ian F. Smith.*		10-Q (Exhibit 10.5)	July 9, 2007	000-19319
10.40	Amended and Restated Employment Agreement, dated as of November 8, 2004, between Vertex and Kenneth S. Boger.*		10-Q (Exhibit 10.3)	July 9, 2007	000-19319
10.41	Form of Restricted Stock Agreement between Vertex and each of the individuals listed on Schedule I thereto.*		10-Q (Exhibit 10.8)	November 9, 2004	000-19319
10.43	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
10.44	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
10.45	Second Amendment to Change of Control Letter Agreement, dated February 11, 2008, between Richard C. Garrison and Vertex.*	X			

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10.46	Employment Agreement, dated February 11, 2008, between Lisa Kelly-Croswell and Vertex.*	X			
10.47	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
10.48	Amendment to Change of Control Letter Agreement, dated February 11, 2008, between Lisa Kelly-Croswell and Vertex.*	X			
10.49	Offer Letter, between Vertex Pharmaceuticals Incorporated and Amit Sachdev, dated June 4, 2007.*		10-Q (Exhibit 10.4)	July 9, 2007	000-19319
10.50	Employment Agreement, dated February 11, 2008, between Amit Sachdev and Vertex.*	X			
10.51	Change of Control Agreement, dated February 11, 2008, between Amit Sachdev and Vertex.*	X			
10.52	Form of Employee Non-Disclosure and Inventions Agreement.*		S-1 (Exhibit 10.4)	May 30, 1991	33-40966
10.53	Vertex Pharmaceuticals Incorporated Executive Compensation Program.*		10-Q (Exhibit 10.2)	May 10, 2007	000-19319
10.54	Vertex Pharmaceuticals Incorporated Employee Stock Purchase Plan, as amended and restated on May 31, 2007.		10-Q (Exhibit 10.1)	July 9, 2007	000-19319
10.55	Vertex Employee Compensation Plan*	X			
10.56	Vertex Pharmaceuticals Non-Employee Board Compensation*		10-K (Exhibit 10.43)	March 1, 2007	000-19319
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.



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Name	Title	Date
Bruce I. Sachs		
/s/ ELAINE S. ULLIAN	Director	February 11, 2008
Elaine S. Ullian		

**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, 2007 and 2006, 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, 2007. 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, 2007 and 2006, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2007, 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, 2007, 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 11, 2008 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts  
February 11, 2008



## VERTEX PHARMACEUTICALS INCORPORATED

## Consolidated Balance Sheets

(In thousands, except share and per share amounts)

	December 31,	
	2007	2006
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 355,663	\$ 213,171
Marketable securities, available for sale, current portion	105,208	491,455
Accounts receivable	31,320	62,923
Prepaid expenses	4,660	3,857
	<u>496,851</u>	<u>771,406</u>
Total current assets	496,851	771,406
Marketable securities, available for sale, excluding current portion	6,925	57,126
Restricted cash	30,258	30,258
Property and equipment, net	66,509	61,535
Other assets	934	1,254
	<u>601,477</u>	<u>921,579</u>
Total assets	\$ 601,477	\$ 921,579
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 32,750	\$ 15,368
Accrued expenses and other current liabilities	98,350	91,359
Accrued interest		1,905
Deferred revenues, current portion	25,528	33,889
Accrued restructuring expense, current portion	5,606	4,735
Convertible subordinated notes		42,102
Convertible senior subordinated notes		59,648
Collaborator development loan (due May 2008), current portion	19,997	
Other obligations	17,048	2,008
	<u>199,279</u>	<u>251,014</u>
Total current liabilities	199,279	251,014
Accrued restructuring expense, excluding current portion	29,686	28,338
Collaborator development loan (due May 2008), excluding current portion		19,997
Deferred revenues, excluding current portion	101,217	116,295
	<u>330,182</u>	<u>415,644</u>
Total liabilities	330,182	415,644
Commitments and contingencies (Note K and Note R)		
Stockholders' equity:		
Preferred stock, \$0.01 par value; 1,000,000 shares authorized; none issued and outstanding at December 31, 2007 and 2006, respectively		
Common stock, \$0.01 par value; 200,000,000 shares authorized; 132,875,540 and 126,121,473 shares issued and outstanding at December 31, 2007 and 2006, respectively	1,312	1,244

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	<b>December 31,</b>	
Additional paid-in capital	1,856,856	1,702,128
Accumulated other comprehensive income (loss)	881	(962)
Accumulated deficit	(1,587,754)	(1,196,475)
Total stockholders' equity	271,295	505,935
Total liabilities and stockholders' equity	\$ 601,477	\$ 921,579

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

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**VERTEX PHARMACEUTICALS INCORPORATED**

**Consolidated Statements of Operations**

(In thousands, except per share amounts)

	Years Ended December 31,		
	2007	2006	2005
<b>Revenues:</b>			
Royalties	\$ 47,973	\$ 41,208	\$ 32,829
Collaborative and other research and development revenues	151,039	175,148	128,061
<b>Total revenues</b>	<b>199,012</b>	<b>216,356</b>	<b>160,890</b>
<b>Costs and expenses:</b>			
Royalty payments	13,904	12,170	10,098
Research and development expenses	513,054	371,713	248,540
Sales, general and administrative expenses	84,727	57,860	43,990
Restructuring expense	7,119	3,651	8,134
<b>Total costs and expenses</b>	<b>618,804</b>	<b>445,394</b>	<b>310,762</b>
<b>Loss from operations</b>	<b>(419,792)</b>	<b>(229,038)</b>	<b>(149,872)</b>
Interest income	30,798	23,024	11,994
Interest expense	(2,285)	(7,955)	(17,326)
Realized gain on sale of investment		11,183	
Loss on exchange of convertible subordinated notes		(5,151)	(48,213)
<b>Loss before cumulative effect of a change in accounting principle</b>	<b>(391,279)</b>	<b>(207,937)</b>	<b>(203,417)</b>
Cumulative effect of a change in accounting principle SFAS 123(R)(1)		1,046	
<b>Net loss</b>	<b>\$ (391,279)</b>	<b>\$ (206,891)</b>	<b>\$ (203,417)</b>
<b>Basic and diluted loss per common share before cumulative effect of a change in accounting principle</b>			
	\$ (3.03)	\$ (1.84)	\$ (2.28)
<b>Basic and diluted cumulative effect of a change in accounting principle per common share</b>			
		0.01	
<b>Basic and diluted net loss per common share</b>	<b>\$ (3.03)</b>	<b>\$ (1.83)</b>	<b>\$ (2.28)</b>
<b>Basic and diluted weighted-average number of common shares outstanding</b>			
	128,986	113,221	89,241

(1) The Company adopted Financial Accounting Standards Board Statement No. 123(R), "Share-Based Payment," using a modified prospective method. See Note D to the Consolidated Financial Statements, "Stock-based Compensation Expense," for further details.

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, 2004	80,765	\$ 807	\$ 833,832	\$ (11,657)	\$ (1,374)	\$ (786,167)	\$ 35,441	
Net change in unrealized holding losses on marketable securities					(868)		(868)	(868)
Translation adjustments					(631)		(631)	(631)
Net loss						(203,417)	(203,417)	(203,417)
Comprehensive loss								\$ (204,916)
Issuances of common stock:								
Equity Offering	13,513	135	165,251				165,386	
Convertible Subordinated Notes exchanged	10,578	106	203,424				203,530	
Benefit plans	3,297	33	41,453	(6,172)			35,314	
Amortization of deferred compensation				4,421			4,421	
Balance, December 31, 2005	108,153	\$ 1,081	\$ 1,243,960	\$ (13,408)	\$ (2,873)	\$ (989,584)	\$ 239,176	
Net change in unrealized holding gains on marketable securities					1,704		1,704	1,704
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	
Net change in unrealized holding gains on marketable securities					1,851		1,851	1,851
Translation adjustments					(8)		(8)	(8)
Net loss						(391,279)	(391,279)	(391,279)

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**Common Stock**

<b>Comprehensive loss</b>		\$ (389,436)
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Issuances of common stock:

<b>Convertible Subordinated</b>			
Notes converted	3,992	40	59,035
Benefit plans	2,763	28	36,286
<b>Stock-based compensation expense</b>			<b>59,407</b>

<b>Balance, December 31, 2007</b>							
	132,876	\$	1,312	\$	1,856,856	\$	\$
						881	\$ (1,587,754)
							271,295

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,		
	2007	2006	2005
<b>Cash flows from operating activities:</b>			
Net loss	\$ (391,279)	\$ (206,891)	\$ (203,417)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	27,459	25,868	27,289
Stock-based compensation expense	59,407	39,137	4,632
Other non-cash based compensation expense	4,340	3,341	2,898
Cumulative effect of a change in accounting principle		(1,046)	
Loss on disposal of property and equipment	142	10	344
Realized loss (gain) on marketable securities	155	(7,579)	60
Realized gain on warrants		(3,520)	
Charge for exchange of convertible subordinated notes		5,151	48,213
Changes in operating assets and liabilities:			
Accounts receivable	31,603	(42,328)	(8,704)
Prepaid expenses	(803)	(554)	(802)
Accounts payable	17,382	9,158	(450)
Accrued expenses and other current liabilities	22,032	48,523	4,262
Accrued restructuring	2,219	(9,909)	(12,861)
Accrued interest	(1,694)	280	268
Deferred revenues	(23,439)	117,884	(33,786)
	<u>(252,476)</u>	<u>(22,475)</u>	<u>(172,054)</u>
<b>Cash flows from investing activities:</b>			
Purchases of marketable securities	(317,470)	(508,085)	(236,489)
Sales and maturities of marketable securities	755,620	302,265	243,410
Sale of warrants		18,369	
Expenditures for property and equipment	(32,415)	(32,417)	(16,959)
Restricted cash		11,224	8,365
Investments and other assets	(569)	173	(59)
	<u>405,166</u>	<u>(208,471)</u>	<u>(1,732)</u>
<b>Cash flows from financing activities:</b>			
Issuances of common stock from employee benefit plans, net	31,965	52,363	32,205
Issuances of common stock from stock offering, net		313,672	165,386
Principal payments on convertible subordinated notes	(42,102)		
Issuance costs related to 2011 convertible senior subordinated notes			(16)
Debt exchange costs	(53)	(170)	(119)
	<u>(10,190)</u>	<u>365,865</u>	<u>197,456</u>
Effect of changes in exchange rates on cash	(8)	207	(631)
	<u>142,492</u>	<u>135,126</u>	<u>23,039</u>
Cash and cash equivalents beginning of period	213,171	78,045	55,006

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Years Ended December 31,

Cash and cash equivalents end of period	\$	355,663	\$	213,171	\$	78,045
Supplemental disclosure of cash flow information:						
Cash paid for interest	\$	3,820	\$	7,212	\$	16,077
Cash paid for taxes	\$		\$		\$	

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

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**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. The Company intends to continue investing in and building capabilities in research, development and commercialization of pharmaceutical products while it advances its drug candidates to market. Vertex earns royalty revenues from the net sales of Lexiva/Telzir (fosamprenavir calcium), an HIV protease inhibitor for the treatment of HIV.

The Company is concentrating a significant portion of its drug development resources on its lead drug candidate telaprevir. In March 2008, the Company expects to begin a Phase 3 clinical trial to evaluate telaprevir in patients infected with genotype 1 hepatitis C virus. In addition, the Company is conducting clinical trials to evaluate VX-770 and VX-809, two drug candidates being evaluated as potential treatments for cystic fibrosis, and VX-500 and VX-813, a second drug candidate being evaluated as a potential treatment for patients infected with hepatitis C virus. 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 and will lead the development program. 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 pipeline also includes several drug candidates that are being developed by its collaborators.

The Company's net loss for 2007 was \$391.3 million, or \$3.03 per basic and diluted common share, and the Company expects to incur operating losses for the foreseeable future, as a result of expenditures for its research, development and commercialization programs. As of December 31, 2007, the Company had cash, cash equivalents and marketable securities of \$467.8 million. While 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 through 2008, the Company expects that it will need to raise additional capital in 2008 from public offerings or private placements of the Company's securities, agreements with third-parties with respect to certain of its assets or other methods of financing in order to continue its operations through 2009. 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, rapid technological change and competition, uncertain protection of proprietary technology, the dependence on the success of the Company's lead drug candidate telaprevir, 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, potential product liability and limited experience in drug development, manufacturing, and sales and marketing.

**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



**VERTEX PHARMACEUTICALS INCORPORATED**

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

**B. Accounting Policies (Continued)**

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 reported amounts of revenues and expenses during the reported periods. Significant estimates in these consolidated financial statements have been made in connection with the calculation of revenues, research and development expenses, stock-based compensation expense, investments and restructuring expense. The Company bases its estimates on historical experience and various other assumptions 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.

To date, the Company's revenues have been generated from a limited number of customers in the biotechnology and pharmaceuticals industries in the United States, Europe and Japan. 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. In 2005, the Company had significant revenue transactions with Novartis Pharma AG, GlaxoSmithKline and Merck that accounted for 33%, 33% and 15% respectively, of the Company's total revenues.

Receivables from GlaxoSmithKline, Janssen and CFFT represented 44%, 36% and 12%, respectively, of the Company's accounts receivable balance at December 31, 2007. Receivables from Janssen and GlaxoSmithKline represented 63% and 22%, respectively, of the Company's accounts receivable balance at December 31, 2006. 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

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**B. Accounting Policies (Continued)**

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, securities of U.S. government-sponsored enterprises, high-grade corporate bonds and asset-backed securities that are classified as available-for-sale. 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 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 market prices. 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 2007, 2006 or 2005. Realized gains and losses are determined on the specific identification method and are included in interest income in the consolidated statements of operations.

*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) revises FASB Statement No. 123, "Accounting for Stock-Based Compensation" ("SFAS 123"), supersedes Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25"), and amends 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 measured 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.

In accordance with FASB Statement No. 148, "Accounting for Stock-Based Compensation, Transition and Disclosure" ("SFAS 148"), for periods prior to January 1, 2006, the Company adopted the disclosure-only provisions of SFAS 123 and also applied APB 25 and related interpretations in accounting for all stock awards granted to employees. Under APB 25, for periods prior to January 1, 2006, provided that other criteria are met, when the exercise price of options equaled the market price of the common stock on the date of grant, no compensation expense was recognized. Also in accordance with APB 25, the Company was not required to record compensation expense for shares issued under the Employee Stock Purchase Plan (the "ESPP"). Prior to January 1, 2006 and in accordance with APB 25, the Company recorded stock-based compensation expense related to restricted stock awards over the related vesting period for an amount equal to the difference between the price per share of restricted stock issued and the fair value of the Company's common stock at the date of grant or issuance. The Company recorded forfeitures of restricted stock as they occurred.

Please refer to Note D, "Stock-based Compensation Expense," for further information.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**B. Accounting Policies (Continued)***Research and Development Expenses*

All research and development expenses, including amounts funded by 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; and infrastructure costs, including facilities costs and depreciation. Due to telaprevir's stage of development, costs related to the investment in its commercial supply are included in research and development expenses. The Company's collaborators have funded portions of the Company's research and development programs related to specific drug candidates and research targets, including, in 2007, telaprevir, VX-702, VX-770, VX-809 and certain kinases and certain cystic fibrosis research targets; in 2006, telaprevir, VX-702, VX-770, kinases and certain cystic fibrosis research targets; and in 2005, telaprevir, VX-702, kinases and certain cystic fibrosis research targets.

The following table details the research and development expenses incurred by the Company for collaborator-sponsored and Company-sponsored programs (collaborator-sponsored programs are those in which a collaborator has funded at least a portion of the related program expenses, such as the telaprevir program) for 2007, 2006 and 2005 (in thousands):

	2007			2006			2005		
	Research	Development	Total	Research	Development	Total	Research	Development	Total
Collaborator-sponsored	\$ 18,451	\$ 243,339	\$ 261,790	\$ 39,021	\$ 178,253	\$ 217,274	\$ 68,194	\$ 72,101	\$ 140,295
Company-sponsored	145,951	105,313	251,264	103,626	50,813	154,439	52,585	55,660	108,245
<b>Total</b>	<b>\$ 164,402</b>	<b>\$ 348,652</b>	<b>\$ 513,054</b>	<b>\$ 142,647</b>	<b>\$ 229,066</b>	<b>\$ 371,713</b>	<b>\$ 120,779</b>	<b>\$ 127,761</b>	<b>\$ 248,540</b>

The total research and development expenses for 2007, 2006 and 2005 include \$48.8 million, \$32.0 million and \$3.6 million, respectively, of stock-based compensation expense.

*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 2007, 2006 and 2005, 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 on at least a quarterly basis for changes in circumstances.

Please refer to Note E, "Restructuring Expense," for further information.

*Revenue Recognition*

The Company recognizes revenues in accordance with the Securities and Exchange Commission's ("SEC") 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, Emerging Issues Task Force Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21").

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**B. Accounting Policies (Continued)**

The Company's revenues are generated primarily through collaborative research, development and/or commercialization agreements. The terms of these agreements typically include payment to Vertex of one or more of the following: non-refundable, 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 customer 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 based on 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 non-refundable, 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 arrangement and the Company has sufficient evidence of fair value for 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 revenue among the milestones and the remaining obligations.

In those circumstances where collection of a substantive milestone payment is reasonably assured, the Company has remaining obligations to perform under the collaboration arrangement, and the Company does not have sufficient evidence of fair value for its remaining obligations, management considers the milestone payment and the remaining obligations under the contract as a single unit of accounting. In those circumstances where 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 the agreement, the Company evaluates whether milestones are substantive based on 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.

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**B. Accounting Policies (Continued)**

Royalty revenues are recognized based upon actual and estimated net sales of licensed products in licensed territories, as provided by the licensee, and 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 and these differences have not historically been significant.

*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 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 market 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 2007, 2006 or 2005. Please refer to Note I, "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*

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

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**B. Accounting Policies (Continued)***Stock 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.

*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 other comprehensive income (loss) is a net unrealized gain related to foreign currency translation of \$181,000 at December 31, 2007, a net unrealized gain related to foreign currency translation of \$189,000 at December 31, 2006 and a net unrealized loss related to foreign currency translation of \$18,000 at December 31, 2005.

*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 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 in any year because their effect would have been anti-dilutive. Total potential gross common equivalent shares consisted of the following (in thousands, except per share amounts):

	At December 31,		
	2007	2006	2005
Stock Options	15,358	14,279	14,669
Weighted-average exercise price (per share)	\$ 28.70	\$ 26.44	\$ 22.84
Convertible Notes		4,449	8,354
Weighted-average conversion price (per share)	n/a	\$ 22.87	\$ 19.16
Unvested Restricted Shares	1,676	1,764	1,521

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**VERTEX PHARMACEUTICALS INCORPORATED**

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

**B. Accounting Policies (Continued)**

*New Accounting Pronouncements*

In December 2007, FASB ratified the consensus reached by the Emerging Issues Task Force ("EITF") on EITF Issue 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 that the determination of whether transactions within a collaborative arrangement are part of a vendor-customer (or analogous) relationship subject to EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)." EITF 07-1 will be effective for the Company beginning on January 1, 2009. The Company is currently evaluating the effect of EITF 07-1 on its consolidated financial statements.

In June 2007, FASB ratified the consensus reached by the EITF on 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"). EITF 07-3 addresses the diversity that exists with respect to the accounting for the non-refundable portion of a payment made by a research and development entity for future research and development activities. Under EITF 07-3, an entity would defer and capitalize non-refundable advance payments made for research and development activities until the related goods are delivered or the related services are performed. EITF 07-3 will be effective for the Company beginning on January 1, 2008. The Company is currently evaluating the effect of EITF 07-3 on its consolidated financial statements.

In February 2007, FASB issued 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 provides companies with an option to report selected financial assets and liabilities at fair value. Furthermore, SFAS 159 establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. SFAS 159 will be effective for the Company beginning on January 1, 2008. The adoption of SFAS 159 is not expected to have a material effect on the Company's consolidated financial statements.

In September 2006, FASB issued Statement No. 157, "Fair Value Measurements" ("SFAS 157"). SFAS 157 provides guidance for using fair value to measure assets and liabilities and requires additional disclosure about the use of fair value measures, the information used to measure fair value, and the effect fair value measurements have on earnings. SFAS 157 does not require any new fair value measurements. SFAS 157 will be effective for the Company beginning on January 1, 2008. The adoption of SFAS 157 is not expected to have a material effect on the Company's consolidated financial statements.

**C. Common and Preferred Stock**

*Stock and Option Plans*

At December 31, 2007, the Company had five 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"), the 2006 Stock and Option Plan (the "2006 Plan") and the 2007 New Hire Stock and Option Plan (the "2007 Plan"), and together with the 1991 Plan, the 1994 Plan, the 1996 Plan and the 2006 Plan, collectively, the "Stock and Option Plans", and one Employee

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**C. Common and Preferred Stock (Continued)**

Stock Purchase Plan (the "ESPP"). 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.

As of December 31, 2007, no awards had been made under the 2007 Plan. Under the 2007 Plan, the Company may issue restricted stock and options as inducement grants only to new employees. Stock options may be granted under the 2007 Plan either as ISOs or NQSOs. The 2007 Plan will terminate on June 1, 2008.

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.

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, 7,302,380 shares under the 2006 Plan and 750,000 shares under the 2007 Plan. At December 31, 2007, the Company had approximately 15,358,000 stock options outstanding and approximately 1,676,000 outstanding and unvested restricted shares. At



**VERTEX PHARMACEUTICALS INCORPORATED**

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

**C. Common and Preferred Stock (Continued)**

December 31, 2007, the Company had approximately 1,877,000 shares of common stock available for grants under the 2006 Plan and 750,000 shares of common stock available for grants under the 2007 Plan. At December 31, 2007, no shares were available for grants under the 1991 Plan, the 1994 Plan or the 1996 Plan. As of December 31, 2007, approximately 207,000 shares remained available for future purchases under the ESPP and approximately 46,000 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.

**D. Stock-based Compensation Expense**

*For the years ended December 31, 2007 and 2006*

On January 1, 2006, Vertex adopted SFAS 123(R), using the modified prospective method, pursuant to which the Company applies the provisions of SFAS 123(R) to its consolidated financial statements on a going-forward basis. The modified prospective transition method requires the

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## D. Stock-based Compensation Expense (Continued)

application of the accounting standard as of January 1, 2006, the first day of Vertex's 2006 fiscal year. Prior periods have not been restated. SFAS 123(R) 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 expense, measured at the grant date based on the fair value of the award, is recognized 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 based on the estimated probability that the PARS award will vest as a result of the market condition. For the PARS awards granted in 2006 and 2007, 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) during 2006, Vertex 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.

The effect of recording stock-based compensation expense in 2007 and 2006 was as follows (in thousands):

	2007	2006
Stock-based compensation expense by type of award:		
Stock options	\$ 38,330	\$ 29,804
Restricted shares	18,419	7,065
ESPP	2,658	2,268
<b>Total stock-based compensation expense</b>	<b>\$ 59,407</b>	<b>\$ 39,137</b>
Effect of stock-based compensation expense on income by line item:		
Research and development expenses	\$ 48,833	\$ 32,002
Sales, general and administrative expenses	10,574	7,135
<b>Total stock-based compensation expense</b>	<b>\$ 59,407</b>	<b>\$ 39,137</b>
Cumulative effect of a change in accounting principle SFAS 123(R)		(1,046)
<b>Net stock-based compensation expense included in net loss</b>	<b>\$ 59,407</b>	<b>\$ 38,091</b>

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**D. Stock-based Compensation Expense (Continued)***Stock Options*

All stock options granted during 2007, 2006 and 2005 were granted with exercise prices equal to the fair market value of the Company's common stock on the date of grant and the options had weighted-average grant-date fair values, measured on the grant date, of \$17.45, \$20.08 and \$7.11, respectively.

In accordance with SFAS 123(R), the Company recorded stock-based compensation expense of \$38.3 million and \$29.8 million in 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, 2007, there was \$68.4 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 2.65 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 2007 and 2006 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	<u>2007</u>	<u>2006</u>
Expected stock price volatility	51.95%	57.10%
Risk-free interest rate	4.81%	4.74%
Expected term	5.74 years	5.64 years
Expected annual dividends		

The weighted-average valuation assumptions were determined as follows:

*Expected stock price volatility:* In 2006, the Company changed its method of estimating expected volatility from relying exclusively on historical volatility to relying exclusively on implied 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.

*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.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## D. Stock-based Compensation Expense (Continued)

*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 2007:

	Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
	(In thousands)		(In years)	(In thousands)
Outstanding at December 31, 2006	14,279	\$ 26.44		
Granted	3,407	32.34		
Exercised	(1,743)	15.11		
Forfeited	(437)	27.12		
Expired	(148)	59.40		
Outstanding at December 31, 2007	15,358	\$ 28.70	6.05	\$ 56,782
Exercisable at December 31, 2007	10,236	\$ 27.88	4.77	\$ 49,430
Total exercisable or expected to vest	14,385	\$ 28.58	5.88	\$ 55,392

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, 2007, based on the average of the high and low price of the Company's common stock of \$23.22 on that date.

The total intrinsic value (the amount by which the fair market value exceeded the exercise price) of stock options exercised during 2007, 2006 and 2005 was \$28.3 million, \$63.4 million and \$18.4 million, respectively. The total cash received from employees as a result of employee stock option exercises during 2007, 2006 and 2005 was \$26.3 million, \$46.5 million and \$28.3 million, respectively.

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

*Restricted Stock*

The Company recorded stock-based compensation expense of \$18.4 million, \$7.1 million and \$4.4 million for 2007, 2006 and 2005, respectively, related to restricted shares outstanding during those periods. 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.

As of December 31, 2007, there was \$26.6 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 2.39 years.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## D. Stock-based Compensation Expense (Continued)

The following table summarizes the restricted stock activity of the Company during 2007:

	<b>Restricted Stock</b>	<b>Weighted-Average Grant-Date Fair Value</b>
	(Shares in thousands)	(per Share)
Outstanding and unvested at December 31, 2006	1,764	\$ 18.72
Granted	780	33.46
Vested	(728)	14.93
Cancelled	(140)	25.75
Outstanding and unvested at December 31, 2007	1,676	\$ 26.62

The total fair value of the shares vesting during 2007, 2006 and 2005 (measured on the date of vesting) was \$22.5 million, \$9.9 million and \$4.7 million, respectively.

*Employee Stock Purchase Plan*

The stock-based compensation expense related to the ESPP for 2007 and 2006 was \$2.7 million and \$2.3 million, respectively. As of December 31, 2007, there was \$2.6 million of total unrecognized compensation expense, net of estimated forfeitures, related to ESPP shares. The Company expects to recognize that expense during 2008.

During 2007, the following shares were issued to employees under the ESPP (shares in thousands):

	<b>Year Ended December 31, 2007</b>
Number of shares	300
Average price paid per share	\$ 23.87

The weighted-average fair value of each purchase right granted during 2007, 2006 and 2005 was \$8.45, \$13.07 and \$6.42, respectively. The following table reflects the weighted-average assumptions used in the Black-Scholes valuation model for 2007 and 2006:

	<b>2007</b>	<b>2006</b>
Expected stock price volatility	46.94%	55.84%
Risk-free interest rate	4.03%	4.99%
Expected term	0.70 years	0.75 years
Expected annual dividends		

The expected stock price volatility for ESPP offerings beginning before November 2005 is based on historical volatility, while the volatility for offerings beginning in or after November 2005 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.

*For Periods Prior to the Adoption of SFAS 123(R)*

In accordance with SFAS 148, for periods prior to January 1, 2006, the Company adopted the disclosure-only provisions of SFAS 123 and also applied APB 25 and related interpretations in



## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## D. Stock-based Compensation Expense (Continued)

accounting for all stock awards granted to employees. Under APB 25, provided that other criteria were met, when the exercise price of stock options granted to employees equaled the market price of the common stock on the date of the grant, no compensation expense was recognized. Additionally, under APB 25, the Company was not required to record compensation expense for the cost of options or shares issued under the ESPP. Accordingly, no expense related to options or ESPP shares was recorded in 2005 except for \$0.2 million in stock-based compensation expense related to the acceleration of options in accordance with one executive's severance agreement.

Prior to January 1, 2006, the Company recorded stock-based compensation expense related to restricted stock awards over the related vesting period for an amount equal to the difference between the price per share of restricted stock issued and the fair value of the Company's common stock at the date of grant or issuance. Prior to January 1, 2006, the Company recorded forfeitures of restricted stock as they occurred.

The following table illustrates the effect on net loss and net loss per common share for the year ended December 31, 2005 if the fair value recognition provisions of SFAS 123 had been applied to the Company's stock-based employee compensation in such period. Employee stock-based compensation expense was amortized on a straight-line basis, because the Company's valuation of options subject to SFAS 123 assumed a single weighted-average expected term for each award. Included in employee stock-based compensation expense for the year ended December 31, 2005 is expense related to the modification of certain stock awards in accordance with an officer's severance agreement.

	<u>2005</u>
	(In thousands, except per share amounts)
Net loss attributable to common stockholders, as reported	\$ (203,417)
Add: Employee stock-based compensation expense included in net loss, net of tax	4,632
Deduct: Total stock-based employee compensation expense determined under the fair value based method for all awards, net of tax	(38,217)
	<u>                    </u>
Pro forma net loss	\$ (237,002)
	<u>                    </u>
Basic and diluted net loss per common share, as reported	\$ (2.28)
Basic and diluted net loss per common share, pro forma	\$ (2.66)

The weighted-average fair value of options granted during 2005 was \$7.11. The fair value of each stock option granted during the year ended December 31, 2005 was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	<u>2005</u>
Expected stock price volatility	60.00%
Risk-free interest rate	3.78%
Expected term	4.20 years
Expected annual dividends	

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

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

The weighted-average fair value of purchase rights granted during 2005 was \$6.42. The fair value of each ESPP purchase right outstanding during the year ended December 31, 2005 was estimated on the date of subscription using the Black-Scholes option pricing model with the following weighted-average assumptions

	<u>2005</u>
Expected stock price volatility	59.00%
Risk-free interest rate	3.59%
Expected term	0.43 years
Expected annual dividends	

**E. 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 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 validates its estimates and assumptions through consultations with independent third parties having relevant expertise. The Company uses a credit-adjusted risk-free rate of approximately 10% to discount the



## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## E. Restructuring Expense (Continued)

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 management 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. Because the Company's estimate of the liability includes the application of a discount rate to reflect the time-value of money, the estimate of the liability will increase each quarter simply as a result of the passage of time. Changes to the Company's estimate of the liability are recorded as additional restructuring expense/(credit).

The restructuring liability of \$35.3 million at December 31, 2007 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 \$5.6 million of the total restructuring liability at December 31, 2007 as short-term, and \$29.7 million as long-term. The short-term portion of the restructuring liability represents the net amount the Company expects to pay in 2008.

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.

Activity with respect to the restructuring liability for 2007 was as follows (in thousands):

	Liability as of December 31, 2006	Cash payments in 2007	Cash received from subleases in 2007	Additional charge in 2007	Liability as of December 31, 2007
Lease restructuring liability	\$ 33,073	\$ (12,854)	\$ 7,954	\$ 7,119	\$ 35,292

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.

Activity with respect to the restructuring liability for 2006 was as follows (in thousands):

	Liability as of December 31, 2005	Cash payments in 2006	Cash received from subleases in 2006	Additional charge in 2006	Liability as of December 31, 2006
Lease restructuring liability	\$ 42,982	\$ (21,607)	\$ 8,047	\$ 3,651	\$ 33,073

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

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## E. Restructuring Expense (Continued)

intend to occupy. Activity with respect to the restructuring liability for 2005 was as follows (in thousands):

	Liability as of December 31, 2004	Cash payments in 2005	Cash received from subleases in 2005	Credit for portion of facility Vertex decided to occupy in 2005	Additional charge in 2005	Liability as of December 31, 2005
Lease restructuring liability	\$ 55,843	\$ (24,229)	\$ 3,234	\$ (10,018)	\$ 18,152	\$ 42,982

In 2004, the Company recorded \$17.6 million of restructuring expense, which primarily resulted from the revision of estimates and assumptions about when subtenants would be identified and secured and imputing an interest charge for the related restructuring liability. Activity with respect to the restructuring liability for 2004 was as follows (in thousands):

	Liability as of December 31, 2003	Cash payments in 2004	Cash received from sublease, net of operating costs in 2004	Additional charge in 2004	Liability as of December 31, 2004
Lease restructuring and other operating lease liability	\$ 69,526	\$ (31,550)	\$ 293	\$ 17,574	\$ 55,843

In 2003, the Company recorded restructuring and other related expenses of \$91.8 million. The \$91.8 million includes \$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 (in thousands):

	Charge in 2003	Cash payments in 2003	Non-cash write-off in 2003	Liability as of December 31, 2003
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. Marketable Securities

A summary of cash, cash equivalents and marketable securities is shown below (in thousands):

December 31, 2007	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
<b>December 31, 2007</b>				
(Maturities stated are effective maturities)				
Cash and cash equivalents				
Cash and money market funds	\$ 355,663	\$	\$	\$ 355,663
Total cash and cash equivalents	\$ 355,663	\$	\$	\$ 355,663
Marketable securities				
U.S. government 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 U.S. government 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
<b>December 31, 2006</b>				
(Maturities stated are effective maturities)				
Cash and cash equivalents				
Cash and money market funds	\$ 200,059	\$	\$	\$ 200,059
Corporate debt securities	13,115	1	(4)	13,112
Total cash and cash equivalents	\$ 213,174	\$ 1	\$ (4)	\$ 213,171
Marketable securities				
Municipal bonds, due after 10 years	\$ 1,802	\$	\$	\$ 1,802
U.S. government securities				
Due within 1 year	18,026	4	(136)	17,894
Due after 1 year through 5 years	53,440	51	(389)	53,102
Total U.S. government securities	71,466	55	(525)	70,996
Corporate debt securities				

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December 31, 2007	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Due within 1 year	409,044	169	(240)	408,973
Due after 1 year through 5 years	67,417	49	(656)	66,810
Total corporate debt securities	476,461	218	(896)	475,783
Total marketable securities	\$ 549,729	\$ 273	\$ (1,421)	\$ 548,581
Total cash, cash equivalents and marketable securities	\$ 762,903	\$ 274	\$ (1,425)	\$ 761,752

The Company has marketable securities of \$105.2 million and \$491.5 million classified as current assets on the consolidated balance sheets as of December 31, 2007 and 2006, respectively, and

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## F. Marketable Securities (Continued)

\$6.9 million and \$57.1 million classified as long term-assets on the consolidated balance sheets as of December 31, 2007 and 2006, 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 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, (in thousands):

## 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
U.S. government securities	\$ 36	\$	\$ 8,872	\$ (51)	\$ 8,908	\$ (51)
Corporate debt securities	19,415	(123)	15,577	(87)	34,992	(210)
<b>Total</b>	<b>\$ 19,451</b>	<b>\$ (123)</b>	<b>\$ 24,449</b>	<b>\$ (138)</b>	<b>\$ 43,900</b>	<b>\$ (261)</b>

## 2006

	Less than 12 months		12 months or more		Total	
	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss	Fair Value	Gross Unrealized Loss
U.S. government securities	\$ 19,609	\$ (56)	\$ 34,163	\$ (469)	\$ 53,772	\$ (525)
Corporate debt securities	56,563	(95)	67,517	(805)	124,080	(900)
<b>Total</b>	<b>\$ 76,172</b>	<b>\$ (151)</b>	<b>\$ 101,680</b>	<b>\$ (1,274)</b>	<b>\$ 177,852</b>	<b>\$ (1,425)</b>

The Company owned 92 available-for-sale marketable securities at December 31, 2007. Of these 92 securities, there were 36 securities with unrealized losses.

Unrealized losses in the portfolio relate to various debt securities including U.S. government securities, U.S. government-sponsored enterprise securities, corporate debt securities and asset-backed securities. For these securities, the unrealized losses are primarily due to increases in interest rates. The investments held by the Company are high investment grade and there were no adverse credit events. Because the Company has the ability and intent to hold these investments until a recovery of fair value, which may be maturity, the Company does not consider these investments to be other-than-temporarily impaired as of December 31, 2007 and 2006.



## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**F. Marketable Securities (Continued)**

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. Gross realized gains and losses for 2005 were \$15,000 and \$75,000, respectively.

**G. Restricted Cash**

At December 31, 2007 and 2006, the Company held \$30.3 million in restricted cash. At December 31, 2007 and 2006 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.

**H. Property and Equipment**

Property and equipment consist of the following at December 31 (in thousands):

	2007	2006
Furniture and equipment	\$ 110,043	\$ 97,638
Leasehold improvements	83,059	74,875
Software	26,584	21,274
Computers	20,202	19,733
Total property and equipment, gross	239,888	213,520
Less accumulated depreciation and amortization	173,379	151,985
Total property and equipment, net	\$ 66,509	\$ 61,535

Depreciation and amortization expense for the years ended December 31, 2007, 2006 and 2005 was \$27.3 million, \$25.4 million and \$26.3 million, respectively.

In 2007, 2006 and 2005, 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 \$142,000 for 2007, \$10,000 for 2006 and \$344,000 for 2005.

**I. 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.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**I. Altus Investment (Continued)**

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 condensed 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.

In accordance with the Company's policy, as outlined in Note B, "Accounting Policies," the Company assessed its investment in Altus, which it accounts for using the cost method, and determined that there had not been any adjustments to the fair values of that investment that would require the Company to write down the investment basis of the asset, in 2006 or 2005.

**J. Current Liabilities**

Accrued expenses and other current liabilities consist of the following at December 31 (in thousands):

	2007	2006
Research and development contract costs	\$ 62,464	\$ 57,761
Payroll and benefits	25,783	25,115
Professional fees	5,952	3,848
Other	4,151	4,635
<b>Total</b>	<b>\$ 98,350</b>	<b>\$ 91,359</b>

Other obligations consists of a deposit received from a collaborator for potential future obligations of the Company.

**K. Commitments**

The Company leases its facilities and certain equipment under non-cancelable operating leases. The Company's leases have terms through April 2018. 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 2008 and May 2013, based on changes in an inflation index. These increases are treated as contingent rentals. The Company had an obligation under the Kendall Square Lease, staged through 2006, to build-out the space into finished laboratory and office space. This 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 E, "Restructuring Expense" for further information.



## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## K. Commitments (Continued)

At December 31, 2007, future minimum commitments under facility operating leases with non-cancelable terms of more than one year (including commitments under the Kendall Square Lease) are as follows (in thousands):

Year	Kendall Square Lease	Sublease income for Kendall Square Facility	Other Operating Leases	Total Operating Leases
2008	\$ 24,047	\$ (8,156)	\$ 17,767	\$ 33,658
2009	24,725	(8,156)	17,976	34,545
2010	24,725	(8,156)	17,780	34,349
2011	24,725	(4,466)	4,119	24,378
2012	24,725	(1,747)	3,799	26,777
Thereafter	142,043		2,585	144,628
Total minimum lease payments	\$ 264,990	\$ (30,681)	\$ 64,026	\$ 298,335

Rental expense for 2007 was \$28.1 million, which included \$9.9 million related to the Kendall Square Facility. Rental expense for 2006 was \$26.7 million, which included \$9.5 million related to the Kendall Square Facility. Rental expense for 2005 was \$20.4 million, which included \$4.7 million related to the space in the Kendall Square Facility that the Company occupied in 2006 in the Kendall Square Facility.

The Company has future contractual commitments in connection with its research and development programs. For 2008 and 2009 the amount committed under these contracts is \$4.5 million and \$0.5 million, respectively.

## L. Convertible Subordinated Notes

On January 1, 2005, the Company had outstanding \$232.4 million in aggregate principal amount of 5.75% Convertible Senior Subordinated Notes due in February 2011 (the "2011 Notes") and \$82.6 million in aggregate principal amount of 5% Convertible Subordinated Notes due in September 2007 (the "2007 Notes"). As of December 31, 2007, there were no remaining 2011 Notes or 2007 Notes outstanding.

The 2011 Notes were convertible, at the option of the holder, into common stock at a price equal to \$14.94 per share. The 2011 Notes bore interest at the rate of 5.75% per annum, and the Company was required to make semi-annual interest payments on the outstanding principal balance of the 2011 Notes on February 15 and August 15 of each year. The 2007 Notes were convertible, at the option of the holder, into common stock at a price equal to \$92.26 per share. The 2007 Notes bore interest at the rate of 5% per annum, and the Company was required to make semi-annual interest payments on the outstanding principal balance of the 2007 Notes on March 19 and September 19 of each year.

In the third quarter of 2005, the Company exchanged approximately 2.5 million shares of newly issued common stock for \$40.5 million in aggregate principal amount of then outstanding 2007 Notes, plus accrued interest. As a result of the exchange, the Company incurred a non-cash charge of \$36.3 million in 2005. This charge is related to the incremental shares issued in the transaction over the number that would have been issued upon conversion of the 2007 Notes under their original terms, at the original conversion price of \$92.26 per share.

In the fourth quarter of 2005, the Company exchanged approximately 8.1 million shares of newly issued common stock for \$114.5 million in aggregate principal amount of then outstanding 2011 Notes,

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**L. Convertible Subordinated Notes (Continued)**

plus accrued interest. As a result of the exchange, the Company incurred a non-cash charge of \$11.9 million in 2005. This charge is related to the incremental shares issued in the transaction over the number that would have been issued upon conversion of the 2011 Notes under their original terms, at the original conversion price of \$14.94 per share.

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 accrued interest. As a result of this exchange, the Company incurred a non-cash charge of \$5.2 million in 2006. This charge is related to the incremental 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 2005 and 2006 exchanges 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, 2006 and 2005, \$0.2 million, \$0.5 million, \$1.0 million, respectively, was amortized to interest expense for the issuance costs of the then outstanding 2007 Notes and the 2011 Notes.

**M. Equity Offerings**

In September 2006, the Company completed a public offering of 10,000,000 shares of common stock, including the underwriters' over-allotment of 900,000 shares, at a price of \$33.00 per share. This transaction resulted in net proceeds of \$313.7 million to the Company.

In June 2005, the Company completed a public offering of 13,512,500 shares of common stock, including the underwriters' over-allotment of 1,762,500 shares, at a price of \$13.00 per share. This transaction resulted in net proceeds of \$165.4 million to the Company.

**N. Income Taxes**

For the years ended December 31, 2007, 2006 and 2005, there is no provision for income taxes included in the consolidated statements of operations.

The Company's federal statutory income tax rate for 2007, 2006 and 2005 was 34%. The Company has incurred losses from operations but has not recorded an income tax benefit for 2007, 2006 and 2005, 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.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## N. Income Taxes (Continued)

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 (in thousands):

	2007	2006	2005
Loss before provision for income taxes	\$ (391,279)	\$ (206,891)	\$ (203,417)
Expected tax benefit at 34%	\$ (133,035)	\$ (70,343)	\$ (69,162)
State taxes, net of federal benefit	(24,533)	(12,972)	(12,754)
Unbenefited operating losses	157,337	81,593	64,262
Non-deductible expenses	91	1,817	17,450
Other	140	(95)	204
Income tax provision	\$	\$	\$

For federal income tax purposes, as of December 31, 2007, the Company has net operating loss carryforwards of approximately \$1.5 billion, and \$38.6 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 \$982.6 million, and \$24.4 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 2007 deferred tax asset since it is more likely than not that the deferred tax asset will not be realized.

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 (in thousands):

	2007	2006
Deferred Tax Assets:		
Net operating loss	\$ 438,044	\$ 352,014
Tax credit carryforwards	54,723	39,981
Property and equipment	17,724	16,130
Deferred revenues	51,040	343
Stock-based compensation	26,613	15,761
Capitalized research and development	9,711	15,591
Accrued expenses and other	15,833	12,580
Gross Deferred Tax Assets	613,688	452,400
Valuation Allowance	(602,630)	(441,342)
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



**VERTEX PHARMACEUTICALS INCORPORATED**

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

**N. Income Taxes (Continued)**

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. Prior to adoption, the Company recognized deferred tax assets, along with an offsetting valuation allowance, for net operating loss carryforwards that included deductions for excess tax benefits from stock-based compensation. On adoption, the Company has chosen to derecognize the deferred tax asset for these excess tax deductions in the net operating loss carryforwards, along with the offsetting valuation allowance, adjusting the prior year footnote information accordingly. The net tax amount of the unrealized excess tax benefits as of December 31, 2007, no longer included and disclosed as a deferred tax asset, is approximately \$111.7 million. The gross amount of this excess tax deduction in the net operating loss carryforward is approximately \$248.0 million.

The valuation allowance increased by \$161.3 million during 2007 due primarily to the increase in net operating losses from operations and tax credits.

The Company adopted FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" an interpretation of FASB Statement No. 109 ("FIN 48") on January 1, 2007. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, "Accounting for Income Taxes." FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

At the adoption date and as of 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's practice was and continues to be to recognize interest and penalty expenses related to uncertain tax positions in income tax expense, which were zero at the adoption date and for the year ended December 31, 2007. Tax years 2004 through 2006 and 2003 through 2006 are subject to examination by the federal and state taxing authorities, respectively. There are no income tax examinations currently in process.

**O. 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.

*Collaborative Research, Development and Commercialization Agreements*

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

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**O. Significant Revenue Arrangements (Continued)**

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 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. 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, 2007, the Company had earned \$45.0 million of these contingent milestone payments under the agreement. 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.

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 of \$15.0 million in connection with commencement of patient enrollment in PROVE 3, a milestone 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.

*GlaxoSmithKline plc*

In December 1993, the Company and GlaxoSmithKline entered into a collaboration agreement to research, develop and commercialize HIV protease inhibitors, including Agenerase (amprenavir), Lexiva/Telzir (fosamprenavir calcium) and brecanavir (VX-385). Under the collaboration agreement, GlaxoSmithKline agreed to pay the Company an up-front license payment, product research funding, development and commercialization milestone payments and royalty payments 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. In the fourth quarter of 2004, GlaxoSmithKline paid the Company a milestone payment of \$1 million based on the initiation of Phase 2 clinical trials for brecanavir. In the third quarter of 2004, GlaxoSmithKline paid the Company a milestone payment of \$1.5 million in connection with the regulatory approval of Telzir in the European Union.

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**O. Significant Revenue Arrangements (Continued)**

On December 15, 2006, GlaxoSmithKline formally notified the Company that it would discontinue clinical development of brecaonavir (VX-385), which had advanced to Phase 2 clinical trials. Currently, there are no drug candidates being developed under this collaboration and the Company does not anticipate any additional research funding or milestone payments under this collaboration. Under the original agreement, GlaxoSmithKline had exclusive rights to develop and commercialize Vertex's HIV protease inhibitors in all parts of the world except the Far East. In 2003, the Company amended the agreement to add the Far East to GlaxoSmithKline's territory for development and commercialization of Lexiva/Telzir. The Company has retained certain bulk drug manufacturing rights and certain product educational rights in territories licensed to GlaxoSmithKline. GlaxoSmithKline has the right to terminate its arrangement with the Company without cause upon twelve months' notice. Termination of the agreement by GlaxoSmithKline will relieve it of its obligation to make further payments to the Company and will end any license granted to GlaxoSmithKline by Vertex 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. The Company pays Searle a royalty based on net sales of Agenerase and Lexiva/Telzir.

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. Development under the collaborative agreement terminated in the fourth quarter of 2007. Vertex received a \$20 million up-front license payment.

Revenues and royalties earned from GlaxoSmithKline under both agreements were \$48.0 million, \$43.6 million and \$52.8 million in 2007, 2006 and 2005, respectively.

*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 the drug discovery effort to March 31, 2008 and to include additional development stage funding for specified VX-770 development activities through the end of 2007. The agreement, as amended, provides that CFFT would pay up to \$32.4 million to Vertex for research and development activities. Under the amended agreement, Vertex retains the right to develop and commercialize VX-770 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 2007, 2006 and 2005, Vertex recognized \$15.9 million, \$12.6 million and \$14.5 million, respectively, in revenues related to its agreement with CFFT. CFFT has the right to terminate the agreement without cause upon 60 days' prior written notice.

*Merck & Co., Inc.*

In June 2004, Vertex entered into a global collaboration with Merck to develop and commercialize MK-0457 (VX-680), an Aurora kinase inhibitor, and additional follow-on compound(s), 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,

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**O. Significant Revenue Arrangements (Continued)**

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, including up to \$130 million for the successful development of MK-0457 (VX-680) in the first oncology indication and additional milestone payments for development of MK-0457 (VX-680) and follow-on compounds in other major oncology indications.

In November 2007, Merck suspended enrollment in clinical trials of MK-0457 (VX-680), pending a full analysis of all efficacy and safety data for MK-0457 (VX-680). The decision was based on preliminary safety data, in which a clinical safety finding of QTc prolongation was observed in one patient. Patients enrolled in the clinical trials of MK-0457 (VX-680), may continue to be treated with MK-0457 (VX-680), with additional monitoring for QTc prolongation. In 2007, Merck ceased development of MK-6592 (VX-667), a follow-on compound, that Merck had selected for development in 2005. 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. In 2007, Vertex received one additional milestone payment from Merck for \$9.0 million. In 2006, Vertex received three additional milestone payments from Merck totaling \$36.3 million. In 2005, Vertex received two milestone payments from Merck totaling \$19.5 million. Vertex recognized \$9.0 million, \$58.7 million and \$24.4 million of revenues related to research support, milestone payments and the up-front license payment for this collaboration in 2007, 2006 and 2005, respectively.

*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 up to \$200 million in research funding through April 2006, and to loan the Company up to \$200 million 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. Novartis held an option to develop drug candidates meeting certain pre-agreed criteria. Restrictions under the original agreement that limited Novartis' right to pursue kinase research and development outside the collaboration were removed, and the development loan facility was terminated. 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 November 2004, Novartis accepted VX-322 for preclinical development and made a \$10 million milestone payment to Vertex that was recognized as revenue over the term of the contract. Novartis had exclusive worldwide development, manufacturing and commercialization rights to VX-322. That compound is no longer in development by Novartis, and Novartis's worldwide development, manufacturing and commercialization rights to VX-322 have terminated.



**VERTEX PHARMACEUTICALS INCORPORATED**

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

**O. Significant Revenue Arrangements (Continued)**

In June 2004, the Company exercised its option under the amended agreement to develop MK-0457 (VX-680), and the Aurora kinases it targets, outside the Novartis collaboration and repaid \$12.5 million of unspent and uncommitted development loans previously advanced on account of MK-0457 (VX-680).

In 2006 and 2005, the Company recognized \$17.6 million and \$53.1 million, respectively, in revenues under this agreement. At December 31, 2007, there were \$20.0 million in remaining loans outstanding under the loan facility. These loans are repayable, without interest, in May 2008.

*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 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 up to \$33 million in 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. Further cost sharing beyond Phase 2 clinical development will be determined by Mitsubishi Tanabe and Vertex based on the design of registration studies for telaprevir. 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. In the fourth quarter of 2004, Mitsubishi Tanabe paid the Company a milestone payment of \$4.0 million for first dosing of telaprevir in a patient in the Phase 1b clinical trial in the United States. In the third quarter of 2006, Mitsubishi Tanabe paid the Company a milestone payment of \$3.0 million for the first dosing of telaprevir in a patient by Mitsubishi Tanabe in the Mitsubishi Tanabe territory. Vertex recognized \$4.4 million, \$8.6 million and \$3.4 million in revenues under this agreement in 2007, 2006 and 2005, 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.

*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. Under the terms of the agreement, Kissei agreed to pay the Company up to \$22 million comprised of a \$4 million up-front license payment, \$11 million of product research funding over three years and \$7 million of development and commercialization milestone payments. Additionally, Kissei agreed to reimburse the Company for certain development costs, including a portion of costs for Phase 2 trials of VX-702. Research funding ended under this program in June 2000, and the Company has received the full amount of research funding specified under the agreement. In 2007, 2006 and 2005, approximately \$3.8 million, \$6.4 million and \$7.3 million, respectively, was recognized as revenues under this agreement. The \$7.3 million of revenues recognized in 2005 includes a \$2.5 million milestone paid upon Kissei's completion of regulatory filings in preparation for Phase 1 clinical development of VX-702 in Japan. In 2007, the Company concluded its agreement with Kissei for the development and commercialization of VX-702 in the Far East. The Company retains worldwide development and commercial rights to VX-702.

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

**P. 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 the form of 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 (in thousands):

	2007	2006	2005
Discretionary matching contributions during the year ended December 31,	\$ 4,340	\$ 3,341	\$ 2,894
Shares issued during the year ended December 31,	133	91	215
Shares issuable as of the year ended December 31,	48	28	19

**Q. Related Party Transactions**

As of December 31, 2006, the Company had a loan outstanding to a former officer of the Company in the amount of \$36,000, which was initially advanced in April 2002. In 2007, the former officer of the Company repaid the loan in full. The loan balance is included in other assets on the consolidated balance sheets.

In 2001, the Company entered into a four year consulting agreement with a director of the Company for the provision of part-time consulting services over a period of four years, at the rate of \$80,000 per year commencing in January 2002. The consulting agreement terminated in January 2006.

**R. 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, 2007 or 2006.

**S. Guarantees**

As permitted under Massachusetts law, Vertex'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 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 and development collaboration agreements. With respect to the Company's clinical trials and

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**S. Guarantees (Continued)**

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 February 10, 2004, Vertex entered into a Dealer Manager Agreement with UBS Securities LLC in connection with the exchange of approximately \$153.1 million of the February 2011 Notes for approximately \$153.1 million of 2007 Notes. On September 13, 2004, the Company entered into a second Dealer Manager Agreement with UBS Securities in connection with the exchange of approximately \$79.3 million of the September 2011 Notes for approximately \$79.3 million of 2007 Notes. Each of the Dealer Manager Agreements requires the Company to indemnify UBS Securities against any loss UBS Securities may suffer by reason of the Company's breach of representations and warranties relating to the exchanges of the convertible notes, the Company's failure to perform certain covenants in those agreements, the inclusion of any untrue statement of material fact in the disclosure materials provided to potential investors in the 2011 Notes, 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 exchanges. The representations, warranties and covenants in the Dealer Manager Agreements are of a type customary in agreements of this sort. The Company believes the estimated fair value of these indemnification obligations is minimal.

**VERTEX PHARMACEUTICALS INCORPORATED**

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

**S. Guarantees (Continued)**

On June 7, 2005 and September 14, 2006, the Company entered into Purchase Agreements with Merrill Lynch, Pierce, Fenner & Smith Incorporated, as the representative of the several underwriters named in such agreements, relating to the public offering and sale of shares of the Company's common stock. The Purchase Agreement relating to each offering requires the Company to indemnify the underwriters 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 Purchase Agreement are of a type customary in agreements of this sort. The Company believes the estimated fair value of these indemnification obligations is minimal.

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## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## T. Quarterly Financial Data (unaudited)

(In thousands, except per share amounts)

	Three Months Ended			
	March 31, 2007	June 30, 2007	Sept. 30, 2007	Dec. 31, 2007
<b>Revenues:</b>				
Royalties	\$ 9,796	\$ 10,967	\$ 12,522	\$ 14,688
Collaborative and other research and development revenues	59,014	27,229	28,492	36,304
<b>Total revenues</b>	<b>68,810</b>	<b>38,196</b>	<b>41,014</b>	<b>50,992</b>
<b>Costs and expenses:</b>				
Royalty payments	3,269	3,401	3,562	3,672
Research and development expenses	132,578	136,187	128,949	115,340
Sales, general and administrative expenses	16,537	23,322	21,416	23,452
Restructuring expense	5,055	906	882	276
<b>Total costs and expenses</b>	<b>157,439</b>	<b>163,816</b>	<b>154,809</b>	<b>142,740</b>
<b>Loss from operations</b>	<b>(88,629)</b>	<b>(125,620)</b>	<b>(113,795)</b>	<b>(91,748)</b>
Interest income	9,122	8,423	7,256	5,997
Interest expense	(1,221)	(570)	(494)	
<b>Loss before cumulative effect of a change in accounting principle</b>	<b>(80,728)</b>	<b>(117,767)</b>	<b>(107,033)</b>	<b>(85,751)</b>
Cumulative effect of a change in accounting principle SFAS 123(R)				
<b>Net loss</b>	<b>\$ (80,728)</b>	<b>\$ (117,767)</b>	<b>\$ (107,033)</b>	<b>\$ (85,751)</b>
<b>Basic and diluted loss before cumulative effect of a change in accounting principle per common share</b>	<b>\$ (0.64)</b>	<b>\$ (0.91)</b>	<b>\$ (0.82)</b>	<b>\$ (0.66)</b>
<b>Basic and diluted cumulative effect of a change in accounting principle per common share</b>				
<b>Basic and diluted net loss per common share</b>	<b>\$ (0.64)</b>	<b>\$ (0.91)</b>	<b>\$ (0.82)</b>	<b>\$ (0.66)</b>
<b>Basic and diluted weighted-average number of common shares outstanding</b>	<b>125,756</b>	<b>129,269</b>	<b>130,006</b>	<b>130,741</b>

## VERTEX PHARMACEUTICALS INCORPORATED

## Notes to Consolidated Financial Statements (Continued)

## T. Quarterly Financial Data (unaudited) (Continued)

	Three Months Ended			
	March 31, 2006	June 30, 2006	Sept. 30, 2006	Dec. 31, 2006
<b>Revenues:</b>				
Royalties	\$ 9,179	\$ 9,005	\$ 10,902	\$ 12,122
Collaborative and other research and development revenues	29,908	20,721	42,387	82,132
Total revenues	39,087	29,726	53,289	94,254
<b>Costs and expenses:</b>				
Royalty payments	2,995	2,885	3,113	3,177
Research and development expenses	75,202	91,250	96,115	109,146
Sales, general and administrative expenses	12,879	14,370	14,773	15,838
Restructuring expense	767	443	1,415	1,026
Total costs and expenses	91,843	108,948	115,416	129,187
Loss from operations	(52,756)	(79,222)	(62,127)	(34,933)
Interest income	3,980	3,921	5,330	9,793
Interest expense	(2,357)	(2,357)	(1,767)	(1,474)
Realized gain (loss) on sale of investment			7,663	(730)
Unrealized gain on warrants			4,250	
Loss on exchange of convertible subordinated notes			(5,151)	
Loss before cumulative effect of a change in accounting principle	(51,133)	(77,658)	(51,802)	(27,344)
Cumulative effect of a change in accounting principle SFAS 123(R)	1,046			
Net loss	\$ (50,087)	\$ (77,658)	\$ (51,802)	\$ (27,344)
Basic and diluted loss before cumulative effect of a change in accounting principle per common share	\$ (0.48)	\$ (0.72)	\$ (0.46)	\$ (0.22)
Basic and diluted cumulative effect of a change in accounting principle per common share	0.01			
Basic and diluted net loss per common share	\$ (0.47)	\$ (0.72)	\$ (0.46)	\$ (0.22)
Basic and diluted weighted-average number of common shares outstanding	107,440	108,523	112,803	123,942

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