GENENTECH INC
Form 10-K
February 20, 2009

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

FORM 10-K

(Mark One)

þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2008

or

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

For the transition period from to

Commission file number: 1-9813

GENENTECH, INC.
(Exact name of registrant as specified in its charter)

Delaware	94-2347624
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1 DNA Way, South San Francisco, California	94080
(Address of principal executive offices)	(Zip Code)

(650) 225-1000
(Registrant's telephone number, including area code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $0.02 par value	New York Stock Exchange

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the

Act. Yes o No þ

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 þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of 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. o

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

Large accelerated filer þ	Accelerated filer o
Non-accelerated filer o	Smaller reporting company o

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

The aggregate market value of Common Stock held by non-affiliates as of June 30, 2008 was $35,103,983,241.(A) All executive officers and directors of the registrant and Roche Holdings, Inc. have been deemed, solely for the purpose of the foregoing calculation, to be "affiliates" of the registrant.

Number of shares of Common Stock outstanding as of February 6, 2009: 1,053,413,655

Documents incorporated by reference:

Portions of the Definitive Proxy Statement with respect to the 2009 Annual Meeting of Stockholders to be filed by Genentech, Inc. with the Securities and Exchange Commission (hereinafter referred to as "Proxy Statement")	Part III

(A) Excludes 587,253,150 shares of Common Stock held by directors and executive officers of Genentech and Roche Holdings, Inc.

GENENTECH, INC.

2008 Form 10-K Annual Report

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In this report, “Genentech,” “we,” “us,” and “our” refer to Genentech, Inc. and its consolidated subsidiaries. “Common Stoc refers to Genentech’s Common Stock, par value $0.02 per share; “Special Common Stock” refers to Genentech’s callable putable common stock, par value $0.02 per share, all of which was redeemed by Roche Holdings, Inc. (RHI) on June 30, 1999.

We own or have rights to various copyrights, trademarks, and trade names used in our business, including the following: Activase® (alteplase, recombinant) tissue-plasminogen activator; Avastin® (bevacizumab) anti-VEGF antibody; Cathflo® Activase® (alteplase for catheter clearance); Genentech®; Herceptin® (trastuzumab) anti-HER2 antibody; Lucentis® (ranibizumab) anti-VEGF antibody fragment; Nutropin® (somatropin [rDNA origin] for injection) growth hormone; Nutropin AQ® and Nutropin AQ Pen® (somatropin [rDNA origin] for injection) liquid formulation growth hormone; Pulmozyme® (dornase alfa, recombinant) inhalation solution; Raptiva® (efalizumab) anti-CD11a antibody; and TNKase® (tenecteplase) single-bolus thrombolytic agent. Rituxan® (rituximab) anti-CD20 antibody is a registered trademark of Biogen Idec Inc.; Tarceva® (erlotinib) is a registered trademark of OSI Pharmaceuticals, Inc.; and Xolair® (omalizumab) anti-IgE antibody is a registered trademark of Novartis AG. This report also includes other trademarks, service marks, and trade names of other companies.

PART I

Item 1. BUSINESS

Overview

Genentech is a leading biotechnology company that discovers, develops, manufactures, and commercializes medicines for patients with significant unmet medical needs. A number of the currently approved biotechnology products originated from or are based on Genentech science. We commercialize multiple biotechnology products and also receive royalties from companies that are licensed to market products based on our technology. See “Marketed Products” and “Licensed Products” below. Genentech was organized in 1976 as a California corporation and was reincorporated in Delaware in 1987.

Marketed Products

We commercialize the pharmaceutical products listed below in the United States (U.S.):

Avastin (bevacizumab) is an anti-VEGF (vascular endothelial growth factor) humanized antibody approved for use in combination with intravenous 5-fluorouracil-based chemotherapy as a treatment for patients with first- or second-line metastatic cancer of the colon or rectum. It is also approved for use in combination with carboplatin and paclitaxel chemotherapy for the first-line treatment of unresectable, locally advanced, recurrent or metastatic non-squamous non-small cell lung cancer (NSCLC). On February 22, 2008, we received accelerated approval from the U.S. Food and Drug Administration (FDA) to market Avastin in combination with paclitaxel chemotherapy for the treatment of patients who have not received prior chemotherapy for metastatic human epidermal growth factor receptor 2 (HER2)-negative breast cancer (BC).

Rituxan (rituximab) is an anti-CD20 antibody that we commercialize with Biogen Idec Inc. It is approved for the treatment of patients with relapsed or refractory, low-grade or follicular, CD20-positive, B-cell non-Hodgkin’s lymphoma (NHL) as a single agent. Rituxan is also approved for patients with previously untreated follicular, CD20-positive, B-cell NHL in combination with cyclophosphamide, vincristine, and prednisone (CVP) chemotherapy. Rituxan is indicated for patients with non-progressing (including stable disease), low-grade, CD20-positive, B-cell NHL, as a single agent, after first-line CVP chemotherapy. Rituxan is also indicated for patients with previously untreated diffuse large B-cell, CD20-positive NHL in combination with cyclophosphamide, doxorubicin, vincristine, and prednisone (CHOP) or other anthracycline-based chemotherapy regimens. Rituxan is also indicated for use in combination with methotrexate to reduce signs and symptoms and slow the progression of structural damage in adult patients with moderate-to-severe rheumatoid arthritis (RA) who have had an inadequate response to one or more tumor necrosis factor (TNF) antagonist therapies.

Herceptin (trastuzumab) is a humanized anti-HER2 antibody approved for treatment of patients with node-positive or node-negative early-stage BC, whose tumors overexpress the HER2 protein, as part of an adjuvant treatment regimen containing 1) doxorubicin, cyclophosphamide, and either paclitaxel or docetaxel or 2) docetaxel and carboplatin, and as a single agent following multi-modality anthracycline-based adjuvant therapy. It is also approved for use as a first-line metastatic BC therapy in combination with paclitaxel and as a single agent in patients who have received one or more chemotherapy regimens for metastatic disease.

Lucentis (ranibizumab) is an anti-VEGF antibody fragment approved for the treatment of neovascular (wet) age-related macular degeneration (AMD).

Xolair (omalizumab) is a humanized anti-IgE (immunoglobulin E) antibody that we commercialize with Novartis Pharma AG. Xolair is approved for adults and adolescents (age 12 or older) with moderate-to-severe persistent asthma who have a positive skin test or in vitro reactivity to a perennial aeroallergen and whose symptoms are inadequately controlled with inhaled corticosteroids.

Tarceva (erlotinib), which we commercialize with OSI Pharmaceuticals, Inc., is a small-molecule tyrosine kinase inhibitor of the HER1/epidermal growth factor receptor signaling pathway. Tarceva is approved for the treatment of patients with locally advanced or metastatic NSCLC after failure of at least one prior chemotherapy regimen. It is also approved, in combination with gemcitabine chemotherapy, for the first-line treatment of patients with locally advanced, unresectable, or metastatic pancreatic cancer.

Nutropin (somatropin [rDNA origin] for injection) and Nutropin AQ are growth hormone products approved for the treatment of growth hormone deficiency in children and adults, growth failure associated with chronic renal insufficiency prior to kidney transplantation, short stature associated with Turner syndrome, and long-term treatment of idiopathic short stature.

Activase (alteplase) is a tissue-plasminogen activator (t-PA) approved for the treatment of acute myocardial infarction (heart attack), acute ischemic stroke (blood clots in the brain) within three hours of the onset of symptoms, and acute massive pulmonary embolism (blood clots in the lungs).

TNKase (tenecteplase) is a modified form of t-PA approved for the treatment of acute myocardial infarction.

Cathflo Activase (alteplase, recombinant) is a t-PA approved in adult and pediatric patients for the restoration of function to central venous access devices that have become occluded due to a blood clot.

Pulmozyme (dornase alfa, recombinant) is an inhalation solution of deoxyribonuclease I, approved for the treatment of cystic fibrosis.

Raptiva (efalizumab) is a humanized anti-CD11a antibody approved for the treatment of chronic moderate-to-severe plaque psoriasis in adults age 18 or older who are candidates for systemic therapy or phototherapy.

Licensed Products

Royalty Revenue

The majority of our royalty revenue is derived from sales of our products outside of the U.S., and the majority of these product sales are made by our related parties, Roche Holding AG and affiliates (Roche) and Novartis Pharma AG and affiliates (Novartis). These licensed products are sometimes sold under different trademarks or trade names. Royalty revenue from our related parties represented 71% of our total royalty revenue in 2008, and resulted from the sales of our licensed products that are presented in the following table:

Product	Trade Name	Licensee	Licensed Territory
Trastuzumab	Herceptin	Roche	Worldwide excluding U.S.
Rituximab	Rituxan/MabThera®	Roche	Worldwide excluding U.S. and Japan
Bevacizumab	Avastin	Roche	Worldwide excluding U.S.
Dornase alfa, recombinant	Pulmozyme	Roche	Worldwide excluding U.S.
Alteplase and Tenecteplase	Activase and TNKase	Roche	Canada
Somatropin	Nutropin	Roche	Canada

Daclizumab	Zenapax®	Roche	Worldwide excluding U.S.
Ranibizumab	Lucentis	Novartis	Worldwide excluding U.S.
Omalizumab	Xolair	Novartis	Worldwide excluding U.S.(1)

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(1) These royalties are earned as a result of our 2007 acquisition of Tanox, Inc.

Our remaining royalty revenue is derived from license agreements with companies that sell and/or manufacture products based on technology developed by us, or intellectual property to which we have rights. In 2008, approximately 40% of this remaining royalty revenue related to the Cabilly patent. See Item 3, "Legal Proceedings," below for information regarding certain Cabilly patent-related legal matters, including the status of the Cabilly patent reexamination and the Centocor, Inc. (a wholly-owned subsidiary of Johnson & Johnson) litigation.

Products in Development

Our product development efforts, including those of our collaborators, cover a wide range of medical conditions, including cancer and immune diseases. Below is a summary of products and current stages of development. For additional information on our development pipeline, visit our website at www.gene.com.

Product	Description
Awaiting FDA Action	
Avastin	A Supplemental Biologic License Application (sBLA) was submitted to the FDA on September 30, 2008 for the use of Avastin in combination with Interferon alpha-2a for the treatment of patients with advanced renal cell carcinoma. This product is being developed in collaboration with Roche. The FDA action date is August 1, 2009.
Avastin	An sBLA was submitted to the FDA on October 31, 2008 for the use of Avastin as a single agent in previously treated patients with glioblastoma. This product is being developed in collaboration with Roche. The FDA action date is May 5, 2009.
Rituxan	An sBLA was submitted to the FDA on September 15, 2008 for the treatment of patients with moderate-to-severe active RA who have had an inadequate response to disease-modifying anti-rheumatic drugs (DMARDs). This product is being developed in collaboration with Roche and Biogen Idec. The FDA action date is July 17, 2009.
Xolair	An sBLA was submitted for pediatric patients (aged 6-12) with asthma on December 5, 2008. This product is being developed in collaboration with Novartis. The FDA action date is October 8, 2009.
Preparing for Filing	
Avastin	We are preparing to submit two additional studies (AVADO and RIBBON I) to the FDA for the first-line treatment of metastatic HER2-negative BC. The filings, expected by June 30, 2009, are required as part of the accelerated approval that we received from the FDA on February 22, 2008. This product is being developed in collaboration with Roche.
Tarceva	OSI Pharmaceuticals, in collaboration with Genentech and Roche, is preparing to submit a supplemental New Drug Application (sNDA) to the FDA for the use of Tarceva in first-line maintenance therapy for advanced NSCLC following initial treatment with platinum-based

	chemotherapy. This product is being developed in collaboration with OSI Pharmaceuticals and Roche. We expect to submit the sNDA in the first half of 2009.
Rituxan	We are in discussions with the FDA regarding the submission requirements for potential sBLAs for the use of Rituxan in combination with fludarabine and cyclophosphamide chemotherapy in frontline and relapsed CD20-positive chronic lymphocytic leukemia (CLL). This product is being developed in collaboration with Roche and Biogen Idec.

Phase III	
Ocrelizumab (2nd Generation anti-CD20)	Ocrelizumab is being evaluated in RA and for lupus nephritis. This product is being developed in collaboration with Roche and Biogen Idec(1).
Avastin	Avastin is being evaluated in adjuvant colon cancer, diffuse large B-cell lymphoma, first-line advanced gastric cancer, adjuvant HER2-negative BC, adjuvant lung cancer, first-line ovarian cancer, and hormone refractory prostate cancer in collaboration with Roche. Avastin is also being evaluated in gastrointestinal stromal tumors, high-risk carcinoid cancer, second-line HER2-negative metastatic BC in combination with several chemotherapy regimens, first-line metastatic BC in combination with endocrine therapy, and platinum-sensitive relapsed ovarian cancer.
Herceptin +/- Avastin	The combination of Avastin and Herceptin is being evaluated in first-line metastatic and adjuvant HER2-positive BC. These products are being developed in collaboration with Roche.
Avastin +/- Tarceva	We announced that a Phase III study evaluating Tarceva in combination with Avastin as maintenance therapy following initial treatment with Avastin plus chemotherapy in advanced NSCLC met its primary endpoint of progression-free survival, and was stopped early on the recommendation of an independent data safety monitoring board after a pre-planned interim analysis. We are evaluating the submission requirements for a potential sNDA for the use of Avastin and Tarceva as combination therapy in first-line NSCLC maintenance. This study was conducted in collaboration with Roche.
Herceptin	Herceptin is being evaluated for the treatment of patients with early-stage HER2-positive BC to compare one year duration of treatment with two years duration of treatment. This product is being developed in collaboration with Roche.
Herceptin +/- Pertuzumab	Pertuzumab is being evaluated in first-line HER2-positive metastatic BC in combination with Herceptin and chemotherapy. This product is being developed in collaboration with Roche.
Rituxan	Rituxan is being evaluated in follicular NHL patients who achieve a response following induction with chemotherapy plus Rituxan. This product is being developed in collaboration with Roche and Biogen Idec.
Rituxan	Rituxan is being evaluated for the first-line treatment of patients with moderate-to-severe active RA in collaboration with Roche and Biogen Idec. Rituxan is also being evaluated in lupus nephritis and ANCA-associated vasculitis in collaboration with Biogen Idec.

Tarceva	Tarceva is being evaluated in adjuvant NSCLC. This product is being developed in collaboration with OSI Pharmaceuticals and Roche.
TNKase	TNKase is being evaluated in the treatment of dysfunctional hemodialysis and central venous access catheters.
Xolair	A liquid formulation of Xolair is being evaluated for adult asthma. Xolair is also being evaluated in patients with asthma that is not controlled with high-dose inhaled corticosteroids and long–acting beta-agonists. Xolair is being developed in collaboration with Novartis.
Lucentis	Lucentis is being evaluated in the treatment of diabetic macular edema in collaboration with Novartis Ophthalmics. Lucentis is also being evaluated in the treatment of retinal vein occlusion.

Preparing for Phase III	
Avastin	We are preparing for Phase III clinical trials in first-line glioblastoma multiforme. This product is being developed in collaboration with Roche.
Trastuzumab-DM1	We are preparing for Phase III clinical trials in second-line HER2-positive metastatic BC. This product is being developed in collaboration with Roche.
Phase II	
Ocrelizumab	Ocrelizumab is being evaluated in relapsing remitting multiple sclerosis. This product is being developed in collaboration with Roche and Biogen Idec(1).
GA101	GA101 is being evaluated in hematologic malignancies (relapsed and refractory NHL and CLL). This product is being developed in collaboration with Roche and Biogen Idec.
Apo2L/TRAIL	Apo2L/TRAIL is being evaluated in first-line metastatic NSCLC in combination with chemotherapy and Avastin and in indolent relapsed NHL in combination with Rituxan. This product is being developed in collaboration with Amgen.
Apomab	Apomab is being evaluated in first-line metastatic NSCLC in combination with chemotherapy and Avastin, and in indolent relapsed NHL in combination with Rituxan.
Avastin	Avastin is being evaluated in relapsed multiple myeloma, extensive small cell lung cancer, non-squamous NSCLC with previously treated brain metastases, and NSCLC with squamous cell histology. This product is being developed in collaboration with Roche.
Pertuzumab	Pertuzumab is being evaluated in ovarian cancer in combination with chemotherapy. This product is being developed in collaboration with Roche.
Trastuzumab-DM1	Trastuzumab-DM1 is being evaluated in first, second, and third-line HER2-positive metastatic BC. This product is being developed in collaboration with Roche.
ABT-869	ABT-869 is being evaluated for the treatment of several types of tumors. This product is being developed in collaboration with Abbott Laboratories.
GDC 0449 (Hedgehog Pathway Inhibitor)	GDC-0449 is being evaluated in first-line metastatic colorectal cancer (CRC) in combination with chemotherapy and Avastin, as a single agent in ovarian cancer maintenance therapy, and as a single agent in advanced basal cell carcinoma. This product is being developed in collaboration with Curis, Inc. and Roche.
Dacetuzumab (Anti-CD40)	Dacetuzumab is being evaluated in combination with Rituxan plus chemotherapy for patients with relapsed or refractory diffuse large B-cell lymphoma. This product is being developed in collaboration with Seattle Genetics, Inc.
Anti-IL13	Anti-IL13 is being evaluated in patients with uncontrolled asthma.

Preparing for Phase II	
GA101	We are preparing for a Phase II clinical trial in Rituxan refractory indolent NHL and in relapsed indolent NHL. This product is being developed in collaboration with Roche and Biogen Idec.
MetMAb	We are preparing for a Phase II clinical trial of MetMAb and Tarceva as combination therapy in second- and third-line metastatic NSCLC.

Xolair	We are preparing for a Phase II clinical trial in chronic idiopathic urticaria in collaboration with Novartis.
Pertuzumab	We are preparing for a Phase II clinical trial in second-line metastatic NSCLC in combination with Tarceva. This product is being developed in collaboration with Roche.
rhuMAb IFN alpha	We are preparing for a Phase II clinical trial in systemic lupus erythematosus.
Phase I and Preparing for Phase I	We have multiple new molecular entities in Phase I or preparing for Phase I.

(1) Our collaborator Biogen Idec disagrees with certain of our development decisions under our 2003 collaboration agreement. A hearing related to the arbitration began on September 15, 2008 and the hearing was closed on January 8, 2009. We expect to receive a ruling within six months of the conclusion of the hearing, i.e., no later than July 2009. See Part I, Item 3, “Legal Proceedings,” of this Form 10-K for further information.

Related Party Arrangements

See “Relationship with Roche” and “Related Party Transactions” below in Part II, Item 7 of this Form 10-K for information on our collaboration arrangements with Roche and Novartis.

Distribution and Commercialization

We have a U.S.-based marketing, sales and distribution organization. Our sales efforts are focused on specialist physicians in private practice or at hospitals and major medical centers in the U.S. In general, our products are sold largely to wholesalers, specialty distributors or directly to hospital pharmacies and specialist physicians in private practice. We utilize common pharmaceutical company marketing techniques, including sales representatives calling on individual physicians and distributors, advertisements, professional symposia, direct mail, and public relations, as well as other methods.

Through Genentech Access Solutions, we provide reimbursement support, patient assistance programs and customer service programs related to our products. The Genentech Access to Care Foundation provides free product to eligible uninsured patients and those deemed uninsured due to payer denial in the U.S. The Genentech Access to Care Foundation is a non-profit entity funded by Genentech, Inc. To further support patient access to therapies for certain diseases, we donate to various independent public charities that offer financial assistance, such as co-pay assistance, to eligible patients. We also maintain a physician-related product waste replacement program and an expired product program that, subject to certain specific conditions, gives eligible customers the right to return expired products to us for replacement or credit at 5% to 8% below their current purchase prices.

In February 2007, we launched the Avastin Patient Assistance Program, a voluntary program that enables eligible patients who receive greater than 10,000 milligrams of Avastin over a 12-month period to receive free Avastin in excess of the 10,000 milligrams during the remainder of the 12-month period. Based on the current wholesale acquisition cost, 10,000 milligrams is valued at $55,000 in gross revenue. Eligible patients include those who are being treated for an FDA-approved indication and who meet the household income criteria for this program. The program is available for eligible patients who enroll regardless of whether they are insured.

As discussed in Note 14, “Segment, Significant Customer and Geographic Information,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K, our combined sales to three major wholesalers, AmerisourceBergen Corporation, McKesson Corporation, and Cardinal Health, Inc., constituted 86% in 2008 and 2007, and 85% in 2006 of our total net U.S. product sales. Also discussed in Note 14 are net U.S. product sales and net foreign revenue in 2008, 2007, and 2006.

Manufacturing and Raw Materials

We manufacture biotherapeutic products and product candidates for commercial and clinical purposes. Our production system includes manufacturing of bulk drug substance, as well as formulation, filling and packaging of the drug product. The bulk drug substance manufacturing process includes cell culture/fermentation operations, during which cells are grown that express proteins which are purified for use as therapeutic products. Formulation of the drug product involves filtering and diluting proteins to obtain the appropriate concentrations for human use. In the final processes, we fill vials or syringes with the formulated proteins and package them for distribution.

Our manufacturing network consists of three bulk manufacturing sites in California. We expect FDA licensure of a bulk drug substance manufacturing site in Singapore in 2010. Fill/finish activities take place in South San Francisco, California. An additional fill/finish facility in Hillsboro, Oregon is planned for licensure in 2010. For further information see also “Properties” in Part I, Item 2 of this Form 10-K. In addition to our owned facilities, we also engage third party contract manufacturers to produce or assist in the production of some of our bulk and finished products, delivery devices and product candidates. Our manufacturing partners operate facilities across North America, Europe, and Asia. Our global supply of our drug products is significantly dependent on the uninterrupted and efficient operation of these facilities.

Raw materials and supplies required for the production of our principal products are, in some instances, sourced from one supplier and, in other instances, from multiple suppliers. In those cases for which raw materials are available through only one supplier, that supplier may be either a sole source (the only recognized supply source available to us) or a single source (the only approved supply source for us among other sources). We have adopted policies that attempt, to the extent feasible, to minimize raw material supply risks to us, including maintenance of greater levels of raw materials inventory and coordination with our collaborators to implement raw materials sourcing strategies in quantities adequate to meet our needs. Due to the unique nature of the production processes used to manufacture our products, certain raw materials, drug delivery devices and components are the proprietary products of single-source unaffiliated third-party suppliers. In some cases, such proprietary products are specifically cited in our FDA drug application, which limits our ability for substitution. We currently manage the risk associated with such sole-sourced raw materials by active inventory management, relationship management and alternate source development, where feasible. We also monitor the financial condition of certain suppliers, their ability to supply our needs, and the market conditions for these raw materials.

We, as well as our third party service providers, suppliers, and manufacturers are subject to continuing inspection by the FDA or comparable agencies in other jurisdictions. Any delay, interruption or other issues that arise in the manufacture, formulation, filling, packaging, or storage of our products, including as a result of a failure of our facilities or the facilities or operations of third parties to pass any regulatory agency inspection, could significantly impair our ability to sell our products.

We believe that our existing manufacturing network of internal and external facilities and suppliers will allow us to meet our near-term and mid-term manufacturing needs for our current commercial products and our product candidates in clinical trials. Our existing licensed manufacturing facilities operate under multiple licenses from the FDA, regulatory authorities in the European Union, and other regulatory authorities. However, additional manufacturing facilities and outside sources may be required to meet our long-term research, development and commercial production needs.

For additional risks associated with manufacturing and raw materials, see “Difficulties or delays in product manufacturing or in obtaining materials from our suppliers, or difficulties in accurately forecasting manufacturing capacity needs, could harm our business and/or negatively affect our financial performance” under “Risk Factors” below

in Part I, Item 1A of this Form 10-K.

Proprietary Technology—Patents and Trade Secrets

We seek patents on inventions originating from our ongoing research and development (R&D) activities. We have been issued patents and have patent applications pending that are related to a number of current and potential

products, including products licensed to others. Patents, issued or applied for, cover inventions ranging from basic recombinant DNA techniques to processes related to specific products and to the products themselves. Our issued patents extend for varying periods according to the date of patent application filing or grant and the legal term of patents in the various countries where patent protection is obtained. The actual protection afforded by a patent, which can vary from country to country, depends on the type of patent, the scope of its coverage as determined by the patent office or courts in the country, and the availability of legal remedies in the country. We consider that in the aggregate our patent applications, patents and licenses under patents owned by third parties are of material importance to our operations. For our five highest selling products, we have identified in the following table the latest-to-expire U.S. patents that are owned or controlled by or exclusively licensed to Genentech having claims directed to product-specific compositions of matter (such as nucleic acids, proteins, and protein-producing host cells). This table does not identify all patents that may be related to these products. For example, in addition to the listed patents, we have patents on platform technologies (that relate to certain general classes of products or methods), as well as patents on methods of using or administering many of our products, that may confer additional patent protection. We also have pending patent applications that may give rise to new patents related to one or more of these products.

Product	Latest-to-Expire Product-Specific U.S. Patent(s)	Year of Expiration
Avastin	6,884,879	2017
	7,169,901	2019
Rituxan	5,677,180	2014
	5,736,137	2015
	7,381,560	2016
Herceptin	6,339,142	2019
	6,407,213	2019
	7,074,404	2019
Lucentis	6,884,879	2017
	7,169,901	2019
Xolair	6,329,509	2018

The information in the above table is based on our current assessment of patents that we own or control or have exclusively licensed. The information is subject to revision, for example, in the event of changes in the law or legal rulings affecting our patents or if we become aware of new information. Significant legal issues remain unresolved as to the extent and scope of available patent protection for biotechnology products and processes in the U.S. and other important markets outside the U.S. We expect that litigation will likely be necessary to determine the term, validity, enforceability, and/or scope of certain of our patents and other proprietary rights. An adverse decision or ruling with respect to one or more of our patents could result in the loss of patent protection for a product and, in turn, the introduction of competitor products or follow-on biologics to the market earlier than anticipated, and could force us to either obtain third-party licenses at a material cost or cease using a technology or commercializing a product. We are currently involved in a number of legal proceedings involving our patents and those of others. These proceedings may result in a significant commitment of our resources in the future and, depending on their outcome, may adversely affect the term, validity, enforceability, and/or scope of certain of our patent or other proprietary rights (such as the Cabilly patent discussed in Item 3, “Legal Proceedings”), and may cause us to incur a material loss of royalties, other revenue, and/or market exclusivity for one or more of our products. The patents that we obtain or the unpatented proprietary technology that we hold may not afford us significant commercial protection.

We have obtained licenses from various parties that we deem to be necessary or desirable for the manufacture, use, or sale of our products. These licenses (both exclusive and non-exclusive) generally require us to pay royalties to the parties on product sales. In conjunction with these licenses, disputes sometimes arise regarding whether royalties are owed on certain product sales or the amount of royalties that are owed. The resolution of such disputes may cause us

to incur significant additional royalty expenses or other expenses.

Our trademarks—Activase, Avastin, Cathflo, Genentech, Herceptin, Lucentis, Nutropin, Nutropin AQ, Nutropin AQ Pen, Pulmozyme, Raptiva, Rituxan (licensed from Biogen Idec), TNKase, Xolair (licensed from Novartis), and Tarceva (licensed from OSI Pharmaceuticals)—in the aggregate are of material importance. All of our trademarks are covered by registrations or pending applications for registration in the U.S. Patent and Trademark Office (Patent Office) and in other countries. Trademark protection continues in some countries for as long as the mark is used and, in other countries, for as long as it is registered. Registrations generally are for fixed, but renewable, terms.

Our royalty revenue for patent licenses, know-how, and other related rights amounted to $2,539 million in 2008, $1,984 million in 2007, and $1,354 million in 2006. Royalty expenses were $753 million in 2008, $712 million in 2007, and $568 million in 2006.

Competition

We face competition from pharmaceutical companies and biotechnology companies. The introduction of new competitive products, including follow-on biologics, new safety or efficacy information about existing products, pricing decisions by us or our competitors, the rate of market penetration by competitors' products, and/or development and use of alternate therapies may result in lost market share for us, reduced utilization of our products, lower prices, and/or reduced product sales, even for products protected by patents. For risks associated with competition, see "We face competition" under "Risk Factors" below in Part I, Item 1A of this Form 10-K.

Government Regulation

Regulation by governmental authorities in the U.S. and other countries is a significant factor in the manufacture and marketing of our products and in ongoing research and product development activities. All of our products require regulatory approval by governmental agencies prior to commercialization. Our products are subject to rigorous preclinical and clinical testing and other premarket approval requirements by the FDA and regulatory authorities in other countries. Various statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping, and marketing of such products. The lengthy process of seeking these approvals, and the subsequent compliance with applicable statutes and regulations, require the expenditure of substantial resources.

The activities that are required before a pharmaceutical product may be marketed in the U.S. begin with preclinical testing. Preclinical tests include laboratory evaluation of product chemistry and required animal studies to assess the potential safety and efficacy of the product and its formulations. The results of these studies must be submitted to the FDA as part of an Investigational New Drug Application, which must be reviewed by the FDA before proposed clinical testing in humans can begin. Typically, clinical testing involves a three-phase process. In Phase I, clinical trials are conducted with a small number of subjects to determine the early safety profile and the pattern of drug distribution and metabolism. In Phase II, clinical trials are conducted with groups of patients afflicted with a specific disease in order to provide enough data to evaluate the preliminary efficacy, optimal dosages, and expanded evidence of safety. In Phase III, large-scale, multi-center clinical trials are conducted with patients afflicted with a target disease in order to provide enough data to statistically evaluate the efficacy and safety of the product, as required by the FDA. The results of the preclinical and clinical testing of a pharmaceutical product are then submitted to the FDA in the form of a New Drug Application (NDA), or a Biologic License Application (BLA), for approval to commence commercial sales. In responding to an NDA or a BLA, the FDA may grant marketing approval, grant conditional approval (such as an accelerated approval), request additional information, or deny the application if the FDA determines that the application does not provide an adequate basis for approval. Most R&D projects fail to produce data sufficiently compelling to enable progression through all of the stages of development and to obtain FDA approval for commercial sale. See also "The successful development of pharmaceutical products is highly uncertain and requires significant expenditures and time" under "Risk Factors" below in Part I, Item 1A of this Form 10-K.

Among the conditions for an NDA or a BLA approval is the requirement that the prospective manufacturer's quality control and manufacturing procedures conform on an ongoing basis with current Good Manufacturing Practices (cGMP). Before approval of a BLA, the FDA will usually perform a preapproval inspection of the facility to determine its compliance with cGMP and other rules and regulations. Manufacturers must expend time, money and

effort in the area of production and quality control to ensure full compliance with cGMP. After a facility is licensed for the manufacture of any product, manufacturers are subject to periodic inspections by the FDA.

We are also subject to various laws and regulations related to safe working conditions, clinical, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with our research.

Our revenue and profitability may be affected by the continuing efforts of government and third-party payers to contain or reduce the costs of healthcare through various means. For example, in certain foreign markets, pricing or profitability of pharmaceutical products is subject to governmental control. In the U.S. there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental control.

In addition, in the U.S. and elsewhere, sales of pharmaceutical products are dependent in part on the availability of reimbursement to the physician or consumer from third-party payers, such as the government or private insurance plans. Government and private third-party payers are increasingly challenging the prices charged for medical products and services, through class-action litigation and otherwise. New regulations related to hospital and physician payment continue to be implemented annually. To date, we have not seen any material effects of the new rules on our product sales. See also “Decreases in third-party reimbursement rates may affect our product sales, results of operations and financial condition” under “Risk Factors” below in Part I, Item 1A of this Form 10-K.

We are also subject to various federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback laws and false claims laws. For risks associated with healthcare fraud and abuse, see “If there is an adverse outcome in our pending litigation or other legal actions, our business may be harmed” under “Risk Factors” below in Part I, Item 1A of this Form 10-K.

Research and Development

A significant portion of our operating expenses is related to R&D. Generally, R&D expenses consist of the costs of our own independent R&D efforts and the costs associated with collaborative R&D and in-licensing arrangements. R&D costs, including up-front fees and milestone payments paid to collaborators, are expensed as incurred. Costs associated with in-licensing arrangements are expensed as incurred if the underlying technology and/or intellectual property rights acquired are determined to not have an alternative future use. R&D expenses, excluding any acquisition-related in-process research and development charges, were $2,800 million in 2008, $2,446 million in 2007, and $1,773 million in 2006. We also receive reimbursements from certain collaborators on some of our R&D expenditures, depending on the mix of spending between us and our collaborators. These R&D expense reimbursements are primarily included in contract revenue, and were $227 million in 2008, $196 million in 2007, and $185 million in 2006.

We intend to maintain our strong commitment to R&D. Biotechnology products generally take 10 to 15 years to research, develop, and bring to market in the U.S. As discussed above, clinical development typically involves three phases of study: Phase I, II, and III. The most significant costs associated with clinical development are Phase III trials, as they tend to be the longest and largest studies conducted during the drug development process. Product completion timelines and costs vary significantly by product and are difficult to predict.

Human Resources

As of December 31, 2008, we had 11,186 employees.

Environment

We have made, and will continue to make, expenditures for environmental compliance and protection. Expenditures for compliance with environmental laws and regulations have not had, and are not expected to have, a material effect on our capital expenditures, results of operations, or competitive position.

Available Information

The following information can be found on our website at www.gene.com or can be obtained free of charge by contacting our Investor Relations Department at (650) 225-4150 or by sending an e-mail message to investor.relations@gene.com:

Ÿ Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, as soon as is reasonably practicable after such material is electronically filed with the U.S. Securities and Exchange Commission;

Ÿ Our policies related to corporate governance, including our Principles of Corporate Governance, Good Operating Principles, and Code of Ethics, which apply to our Chief Executive Officer, Chief Financial Officer, and senior financial officials; and

Ÿ The charters of the Audit Committee and the Compensation Committee of our Board of Directors.

Item 1A. RISK FACTORS

This Form 10-K contains forward-looking information based on our current expectations. Because our actual results may differ materially from any forward-looking statements that we make or that are made on our behalf, this section includes a discussion of important factors that could affect our actual future results, including, but not limited to, our product sales, royalties, contract revenue, expenses, net income, and earnings per share.

The successful development of pharmaceutical products is highly uncertain and requires significant expenditures and time.

Successful development of pharmaceutical products is highly uncertain. Products that appear promising in research or development may be delayed or fail to reach later stages of development or the market for several reasons, including:

Ÿ Preclinical tests may show the product to be toxic or lack efficacy in animal models.

Ÿ Clinical trial results may show the product to be less effective than desired or to have harmful or problematic side effects.

Ÿ Failure to receive the necessary U.S. and international regulatory approvals or a delay in receiving such approvals. Among other things, such delays may be caused by slow enrollment in clinical studies; extended length of time to achieve study endpoints; additional time requirements for data analysis or BLA or NDA preparation; discussions with the FDA; FDA requests for additional preclinical or clinical data; FDA delays due to staffing or resource limitations at the agency; analyses of or changes to study design; or unexpected safety, efficacy, or manufacturing issues.

Ÿ Difficulties in formulating the product, scaling the manufacturing process, or getting approval for manufacturing.

Ÿ Manufacturing costs, pricing, reimbursement issues, or other factors may make the product uneconomical to commercialize.

Ÿ The proprietary rights of others and their competing products and technologies may prevent the product from being developed or commercialized.

Ÿ The contractual or intellectual property rights of our collaborators or others may prevent the product from being developed or commercialized.

Success in preclinical and early clinical trials does not ensure that large-scale clinical trials will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit, or prevent regulatory approvals. The length of time necessary to complete clinical trials and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly and may be difficult to predict. If our large-scale clinical trials for a product are not successful, we will not recover our substantial investments in that product.

Factors affecting our R&D productivity and the amount of our R&D expenses include, but are not limited to:

Ÿ The number and outcome of clinical trials currently being conducted by us and/or our collaborators. For example, our R&D expenses may increase based on the number of late-stage clinical trials being conducted by us and/or our collaborators.

Ÿ The number of products entering into development from late-stage research. For example, there is no guarantee that internal research efforts will succeed in generating a sufficient number of product candidates ready to move into development or that product candidates will be available for in-licensing on terms acceptable to us and permitted under anti-trust laws.

Ÿ Decisions by Roche whether to exercise its options to develop and sell our future products in non-U.S. markets, and the timing and amount of any related development cost reimbursements.

Ÿ Our ability to in-license projects of interest to us, and the timing and amount of related development funding or milestone payments for such licenses. For example, we may enter into agreements requiring us to pay a significant up-front fee for the purchase of in-process research and development, which we may record as an R&D expense.

Ÿ Participation in a number of collaborative R&D arrangements. In many of these collaborations, our share of expenses recorded in our financial statements is subject to volatility based on our collaborators' spending activities, as well as the mix and timing of activities between the parties.

Ÿ Charges incurred in connection with expanding our product manufacturing capabilities, as described below in "Difficulties or delays in product manufacturing or in obtaining materials from our suppliers, or difficulties in accurately forecasting manufacturing capacity needs, could harm our business and/or negatively affect our financial performance."

Ÿ Future levels of revenue.

Ÿ Our ability to supply product for use in clinical trials.

We face competition.

We face competition from pharmaceutical companies and biotechnology companies.

The introduction of new competitive products or follow-on biologics, new safety or efficacy information about or new indications for existing products, pricing decisions by us or our competitors, the rate of market penetration by competitors' products, and/or development and use of alternate therapies may result in lost market share for us; reduced utilization of our products; lower prices; and/or reduced product sales, even for products protected by patents.

Avastin: Avastin competes in metastatic CRC with Erbitux® (ImClone Systems Inc. (a wholly-owned subsidiary of Eli Lilly and Company)/Bristol-Myers Squibb/Merck KGaA), which is an epidermal growth factor receptor (EGFR) inhibitor approved for the treatment of irinotecan refractory or intolerant metastatic CRC patients; and with Vectibix™ (Amgen Inc.), which is indicated for the treatment of patients with EGFR-expressing metastatic CRC who have disease progression on or following fluoropyrimidine, oxaliplatin, and irinotecan-containing regimens.

Avastin could also face competition from Erbitux® in metastatic NSCLC. At the 2008 annual meeting of the American Society of Clinical Oncology (ASCO), ImClone and Bristol-Myers Squibb presented data from a Phase III study of Erbitux® in combination with vinorelbine plus cisplatin showing that the study met its primary endpoint of increasing overall survival compared with chemotherapy alone in patients with advanced NSCLC. ImClone and Bristol-Myers Squibb submitted, then withdrew, and plan to eventually resubmit, an sBLA for U.S. approval with the FDA for advanced NSCLC. Merck KGaA has filed a European application for Erbitux® in this indication. Avastin also faces competition in advanced or metastatic NSCLC from the chemotherapy Alimta® (Eli Lilly), which received approval in the third quarter of 2008 for use in first-line NSCLC in combination with cisplatin. The approval for Alimta® in first line NSCLC is limited to use in patients with non-squamous histology. In NSCLC, both Erbitux® and Alimta® are included in the National Comprehensive Cancer Network (NCCN) guidelines and compendia as first-line options. The Erbitux® listing in the first-line setting is limited to combinations with cisplatin and vinorelbine. Alimta® is listed as an option for non-squamous patients in the first-line setting and as maintenance therapy for patients previously having a response.

Other potential Avastin competitors include Nexavar® (sorafenib, Bayer Corporation/Onyx Pharmaceuticals, Inc.), Sutent® (sunitinib malate, Pfizer Inc.), and Torisel® (Wyeth) for the treatment of patients with advanced renal cell carcinoma (an unapproved use of Avastin).

Avastin could face competition from products in development that currently do not have regulatory approval. Sanofi-Aventis is developing a vascular endothelial growth factor (VEGF) inhibitor, VEGF-Trap, in multiple indications, including metastatic CRC and metastatic NSCLC. Avastin could also face competition from the VEGF receptor-2 inhibitor (IMC-1121b) under development by ImClone in several indications, including BC. There are also ongoing head-to-head clinical trials comparing both Sutent® and AZD2171 (AstraZeneca) to Avastin. Likewise, Amgen is conducting head-to-head clinical trials comparing AMG 706 to Avastin in NSCLC and metastatic BC, and Pfizer is conducting a head-to-head trial comparing Sutent® to Avastin in BC. Antisoma's vascular disrupting agent, ASA404, has an ongoing Phase III trial in first-line NSCLC (ATTRACT-1) and a planned Phase III trial in second-line NSCLC (ATTRACT-2). Overall, there are more than 65 molecules in clinical development that target VEGF inhibition that, if successful in clinical trials, may compete with Avastin.

Rituxan: Current competitors for Rituxan in hematology-oncology include Bexxar® (GlaxoSmithKline [GSK]) and Zevalin® (Cell Therapeutics), both of which are radioimmunotherapies indicated for the treatment of patients with relapsed or refractory low-grade, follicular, or transformed B-cell NHL. Cell Therapeutics recently filed an sBLA based on data from the Zevalin FIT trial, showing a benefit as consolidation therapy in frontline follicular NHL. Bexxar has an ongoing study nearing completion that may also expand its label to earlier settings in indolent NHL. Other potential competitors include Campath® (Bayer Corporation/Genzyme Corporation) in previously untreated and relapsed CLL (an unapproved use of Rituxan); Velcade® (Millennium Pharmaceuticals, Inc.), which is indicated for multiple myeloma and more recently mantle cell lymphoma (both unapproved uses of Rituxan); Revlimid® (Celgene Corporation), which is indicated for multiple myeloma and myelodysplastic syndromes (both unapproved uses of Rituxan); and Treanda® (Cephalon, Inc.), which is approved for CLL and was recently approved for the treatment of indolent NHL patients who have progressed while on or shortly after a Rituxan-containing regimen.

Current competitors for Rituxan in RA include Enbrel® (Amgen/Wyeth), Humira® (Abbott), Remicade® (Johnson & Johnson), Orencia® (Bristol-Myers Squibb), and Kineret® (Amgen). These products are approved for use in an RA patient population that is broader than the population in which Rituxan is approved for use. In addition, molecules in development that, if approved by the FDA, may compete with Rituxan in RA include: Actemra™, an anti-interleukin-6 receptor being developed by Chugai Pharmaceutical Co. Ltd. and Roche; Cimzia™ (certolizumab pegol), an anti-TNF antibody being developed by UCB S.A.; and CNTO 148 (golimumab), an anti-TNF antibody being developed by Centocor and Schering-Plough Corporation.

Rituxan may face future competition in both hematology-oncology and RA from Arzerra™ (ofatumumab), an anti-CD20 antibody being co-developed by Genmab A/S and GSK. Genmab and GSK recently presented positive results from their pivotal trial for CLL at the American Society of Hematology meeting. They announced on January 30, 2009 that they filed for approval of Arzerra™ for monotherapy use in refractory CLL. Additional ongoing studies include a monotherapy trial for refractory indolent NHL. In addition, we are aware of other anti-CD20 molecules in development that, if successful in clinical trials, may compete with Rituxan. Finally, positive results were announced from a pivotal trial for BiovaxID™ (BioVest International, Inc.) for indolent NHL patients post front-line induction. BioVest has announced plans to file for approval of BiovaxID™ in indolent NHL in the U.S.

Herceptin: Herceptin faces competition in the relapsed metastatic setting from Tykerb® (lapatinib ditosylate) which is manufactured by GSK. Tykerb® is approved in combination with capecitabine for the treatment of patients with advanced or metastatic BC whose tumors overexpress HER2 and who have received prior therapy, including an anthracycline, a taxane, and Herceptin. Tykerb® is currently being studied in adjuvant and multiple lines of metastatic HER2-positive BC.

Lucentis: We are aware that retinal specialists are currently using Avastin to treat the wet form of AMD, an unapproved use for Avastin, which results in significantly less revenue to us per treatment compared to Lucentis. As of January 1, 2008, we no longer directly supply Avastin to compounding pharmacies. Ocular use of Avastin continues, as physicians can purchase Avastin from authorized distributors and have it shipped to the destination of the physicians' choice. Additionally, an independent head-to-head trial of Avastin and Lucentis in wet AMD is being partially funded by the National Eye Institute, which announced that enrollment had commenced in February 2008. Lucentis also competes with Macugen® (Pfizer/OSI Pharmaceuticals), and with Visudyne® (Novartis) alone, in combination with Lucentis, in combination with Avastin, or in combination with off-label steroids in wet AMD. In addition, VEGF-Trap-Eye, a vascular endothelial growth factor blocker being developed by Bayer and Regeneron Pharmaceuticals, Inc., is in Phase III clinical trials for the treatment of wet AMD.

Xolair: Xolair faces competition from other asthma therapies, including inhaled corticosteroids, long-acting beta agonists, combination products such as fixed-dose inhaled corticosteroids/long-acting beta agonists and leukotriene inhibitors, as well as oral corticosteroids and immunotherapy.

Tarceva: Tarceva competes with the chemotherapy agents Taxotere® (Sanofi-Aventis) and Alimta® (Eli Lilly) both of which are indicated for the treatment of relapsed NSCLC. Tarceva may face future competition in relapsed NSCLC from Zactima™ (AstraZeneca), Erbitux® (Bristol-Myers Squibb/ImClone), ASA404 (Novartis/Antisoma), and from a potential re-filing of Iressa® (AstraZeneca) in the U.S. Alimta® received approval in the third quarter of 2008 for first-line treatment of locally advanced and metastatic NSCLC, for patients with non-squamous histology. Eli Lilly has filed with the FDA for U.S. approval of Alimta® in first-line maintenance NSCLC. ImClone and Bristol-Myers Squibb have filed with the FDA for U.S. approval of Erbitux® in first-line NSCLC. Both Alimta® and Erbitux® are compendia listed and included in the NCCN guidelines for first-line metastatic NSCLC in accordance with their trials. In front-line pancreatic cancer, Tarceva primarily competes with Gemzar® (Eli Lilly) monotherapy and Gemzar® in combination with other chemotherapeutic agents. Tarceva could face competition in the future from products in development for the treatment of pancreatic cancer. We could face competition from generic versions of Tarceva. In February 2009, OSI Pharmaceuticals, with whom we collaborate on Tarceva, announced receipt of a notice letter advising that Teva Pharmaceuticals USA, Inc. submitted an Abbreviated New Drug Application (ANDA) to the FDA requesting permission to manufacture and market a generic version of Tarceva. OSI Pharmaceuticals announced that it expects to file a patent infringement lawsuit against Teva seeking to restrict approval of the ANDA.

Nutropin: Nutropin faces competition in the growth hormone market from multiple competitors, including Humatrope® (Eli Lilly), Genotropin® (Pfizer), Norditropin® (Novo Nordisk), Saizen® (Merck Serono), and

Tev-Tropin® (Teva Pharmaceutical Industries Ltd.). In addition, Accretropin® (Cangene Corporation), a biologic growth hormone, has been approved and is also pending launch. Nutropin also faces competition from follow-on biologics, including Omnitrope® (Sandoz Inc.) and Valtropin® (LG Life Sciences Ltd.), the latter of which has been approved and is pending launch.

As a result of this competition, we have experienced and may continue to experience a loss of patient share and increased competition for managed care product placement. Obtaining placement on the preferred product lists of managed care companies may require that we further discount the price of Nutropin. In addition to managed care placement, patient and healthcare provider services provided by growth hormone manufacturers are increasingly important to creating brand preference.

Thrombolytics: Our thrombolytic products face competition in the acute myocardial infarction market, with sales of TNKase and Activase affected by the adoption by physicians of mechanical reperfusion strategies. We expect that the use of mechanical reperfusion, in lieu of thrombolytic therapy for the treatment of acute myocardial infarction, will continue to grow. TNKase for acute myocardial infarction also faces competition from Retavase® (EKR Therapeutics, Inc.).

Pulmozyme: Pulmozyme currently faces competition from the use of hypertonic saline, an inexpensive approach to clearing sputum from the lungs of cystic fibrosis patients. Approximately 30 percent of cystic fibrosis patients receive hypertonic saline, and we estimate that in a small percentage of patients (less than 5 percent), this use will affect how a physician may prescribe or a patient may use Pulmozyme. Infants and toddlers are most likely to be prescribed hypertonic saline rather than Pulmozyme.

Raptiva: Raptiva competes with established therapies for moderate-to-severe psoriasis, including oral systemics such as methotrexate and cyclosporin as well as ultraviolet light therapies. In addition, Raptiva competes with biologic agents Amevive® (Astellas Pharma AG), Enbrel®, and Remicade®. Raptiva also competes with the biologic agent Humira®, which was approved by the FDA for use in moderate-to-severe psoriasis on January 18, 2008. Raptiva may face future competition from the biologic Ustekinumab/CNTO-1275 (Centocor), for which a filing was made with the FDA for approval in the treatment of psoriasis on December 4, 2007. Additionally, we expect Raptiva to lose market share to competitors due to cases of progressive multifocal leukoencephalopathy (PML) in Raptiva patients as discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of this Form 10-K.

In addition to the commercial and late-stage development products listed above, numerous products are in earlier stages of development at other biotechnology and pharmaceutical companies that, if successful in clinical trials, may compete with our products.

Changes in the third-party reimbursement environment may affect our product sales, results of operations, and financial condition.

Sales of our products will depend significantly on the extent to which reimbursement for the cost of our products and related treatments will be available to physicians and patients from various levels of U.S. and international government health administration authorities, private health insurers, and other organizations. Third-party payers and government health administration authorities increasingly attempt to limit and/or regulate the reimbursement of medical products and services, including branded prescription drugs. Changes in government legislation or regulation, such as the Medicare Prescription Drug Improvement and Modernization Act of 2003; the Deficit Reduction Act of 2005; the Medicare, Medicaid, and State Children’s Health Insurance Program Extension Act of 2007; and the Medicare Improvements for Patients and Providers Act of 2008; changes in formulary or compendia listings; or changes in private third-party payers’ policies toward reimbursement for our products may reduce reimbursement of our products’ costs to physicians, pharmacies, and distributors. Decreases in third-party reimbursement for our products could reduce usage of the products, sales to collaborators, and royalties, and may have a material adverse effect on our product sales, results of operations, and financial condition. The pricing and reimbursement environment for our products may change in the future and become more challenging due to, among other reasons, policies

advanced by the new presidential administration, new healthcare legislation passed by Congress or fiscal challenges faced by all levels of government health administration authorities.

We may be unable to obtain or maintain regulatory approvals for our products.

We are subject to stringent regulations with respect to product safety and efficacy by various international, federal, state, and local authorities. Of particular significance are the FDA's requirements covering R&D, testing, manufacturing, quality control, labeling, and promotion of drugs for human use. As a result of these requirements, the length of time, the level of expenditures, and the laboratory and clinical information required for approval of a BLA or NDA are substantial and can require a number of years. In addition, even if our products receive regulatory approval, they remain subject to ongoing FDA regulations, including, for example, obligations to conduct additional clinical trials or other testing, changes to the product label, new or revised regulatory requirements for manufacturing practices, written advisements to physicians, and/or a product recall or withdrawal.

We may not obtain necessary regulatory approvals on a timely basis, if at all, for any of the products we are developing or manufacturing, or we may not maintain necessary regulatory approvals for our existing products, and all of the following could have a material adverse effect on our business:

Ÿ Significant delays in obtaining or failing to obtain approvals, as described above in "The successful development of pharmaceutical products is highly uncertain and requires significant expenditures and time."

Ÿ Loss of, or changes to, previously obtained approvals or accelerated approvals, including those resulting from post-approval safety or efficacy issues. For example, with respect to the FDA's accelerated approval of Avastin in combination with paclitaxel chemotherapy for the treatment of patients who have not received prior chemotherapy for metastatic HER2-negative BC, the FDA may withdraw or modify such approval, or request additional post-marketing studies. Additionally, we may be unable to maintain regulatory approval for Raptiva, or we may be subject to other regulatory requirements or actions that significantly restrict the use of Raptiva, due to cases of PML in Raptiva patients. On February 19, 2009, the European Medicines Agency announced that it recommended the suspension of the marketing authorization for Raptiva from our collaborator, Merck Serono, and the FDA issued a public health advisory regarding Raptiva, as discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this Form 10-K.

Ÿ Failure to comply with existing or future regulatory requirements.

Ÿ A determination by the FDA that study endpoints used in clinical trials for our products are not sufficient for product approval.

Ÿ Changes to manufacturing processes, manufacturing process standards, or cGMP following approval, or changing interpretations of those factors.

In addition, the current regulatory framework could change, or additional regulations could arise at any stage during our product development or marketing that may affect our ability to obtain or maintain approval of our products or require us to make significant expenditures to obtain or maintain such approvals.

Difficulties or delays in product manufacturing or difficulties in accurately forecasting manufacturing capacity needs, could harm our business and/or negatively affect our financial performance.

Manufacturing pharmaceutical products is difficult and complex, and requires facilities specifically designed and validated for that purpose. It can take more than five years to design, construct, validate, and license a new biotechnology manufacturing facility. We currently produce our products at our manufacturing facilities in South San Francisco, Vacaville, and Oceanside, California, and through various contract-manufacturing arrangements.

Maintaining an adequate supply to meet demand for our products depends on our ability to execute on our production plan. Any significant problem in the operations of our or our contractors' manufacturing facilities could result in cancellation of shipments; loss of product in the process of being manufactured; a shortfall, stock-out, or recall of available product inventory; or unplanned increases in production costs—any of which could have a material adverse effect on our business. A number of factors could cause significant production problems or interruptions, including:

Ÿ The inability of a supplier to provide raw materials or supplies used to manufacture our products.

Ÿ Equipment obsolescence, malfunctions, or failures.

Ÿ Product quality or contamination problems, due to a number of factors including, but not limited to, accidental or willful human error.

Ÿ Damage to a facility, including our warehouses and distribution facilities, due to events such as fires or earthquakes, as our South San Francisco, Vacaville, and Oceanside facilities are located in areas where earthquakes and/or fires have occurred.

Ÿ Changes in FDA regulatory requirements or standards that require modifications to our manufacturing processes.

Ÿ Action by the FDA or by us that results in the halting or slowdown of production of one or more of our products or products that we make for others.

Ÿ A supplier or contract manufacturer going out of business or failing to produce product as contractually required.

Ÿ Failure to maintain an adequate state of cGMP compliance.

See also, "Our business is affected by macroeconomic conditions."

In addition, there are inherent uncertainties associated with forecasting future demand or actual demand for our products or products that we produce for others, and as a consequence we may have inadequate capacity or inventory to meet actual demand. Alternatively, as a result of these inherent uncertainties, we may have excess capacity or inventory, which could lead to an idling of a portion of our manufacturing facilities, during which time we would incur unabsorbed or idle plant charges, costs associated with the termination of existing contract manufacturing relationships, costs associated with a reduction in workforce, costs associated with unsalable inventory, or other excess capacity charges, resulting in an increase in our cost of sales (COS). For example, in 2008, we recognized charges of approximately $90 million related to unexpected failed lots, delays in manufacturing start-up campaigns, and excess capacity.

Difficulties or delays in our or our contractors' manufacturing of existing or new products could increase our costs; cause us to lose revenue or market share; damage our reputation; and result in a material adverse effect on our product sales, financial condition, and results of operations.

Difficulties or delays in obtaining materials from our suppliers could harm our business and/or negatively affect our financial performance.

Certain of our raw materials and supplies required for the production of our principal products, or products that we make for others, are available only through sole-source suppliers (the only recognized supplier available to us) or single-source suppliers (the only approved supplier for us among other sources). If such sole-source or single-source suppliers were to limit or terminate production or otherwise fail to supply these materials for any reason, we may not be able to obtain such raw materials and supplies without significant delay or at all, and such failures could have a material adverse effect on our product sales and our business.

Difficulties or delays in our or our contractors' supply of existing or new products could increase our costs; cause us to lose revenue or market share; damage our reputation; and result in a material adverse effect on our product sales, financial condition, and results of operations.

Protecting our proprietary rights is difficult and costly.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. Accordingly, we cannot predict with certainty the breadth of claims that will be allowed

in patents, nor can we predict with certainty the outcome of disputes about the infringement, validity, or enforceability of patents. Patent disputes are frequent and may ultimately preclude the commercialization of products. We have in the past been, are currently, and may in the future be involved in material litigation and other legal proceedings related to our proprietary rights, such as the Cabilly patent litigation and re-examination (discussed in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K), the proprietary rights of third parties, and disputes in connection with licenses granted to or obtained from third parties. Such litigation and other legal proceedings are costly in their own right and could subject us to significant liabilities including the payment of significant royalty expenses, the loss of significant royalty income, or other expenses or losses. Furthermore, an adverse decision or ruling could force us to obtain third-party licenses at a material cost, cease using the technology in dispute, terminate the R&D or commercialization of a product, cause us to incur a material loss of sales and/or royalties and other revenue from licensing arrangements that we have with third parties, and/or significantly interfere with our ability to negotiate future licensing arrangements.

The presence of patents or other proprietary rights belonging to other parties may subject us to infringement claims and may lead to a loss of our entire investment in a product or technology.

If there is an adverse outcome in our pending litigation or other legal actions, our business may be harmed.

Litigation and other legal actions to which we are currently or have been subject to relate to, among other things, our patent and other intellectual property rights, licensing arrangements and other contracts with third parties, and product liability. We cannot predict with certainty the eventual outcome of pending proceedings, which may include an injunction against the development, manufacture, or sale of a product or potential product; a judgment with a significant monetary award, including the possibility of punitive damages; or a judgment that certain of our patent or other intellectual property rights are invalid or unenforceable. Furthermore, we may have to incur substantial expense in these proceedings, and such matters could divert management's attention from ongoing business concerns.

Our activities related to the sale and marketing of our products are subject to regulation under the U.S. Federal Food, Drug, and Cosmetic Act and other federal and state statutes. Violations of these laws may be punishable by criminal and/or civil sanctions, including fines and civil monetary penalties, as well as the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid). In 1999, we agreed to pay $50 million to settle a federal investigation related to our past clinical, sales, and marketing activities associated with human growth hormone. We are currently being investigated by the Department of Justice with respect to our promotional practices and may in the future be investigated for our promotional practices related to any of our products. If the government were to bring charges against us, if we were convicted of violating federal or state statutes, or if we were subject to third-party litigation related to the same promotional practices, there could be a material adverse effect on our business, including our financial condition and results of operations.

We are subject to various U.S. federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback and false claims laws. Anti-kickback laws make it illegal for a prescription drug manufacturer to solicit, offer, receive, or pay any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug. Due in part to the breadth of the statutory provisions and the absence of guidance in the form of regulations or court decisions addressing some of our practices, it is possible that our practices might be challenged under anti-kickback or similar laws. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented for payment to third-party payers (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. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including fines and civil monetary penalties, as well as the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid). If we were found liable for violating these laws, or if the government were to allege that we have violated, or if we are convicted of violating these laws, there could be a

material adverse effect on our business, including our stock price.

Roche's unsolicited proposal and related matters may adversely affect our business.

On July 21, 2008, we announced that we received an unsolicited proposal from Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche (the Roche Proposal). A special committee of our Board of Directors, composed of the independent directors (the Special Committee) was formed to review and consider the terms and conditions of the Roche Proposal, any business combination with Roche or any offer by Roche to acquire our securities, negotiate as appropriate, and, in the Special Committee's discretion, recommend or not recommend the acceptance of the Roche Proposal by the minority shareholders. On August 13, 2008, we announced that the Special Committee had unanimously concluded that the Roche Proposal substantially undervalues the company, but would consider a proposal that recognizes the value of the company and reflects the significant benefits that would accrue to Roche as a result of full ownership. On January 30, 2009, Roche announced that it intended to commence a cash tender offer which would replace the Roche Proposal that was announced on July 21, 2008. On January 30, 2009, in response to the announcement by Roche, the Special Committee urged shareholders to take no action with respect to the announcement by Roche and that the Special Committee will announce a formal position within 10 business days following the commencement of such a tender offer by Roche. On February 9, 2009, Roche commenced a cash tender offer for all of the outstanding shares of our Common Stock not owned by Roche for $86.50 per share (the Roche Tender Offer). Also on February 9, 2009, the Special Committee urged shareholders to take no action with respect to the Roche Tender Offer. The Special Committee announced that it intended to take a formal position within 10 business days of the commencement of the Roche Tender Offer, and would explain in detail its reasons for that position by filing a Statement on Schedule 14D-9 with the Securities and Exchange Commission.

The review and response to the Roche Proposal, the Roche Tender Offer or any other tender offer or other proposal by Roche and related matters requires the expenditure of significant time and resources by us and may be a significant distraction for our management and employees. The Roche Proposal or the Roche Tender Offer may create uncertainty for our management, employees, current and potential collaborators, and other third parties. On August 18, 2008, the Special Committee adopted two retention plans and two severance plans that together cover substantially all employees of the company, including our named executive officers. The two retention plans were implemented in lieu of our 2008 annual stock option grant and the two severance plans were adopted in addition to existing severance plans. Nevertheless, this uncertainty could adversely affect our ability to retain key employees and to hire new talent; cause collaborators to terminate, or not to renew or enter into arrangements with us; and negatively impact our business during the pendency of the Roche Tender Offer or any other tender offer or other proposal by Roche or anytime thereafter. Additionally, we, members of our Board of Directors, and Roche entities have been named in several purported stockholder class-action complaints related to the Roche Proposal and may be named in lawsuits related to the Roche Tender Offer, which are more fully described in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K. These lawsuits or any future lawsuits may become burdensome and result in significant costs of defense, indemnification, and liability. These consequences, alone or in combination, may harm our business and have a material adverse effect on our results of operations. See also "RHI, our controlling stockholder, may seek to influence our business in a manner that is adverse to us or adverse to other stockholders who may be unable to prevent actions by RHI" and "Our Affiliation Agreement with RHI could adversely affect our cash position."

RHI, our controlling stockholder, may seek to influence our business in a manner that is adverse to us or adverse to other stockholders who may be unable to prevent actions by RHI.

As our majority stockholder, RHI controls the outcome of most actions requiring the approval of our stockholders. Our bylaws provide, among other things, that the composition of our Board of Directors shall consist of at least three directors designated by RHI, three independent directors nominated by the Nominations Committee, and one Genentech executive officer nominated by the Nominations Committee. Our bylaws also provide that RHI will have

the right to obtain proportional representation on our Board of Directors until such time that RHI owns less than five percent of our stock. In connection with the Roche Tender Offer, RHI stated that whether or not the tender offer is consummated, RHI may exercise its rights to obtain proportional representation on our Board of Directors and take a more active role in overseeing the management and policies of Genentech. Currently, three of our directors—Mr. William Burns, Dr. Erich Hunziker, and Dr. Jonathan K. C. Knowles—also serve as officers and employees of

Roche. As long as RHI owns more than 50 percent of our Common Stock, RHI directors will be two of the three members of the Nominations Committee. Our certificate of incorporation includes provisions related to competition by RHI affiliates with Genentech, offering of corporate opportunities, transactions with interested parties, intercompany agreements, and provisions limiting the liability of specified employees. We cannot assure that RHI will not seek to influence our business in a manner that is contrary to our goals or strategies, or the interests of other stockholders. Moreover, persons who are directors of Genentech and who are also directors and/or officers of RHI may decline to take action in a manner that might be favorable to us but adverse to RHI.

Additionally, our certificate of incorporation provides that any person purchasing or acquiring an interest in shares of our capital stock shall be deemed to have consented to the provisions in the certificate of incorporation related to competition with RHI, conflicts of interest with RHI, the offer of corporate opportunities to RHI, and intercompany agreements with RHI. This deemed consent might restrict our ability to challenge transactions carried out in compliance with these provisions.

Our Affiliation Agreement with RHI could adversely affect our cash position.

Under our July 1999 Affiliation Agreement with RHI (Affiliation Agreement), we have established a stock repurchase program designed to maintain RHI's percentage ownership interest in our Common Stock based on an established Minimum Percentage. The Affiliation Agreement provides that the percentage of our Common Stock owned by RHI could be up to 2% below the Minimum Percentage (subject to certain conditions). However, it also provides that, upon RHI's request, we will repurchase shares of our Common Stock to increase RHI's ownership to the Minimum Percentage. Such a request by RHI may adversely affect our cash position. Based on the trading price of our Common Stock and RHI's approximate ownership percentage as of December 31, 2008, to raise RHI's percentage ownership to the Minimum Percentage would require us to spend approximately $3 billion for share repurchases. Limitations in our ability to repurchase shares could result in further dilution, which could increase the number of shares required to be repurchased in order to raise RHI's percentage ownership to the Minimum Percentage. For more information on our stock repurchase program, see "Liquidity and Capital Resources—Cash Used in Financing Activities," in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this Form 10-K. For information on the Minimum Percentage, see Note 10, "Relationship with Roche Holdings, Inc. and Related Party Transactions," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

RHI's ownership percentage is diluted by the exercise of stock options to purchase shares of our Common Stock by our employees and the purchase of shares of our Common Stock through our employee stock purchase plan. See Note 3, "Retention Plans and Employee Stock-Based Compensation," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for information regarding employee stock plans. In order to maintain RHI's Minimum Percentage, we repurchase shares of our Common Stock under the stock repurchase program. As of December 31, 2008, if all holders of exercisable in-the-money stock options had exercised their stock options, to offset dilution of such exercises would require us to spend approximately $2 billion for share repurchases, net of the exercise price of the stock options. In the first quarter of 2008, we received approximately four million shares under a $300 million prepaid share repurchase arrangement that we entered into and funded in 2007. In the second quarter of 2008, we entered into another prepaid share repurchase arrangement with an investment bank pursuant to which we delivered $500 million to the investment bank. Under this arrangement, the investment bank delivered approximately 5.5 million shares to us on September 30, 2008. As of December 31, 2008, there were in-the-money exercisable options outstanding for the purchase of approximately 45 million shares of Common Stock. While the cash outflows associated with future stock repurchase programs are uncertain, future stock repurchases could have a material adverse effect on our liquidity, credit rating, and ability to access additional capital in the financial markets.

Our Affiliation Agreement with RHI could limit our ability to make acquisitions or divestitures.

Our Affiliation Agreement with RHI contains provisions that:

Ÿ Require the approval of the directors designated by RHI to make any acquisition that represents 10 percent or more of our assets, net income, or revenue; or any sale or disposal of all or a portion of our business representing 10 percent or more of our assets, net income, or revenue.

Ÿ Enable RHI to maintain its percentage ownership interest in our Common Stock.

Ÿ Require us to establish a stock repurchase program designed to maintain RHI's percentage ownership interest in our Common Stock based on an established Minimum Percentage. For information regarding the Minimum Percentage, see Note 10, "Relationship with Roche Holdings, Inc. and Related Party Transactions," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Sales of our Common Stock by RHI could cause the price of our Common Stock to decline.

As of December 31, 2008, RHI owned 587,189,380 shares of our Common Stock, or 55.8% of our outstanding shares. All of our shares owned by RHI are eligible for sale in the public market subject to compliance with the applicable securities laws. We have agreed that, upon RHI's request, we will file one or more registration statements under the Securities Act of 1933 in order to permit RHI to offer and sell shares of our Common Stock. Sales of a substantial number of shares of our Common Stock by RHI in the public market could adversely affect the market price of our Common Stock.

Our results of operations are affected by our royalty and contract revenue, and sales to collaborators.

Royalty and contract revenue, and sales to collaborators in future periods, could vary significantly. Major factors affecting this revenue include, but are not limited to:

Ÿ Roche's decisions about whether to exercise its options and option extensions to develop and sell our future products in non-U.S. markets, and the timing and amount of any related development cost reimbursements.

Ÿ The expiration or termination of existing arrangements with other companies and Roche, which may include development and marketing arrangements for our products in the U.S., Europe, and other countries.

Ÿ The timing of non-U.S. approvals, if any, for products licensed to Roche and other licensees.

Ÿ Government and third-party payer reimbursement and coverage decisions that affect the utilization of our products and competing products.

Ÿ The initiation of new contractual arrangements with other companies.

Ÿ Whether and when contract milestones are achieved.

Ÿ The failure or refusal of a licensee to pay royalties or to make other contractual payments, the termination of a contract under which we receive royalties or other revenue, or changes to the terms of such a contract.

Ÿ The expiration of, or an adverse legal decision or ruling with respect to, our patents or licensed intellectual property. See "Protecting our proprietary rights is difficult and costly" and the Cabilly patent litigation and re-examination discussion in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Ÿ Variations in Roche's or other licensees' sales of their licensed products due to competition, manufacturing difficulties, licensees' internal forecasts, or other factors that affect the sales of products.

Ÿ

Variations in the recognition of royalty revenue based on our estimates of our licensees' sales, which are difficult to forecast because of the number of products involved, the availability of licensee sales data, potential contractual and intellectual property disputes, and the volatility of foreign exchange rates.

Ÿ Fluctuations in foreign currency exchange rates and the effect of any hedging contracts that we have entered into under our hedging policy.

Ÿ Negative safety or efficacy data from clinical studies conducted either in the U.S. or internationally by any party or post-approval marketing experience could cause the sales of our products to decrease or a product to be recalled or withdrawn.

Other factors could affect our product sales.

Other factors that could affect our product sales include, but are not limited to:

Ÿ Efficacy data from clinical studies conducted by any party in the U.S. or internationally showing, or perceived to show, a similar or improved treatment benefit at a lower dose or shorter duration of therapy could cause the sales of our products to decrease.

Ÿ Our pricing decisions, including a decision to increase or decrease the price of a product; the pricing decisions of our competitors; as well as our Avastin Patient Assistance Program.

Ÿ Negative safety or efficacy data from clinical studies conducted either in the U.S. or internationally by any party or post-approval marketing experience could cause the sales of our products to decrease or a product to be recalled or withdrawn.

Ÿ The outcome of litigation involving patents of other companies concerning our products (or those of our collaborators) or processes related to production and formulation of those products or uses of those products.

Ÿ Our distribution strategy, including the termination of, or change in, an existing arrangement with any major wholesalers that supply our products, and sales initiatives that we may undertake including product discounts.

Ÿ Product returns and allowances greater than expected or historically experienced.

Ÿ The inability of one or more of our major customers to maintain their ordering patterns or inventory levels, to efficiently and effectively distribute our products, or to meet their payment obligations to us on a timely basis or at all.

Ÿ The inability of patients to afford co-pay costs due to an economic contraction or recession, increases in co-pay costs, or for any other reason.

Any of the following additional factors could have a material adverse effect on our sales and results of operations.

We may be unable to attract and retain skilled personnel and maintain key relationships.

The success of our business depends, in large part, on our continued ability to (1) attract and retain highly qualified management, scientific, manufacturing, and sales and marketing personnel, (2) successfully integrate new employees into our corporate culture, and (3) develop and maintain important relationships with leading research and medical institutions and key distributors. Competition for these types of personnel and relationships is intense, and may intensify due to, among other reasons, uncertainty regarding the Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche. We cannot be sure that we will be able to attract or retain skilled personnel or maintain key relationships, or that the costs of retaining such personnel or maintaining such relationships will not materially increase.

Our business is affected by macroeconomic conditions.

Various macroeconomic factors could affect our business and the results of our operations. For instance, if inflation or other factors were to significantly increase our business costs, it may not be feasible to pass significant price increases on to our customers due to the process by which physician reimbursement for our products is calculated by

the government. Interest rates and the ability to access credit markets could affect the ability of our customers/distributors to purchase, pay for, and effectively distribute our products. Similarly, these macroeconomic factors could affect the ability of our sole-source or single-source suppliers to remain in business or otherwise supply product; failure by any of them to remain a going concern could affect our ability to manufacture products. Macroeconomic factors could also affect the ability of patients to pay for co-pay costs or otherwise pay for our products. Interest rates and the liquidity of the credit markets could also affect the value of our investments. Foreign currency exchange rates may affect our royalty revenue as well as the costs of R&D and manufacturing activities denominated in a currency other than the U.S. dollar.

We may incur material product liability costs.

The testing and marketing of medical products entails an inherent risk of product liability. Liability exposures for pharmaceutical products can be extremely large and pose a material risk. Our business may be materially and adversely affected by a successful product liability claim or claims in excess of any insurance coverage that we may have.

Insurance coverage may be more difficult and costly to obtain or maintain.

We currently have a limited amount of insurance to minimize our direct exposure to certain business risks. In the future, we may be exposed to an increase in premiums, a narrowing scope of coverage, and default risk from our underwriters. As a result, we may be required to assume more risk or make significant expenditures to maintain our current levels of insurance. If we are subject to third-party claims or suffer a loss or damages in excess of our insurance coverage, we will incur the cost of the portion of the retained risk. Furthermore, any claims made on our insurance policies may affect our ability to obtain or maintain insurance coverage at reasonable costs.

We are subject to environmental and other risks.

We use certain hazardous materials in connection with our research and manufacturing activities. In the event that such hazardous materials are stored, handled, or released into the environment in violation of law or any permit, we could be subject to loss of our permits, government fines or penalties, and/or other adverse governmental or private actions. The levy of a substantial fine or penalty, the payment of significant environmental remediation costs, or the loss of a permit or other authorization to operate or engage in our ordinary course of business could materially adversely affect our business.

We also have acquired, and may continue to acquire in the future, land and buildings as we expand our operations. Some of these properties are “brownfields” for which redevelopment or use is complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Certain events that could occur may require us to pay significant clean-up or other costs in order to maintain our operations on those properties. Such events include, but are not limited to, changes in environmental laws, discovery of new contamination, or unintended exacerbation of existing contamination. The occurrence of any such event could materially affect our ability to continue our business operations on those properties.

Fluctuations in our operating results could affect the price of our Common Stock.

Our operating results may vary from period to period for several reasons, including, but not limited to, the following:

Ÿ The overall competitive environment for our products, as described in “We face competition” above, factors affecting our royalty and contract revenue and sales to collaborators, as described in “Our results of operations are affected by our royalty and contract revenue, and sales to collaborators” above, and other factors that could affect our products

sales as described in “Other factors could affect our product sales” above.

Ÿ Increased COS, R&D, and marketing, general and administrative expenses; stock-based or other compensation expenses; litigation-related expenses; asset impairments; and equity securities write-downs.

Ÿ Changes in the economy, the credit markets, increased counterparty performance risks, interest rates, credit ratings, and the liquidity of our investments, and the effects that such changes or volatility may have on the value of our interest-bearing or equity investments.

Ÿ Changes in foreign currency exchange rates, the effect of any hedging contracts that we have entered into under our policy and the effects that they may have on our royalty revenue, contract revenue, R&D expenses and foreign-currency-denominated investments.

Ÿ The availability and extent of government and private third-party reimbursements for the cost of our products.

Ÿ The ability to successfully manufacture sufficient quantities of any particular marketed product.

Fluctuation in our operating results due to factors described above or for any other reason could affect the price of our Common Stock.

We may be unable to manufacture certain of our products if there is bovine spongiform encephalopathy (BSE) contamination of our bovine source raw material.

Most biotechnology companies, including Genentech, have historically used, and continue to use, bovine source raw materials to support cell growth in certain production processes. Bovine source raw materials from within or outside the U.S. are subject to public and regulatory scrutiny because of the perceived risk of contamination with the infectious agent that causes BSE. Should such BSE contamination occur, it would likely negatively affect our ability to manufacture certain products for an indefinite period of time (or at least until an alternative process is approved); negatively affect our reputation; and could result in a material adverse effect on our product sales, financial condition, and results of operations.

We could experience disruptions to our internal operations due to information system problems, which could decrease revenue and increase expenses.

Portions of our information technology infrastructure, and those of our service providers, may experience interruptions, delays, or cessations of service, or produce errors. Any disruptions that may occur to our current or future systems, could adversely affect our ability to report in an accurate and timely manner the results of our consolidated operations, financial position, and cash flows. Disruptions to these systems also could adversely affect our ability to fulfill orders and interrupt other operational processes. Delayed sales, lower margins, or lost customers resulting from these disruptions could adversely affect our financial results.

Our stock price, like that of many biotechnology companies, is volatile.

The market prices for securities of biotechnology companies in general have been highly volatile and may continue to be highly volatile in the future. In addition, the market price of our Common Stock has been and may continue to be volatile. Among other factors, the following may have a significant effect on the market price of our Common Stock:

Ÿ The Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche. In addition, other future developments and announcements related to the Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche may result in further volatility in the price of our Common Stock.

Ÿ Announcements of technological innovations or new commercial products by us or our competitors.

Ÿ Publicity regarding actual or potential medical results related to products under development or being commercialized by us or our competitors.

Ÿ Our financial results or the guidance we provide relating to our financial results.

Ÿ Concerns about our pricing initiatives and distribution strategy, and the potential effect of such initiatives and strategy on the utilization of our products or our product sales.

Ÿ Developments or outcomes of litigation, including litigation regarding proprietary and patent rights (including, for example, the Cabilly patent discussed in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K), and governmental investigations.

Ÿ Regulatory developments or delays affecting our products in the U.S. and other countries.

Ÿ Issues concerning the efficacy or safety of our products, or of biotechnology products generally.

Ÿ Economic and other external factors or a disaster or crisis.

Ÿ New proposals to change or reform the U.S. healthcare system, including, but not limited to, new regulations concerning reimbursement or follow-on biologics.

Our effective income tax rate may vary.

Various internal and external factors may have favorable or unfavorable effects on our future effective income tax rate. These factors include, but are not limited to, changes in tax laws, regulations, and/or rates; the results of any tax examinations; changing interpretations of existing tax laws or regulations; changes in estimates of prior years' items; past and future levels of R&D spending; acquisitions; changes in our corporate structure; and changes in overall levels of income before taxes—all of which may result in periodic revisions to our effective income tax rate.

Paying our indebtedness will require a significant amount of cash and may adversely affect our operations and financial results.

As of December 31, 2008, we had $2.0 billion of long-term debt and $500 million of commercial paper notes payable. Our ability to make payments on or to refinance our indebtedness, and to fund planned capital expenditures and R&D, as well as stock repurchases and expansion efforts, will depend on our ability to generate cash in the future. This ability, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory, and other factors that are and will remain beyond our control. Additionally, our indebtedness may increase our vulnerability to general adverse economic and industry conditions, and require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, which would reduce the availability of our cash flow to fund working capital, capital expenditures, R&D, expansion efforts, and other general corporate purposes; and limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

Our headquarters are located in a research and industrial area in South San Francisco, California, where we currently occupy 35 owned and 15 leased buildings that house our R&D, marketing and administrative activities, as well as bulk manufacturing facilities, a fill/finish facility, and a warehouse. We have made and will continue to make improvements to these properties to accommodate our growth. In addition, we own other properties in South San Francisco that we may utilize for future expansion.

We own a manufacturing facility in Vacaville, California, that is licensed to produce commercial materials for select products. We expanded our Vacaville site by constructing an additional manufacturing facility adjacent to the existing facility as well as office buildings to support the added manufacturing capacity. We expect qualification and licensure of our new Vacaville plant by the end of 2009. We also own a biologics manufacturing facility in Oceanside, California.

In September 2006, we acquired land in Hillsboro, Oregon for the construction of a new fill/finish, warehousing, distribution and related office facility. We completed construction and began warehousing and distribution operations in 2008. We expect FDA licensure of the fill/finish operation in late 2010.

We have an agreement with Lonza Group Ltd under which we can elect to purchase Lonza's manufacturing facility currently under construction in Singapore. The facility is expected to be licensed for the production of Avastin bulk drug substance in 2010.

In May 2007, we acquired land in Dixon, California and began the construction of a research support facility. We expect completion in late 2009.

In June 2007, we began construction of a new E. coli manufacturing facility in Singapore to produce bulk drug substance of Lucentis and other E. coli derived products for the U.S. market. We anticipate FDA licensure of the site in the first half of 2010.

In connection with our acquisition of Tanox, Inc. in August 2007, we acquired a lease for a manufacturing plant in San Diego, California that has been certified by the FDA for clinical use.

We lease small facilities as regional offices for sales and marketing and other functions in several locations throughout the U.S., as well as in London, United Kingdom. We also lease a lab facility and an office facility in Singapore.

In general, our existing facilities, owned or leased, are in good condition and are adequate for all present and near-term uses, and we believe that our capital resources are sufficient to purchase, lease, or construct any additional facilities required to meet our long-term growth needs.

Item 3. LEGAL PROCEEDINGS

We are a party to various legal proceedings, including patent litigations, licensing and contract disputes, and other matters.

On October 4, 2004, we received a subpoena from the U.S. Department of Justice requesting documents related to the promotion of Rituxan, a prescription treatment now approved for five indications. We are cooperating with the associated investigation. Through counsel we are having discussions with government representatives about the status of their investigation and Genentech's views on this matter, including potential resolution. Previously, the investigation had been both criminal and civil in nature. We were informed in August 2008 by the criminal prosecutor who handled this matter that the government had decided to decline to prosecute the company criminally in connection with this investigation. The civil matter is still ongoing. The outcome of this matter cannot be determined at this time.

We and the City of Hope National Medical Center (COH) are parties to a 1976 agreement related to work conducted by two COH employees, Arthur Riggs and Keiichi Itakura, and patents that resulted from that work that are referred to as the "Riggs/Itakura Patents." Subsequently, we entered into license agreements with various companies to

manufacture, use, and sell the products covered by the Riggs/Itakura Patents. On August 13, 1999, COH filed a complaint against us in the Superior Court in Los Angeles County, California, alleging that we owe royalties to COH in connection with these license agreements, as well as product license agreements that involve the grant of licenses under the Riggs/Itakura Patents. On June 10, 2002, a jury voted to award COH approximately $300 million in compensatory damages. On June 24, 2002, a jury voted to award COH an additional $200 million in punitive

damages. Such amounts were accrued as an expense in the second quarter of 2002. Included within current liabilities in "Accrued litigation" in the accompanying Consolidated Balance Sheet at December 31, 2007 was $776 million, which represented our estimate of the costs for the resolution of the COH matter as of that reporting date. We filed a notice of appeal of the verdict and damages awards with the California Court of Appeal, and in subsequent proceedings the California Court of Appeal affirmed the verdict and damages awards in all respects. Following the decision of the Court of Appeal, we filed a petition seeking review by the California Supreme Court which was granted, and on April 24, 2008 the California Supreme Court overturned the award of $200 million in punitive damages to COH but upheld the award of $300 million in compensatory damages. We paid $476 million to COH in the second quarter of 2008, reflecting the amount of compensatory damages awarded plus interest thereon from the date of the original decision, June 10, 2002.

As a result of the April 24, 2008 California Supreme Court decision, we reversed a $300 million net litigation accrual related to the punitive damages and accrued interest, which we recorded as "Special items: litigation-related" in our Consolidated Statements of Income in 2008. In 2007, we recorded accrued interest and bond costs on both compensatory and punitive damages totaling $54 million. In conjunction with the COH judgment in 2002, we posted a surety bond and were required to pledge cash and investments of $788 million to secure the bond, and this balance was reflected in "Restricted cash and investments" in the accompanying Consolidated Balance Sheet as of December 31, 2007. During the third quarter of 2008, the court completed certain administrative procedures to dismiss the case. As a result, the restrictions were lifted from the restricted cash and investments accounts, which consisted of available-for-sale investments, and the funds became available for use in our operations. We and COH are in discussions, but have not reached agreement, regarding additional royalties and other amounts that Genentech owes COH under the 1976 agreement for third-party product sales and settlement of a third-party patent litigation that occurred after the 2002 judgment. We recorded additional costs of $40 million as "Special items: litigation-related" in 2008 based on our estimate of our range of liability in connection with the resolution of these issues.

On April 11, 2003, MedImmune, Inc. filed a lawsuit against Genentech, COH, and Celltech R & D Ltd. in the U.S. District Court for the Central District of California (Los Angeles). The lawsuit related to U.S. Patent No. 6,331,415 (the Cabilly patent) that we co-own with COH and under which MedImmune and other companies have been licensed and have paid royalties to us under these licenses. The lawsuit included claims for violation of anti-trust, patent, and unfair competition laws. MedImmune sought a ruling that the Cabilly patent was invalid and/or unenforceable, a determination that MedImmune did not owe royalties under the Cabilly patent on sales of its Synagis® antibody product, an injunction to prevent us from enforcing the Cabilly patent, an award of actual and exemplary damages, and other relief. On June 11, 2008, we announced that we settled this litigation with MedImmune. Pursuant to the settlement agreement, the U.S. District Court dismissed all of the claims against us in the lawsuit. The litigation has been fully resolved and dismissed, and the settlement did not have a material effect on our operating results in 2008.

On May 13, 2005, a request was filed by a third party for reexamination of the Cabilly patent. The request sought reexamination on the basis of non-statutory double patenting over U.S. Patent No. 4,816,567. On July 7, 2005, the Patent Office ordered reexamination of the Cabilly patent. On September 13, 2005, the Patent Office mailed an initial non-final Patent Office action rejecting all 36 claims of the Cabilly patent. We filed our response to the Patent Office action on November 25, 2005. On December 23, 2005, a second request for reexamination of the Cabilly patent was filed by another third party, and on January 23, 2006, the Patent Office granted that request. On June 6, 2006, the two reexaminations were merged into one proceeding. On August 16, 2006, the Patent Office mailed a non-final Patent Office action in the merged proceeding rejecting all the claims of the Cabilly patent based on issues raised in the two reexamination requests. We filed our response to the Patent Office action on October 30, 2006. On February 16, 2007, the Patent Office mailed a final Patent Office action rejecting all the claims of the Cabilly patent. We responded to the final Patent Office action on May 21, 2007 and requested continued reexamination. On May 31, 2007, the Patent Office granted the request for continued reexamination, and in doing so withdrew the finality of the February 2007 Patent Office action and agreed to treat our May 21, 2007 filing as a response to a first Patent Office action. On

February 25, 2008, the Patent Office mailed a final Patent Office action rejecting all the claims of the Cabilly patent. We filed our response to that final Patent Office action on June 6, 2008. On July 19, 2008, the Patent Office mailed an advisory action replying to our response and confirming the rejection of all claims of the Cabilly patent. We filed a notice of appeal challenging the rejection on August 22, 2008. Our opening appeal brief was filed on December 9, 2008. Subsequent to the filing of our appeal brief, the Patent Office continued the reexamination. On February 12 and 13, 2009, we filed further responses with the Patent Office that included our proposed amendments to three claims of the patent (claims 21, 27, and 32). The Cabilly patent, which expires in

2018, relates to methods that we and others use to make certain antibodies or antibody fragments, as well as cells and deoxyribonucleic acid (DNA) used in these methods. We have licensed the Cabilly patent to other companies and derive significant royalties from those licenses. The claims of the Cabilly patent remain valid and enforceable throughout the reexamination and appeals processes. The outcome of this matter cannot be determined at this time.

In 2006, we made development decisions involving our humanized anti-CD20 program, and our collaborator, Biogen Idec Inc., disagreed with certain of our development decisions related to humanized anti-CD20 products. Under our 2003 collaboration agreement with Biogen Idec, we believe that we are permitted to proceed with further trials of certain humanized anti-CD20 antibodies, but Biogen Idec disagreed with our position. The disputed issues have been submitted to arbitration. Resolution of the arbitration could require that both parties agree to certain development decisions before moving forward with humanized anti-CD20 antibody clinical trials (and possibly clinical trials of other collaboration products, including Rituxan), in which case we may have to alter or cancel planned clinical trials in order to obtain Biogen Idec's approval. Each party is also seeking monetary damages from the other. The arbitrators held hearings on this matter, and we expect a final decision from the arbitrators by no later than July 2009. The outcome of this matter cannot be determined at this time.

On June 28, 2003, Mr. Ubaldo Bao Martinez filed a lawsuit against the Porriño Town Council and Genentech España S.L. in the Contentious Administrative Court Number One of Pontevedra, Spain. The lawsuit challenges the Town Council's decision to grant licenses to Genentech España S.L. for the construction and operation of a warehouse and biopharmaceutical manufacturing facility in Porriño, Spain. On January 16, 2008, the Administrative Court ruled in favor of Mr. Bao on one of the claims in the lawsuit and ordered the closing and demolition of the facility, subject to certain further legal proceedings. On February 12, 2008, we and the Town Council filed appeals of the Administrative Court decision at the High Court in Galicia, Spain. In addition, through legal counsel in Spain we are cooperating with Lonza to pursue additional licenses and permits for the facility. We sold the assets of Genentech España S.L., including the Porriño facility, to Lonza in December 2006, and Lonza has operated the facility since that time. Under the terms of that sale, we retained control of the defense of this lawsuit and agreed to indemnify Lonza against certain contractually defined liabilities up to a specified limit, which is currently estimated to be approximately $100 million. The outcome of this matter and our indemnification obligation to Lonza, if any, cannot be determined at this time.

On May 30, 2008, Centocor, Inc. filed a patent lawsuit against Genentech and COH in the U.S. District Court for the Central District of California. The lawsuit relates to the Cabilly patent that we co-own with COH and under which Centocor and other companies have been licensed and have paid royalties to us under these licenses. The lawsuit seeks a declaratory judgment of patent invalidity and unenforceability with regard to the Cabilly patent and of patent non-infringement with regard to Centocor's marketed product ReoPro® (Abciximab) and its unapproved product CNTO 1275 (Ustekinumab). Centocor originally sought to recover the royalties that it has paid to Genentech for ReoPro® and the monies it alleges that Celltech has paid to Genentech for Remicade® (infliximab), a product marketed by Centocor (a wholly-owned subsidiary of Johnson & Johnson) under an agreement between Centocor and Celltech, but Centocor withdrew those claims in connection with its first amended complaint filed on September 3, 2008. Genentech answered the complaint on September 19, 2008 and also filed counterclaims against Centocor alleging that four Centocor products infringe certain Genentech patents. Genentech filed an amendment to those counterclaims on October 10, 2008 and Centocor answered these counterclaims on November 26, 2008. The outcome of this matter cannot be determined at this time.

On May 8, June 11, August 8, and September 29 of 2008, Genentech was named as a defendant, along with InterMune, Inc. and its former chief executive officer, W. Scott Harkonen, in four originally separate class-action complaints filed in the U.S. District Court for the Northern District of California on behalf of plaintiffs who allegedly paid part or all of the purchase price for Actimmune® for the treatment of idiopathic pulmonary fibrosis. Actimmune® is an interferon-gamma product that was licensed by Genentech to Connectics Corporation and was

subsequently assigned to InterMune. InterMune currently sells Actimmune® in the U.S. The complaints are related in part to royalties that we received in connection with the Actimmune® product. The May 8, June 11, and August 8 complaints have been consolidated into a single amended complaint that claims and seeks damages for violations of

federal racketeering laws, unfair competition laws, and consumer protection laws, and for unjust enrichment. The September 29 complaint includes six claims, but only names Genentech as a defendant in one claim for damages for unjust enrichment. Genentech's motion to dismiss both complaints was heard on February 2, 2009. The outcome of these matters cannot be determined at this time.

Subsequent to the Roche Proposal, more than thirty shareholder lawsuits have been filed against Genentech and/or the members of its Board of Directors, and various Roche entities, including RHI, Roche Holding AG, and Roche Holding Ltd. The lawsuits are currently pending in various state courts, including the Delaware Court of Chancery and San Mateo County Superior Court, as well as in the United States District Court for the Northern District of California. The lawsuits generally assert class-action claims for breach of fiduciary duty and aiding and abetting breaches of fiduciary duty based in part on allegations that, in connection with Roche's offer to purchase the remaining shares, some or all of the defendants failed to properly value Genentech, failed to solicit other potential acquirers, and are engaged in improper self-dealing. Several of the suits also seek the invalidation, in whole or in part, of the Affiliation Agreement, and an order deeming Articles 8 and 9 of the company's Amended and Restated Certificate of Incorporation invalid or inapplicable to a potential transaction with Roche. The outcome of these matters cannot be determined at this time.

On October 27, 2008, Genentech and Biogen Idec Inc. filed a complaint against Sanofi-Aventis Deutschland GmbH (Sanofi), Sanofi-Aventis U.S. LLC, and Sanofi-Aventis U.S. Inc. in the Northern District of California, seeking a declaratory judgment that certain Genentech products, including Rituxan (which is co-marketed with Biogen Idec) do not infringe Sanofi's U.S. Patents 5,849,522 ('522 patent) and 6,218,140 ('140 patent) and a declaratory judgment that the '522 and '140 patents are invalid. Also on October 27, 2008, Sanofi filed suit against Genentech and Biogen Idec in the Eastern District of Texas, Lufkin Division, claiming that Rituxan and at least eight other Genentech products infringe the '522 and '140 patents. Sanofi is seeking preliminary and permanent injunctions, compensatory and exemplary damages, and other relief. Genentech and Biogen Idec filed a motion to transfer this matter to the Northern District of California on January 22, 2009. In addition, on October 24, 2008, Hoechst GmbH filed with the ICC International Court of Arbitration (Paris) a request for arbitration with Genentech, relating to a terminated agreement between Hoechst's predecessor and Genentech that pertained to the above-referenced patents and related patents outside the U.S. Hoechst is seeking payment of royalties on sales of Genentech products, damages for breach of contract, and other relief. Genentech intends to defend itself vigorously. The outcome of these matters cannot be determined at this time.

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

Not applicable.

Executive Officers of the Company

The executive officers of the company and their respective ages (as of December 31, 2008) and positions with the company are as follows:

Name	Age	Position
Arthur D. Levinson, Ph.D.*	58	Chairman and Chief Executive Officer
Susan D. Desmond-Hellmann, M.D., M.P.H.*	51	President, Product Development
Ian T. Clark*	48	Executive Vice President, Commercial Operations
David A. Ebersman*	39	Executive Vice President and Chief Financial Officer
Stephen G. Juelsgaard, D.V.M., J.D.*	60	Executive Vice President, Secretary and Chief Compliance Officer
Richard H. Scheller, Ph.D.*	55	Executive Vice President, Research and Chief Scientific Officer
Patrick Y. Yang, Ph.D.*	60	Executive Vice President, Product Operations
Marc Tessier-Lavigne, Ph.D.	49	Executive Vice President, Research Drug Discovery
Hal Barron, M.D., F.A.C.C.	46	Senior Vice President, Development, and Chief Medical Officer
Robert E. Andreatta	47	Vice President, Controller and Chief Accounting Officer

* Members of the Executive Committee of the company.

The Board of Directors appoints all executive officers annually. There is no family relationship between or among any of the executive officers or directors.

Business Experience

Arthur D. Levinson, Ph.D. was appointed Chairman of the Board of Directors of Genentech, Inc. in September 1999 and was elected its Chief Executive Officer and a director of the company in July 1995. Since joining the company in 1980, Dr. Levinson has been a Senior Scientist, Staff Scientist and Director of the company's Cell Genetics Department. Dr. Levinson was appointed Vice President of Research Technology in April 1989, Vice President of Research in May 1990, Senior Vice President of Research in December 1992, and Senior Vice President of Research and Development in March 1993. Dr. Levinson also serves as a member of the Board of Directors of Apple, Inc. and Google, Inc.

Susan D. Desmond-Hellmann, M.D., M.P.H. was appointed President, Product Development of Genentech in March 2004. She previously served as Executive Vice President, Development and Product Operations from September 1999 to March 2004, Chief Medical Officer from December 1996 to March 2004, and as Senior Vice President, Development from December 1997 to September 1999, among other positions, since joining Genentech in March 1995 as a Clinical Scientist. Prior to joining Genentech, she held the position of Associate Director at Bristol-Myers Squibb. Dr. Hellmann also serves as a member of the Board of Directors of Affymetrix, Inc.

Ian T. Clark was appointed Executive Vice President, Commercial Operations of Genentech in December 2005. He previously served as Senior Vice President, Commercial Operations of Genentech from August 2005 to December 2005 and joined Genentech as Senior Vice President and General Manager, BioOncology and served in that role from January 2003 through August 2005. Prior to joining Genentech, he served as president for Novartis Canada from 2001 to 2003. Before assuming his post in Canada, he served as chief operating officer for Novartis United Kingdom from 1999 to 2001. Mr. Clark also serves as a member of the Board of Directors of Vernalis plc.

David A. Ebersman was appointed Executive Vice President of Genentech in January 2006 and Chief Financial Officer in March 2005. Previously, he served as Senior Vice President, Finance from January 2005 through March 2005 and Senior Vice President, Product Operations from May 2001 through January 2005. He joined Genentech in February 1994 as a Business Development Analyst and subsequently served as Manager, Business Development from February 1995 to February 1996, Director, Business Development from February 1996 to March 1998, Senior Director, Product Development from March 1998 to February 1999 and Vice President, Product Development from February 1999 to May 2001. Prior to joining Genentech, he held the position of Research Analyst at Oppenheimer & Company, Inc.

Stephen G. Juelsgaard, D.V.M., J.D. was appointed Chief Compliance Officer of Genentech in June 2005, Executive Vice President in September 2002, and Secretary in April 1997. He joined Genentech in July 1985 as Corporate Counsel and subsequently served as Senior Corporate Counsel from 1988 to 1990, Chief Corporate Counsel from 1990 to 1993, Vice President, Corporate Law from 1993 to 1994, Assistant Secretary from 1994 to 1997, Senior Vice President from 1998 to 2002, and General Counsel from 1994 to January 2007.

Richard H. Scheller, Ph.D. was appointed Executive Vice President, Research of Genentech in September 2003 and Chief Scientific Officer in June 2008. Previously, he served as Senior Vice President, Research from March 2001 to September 2003. Prior to joining Genentech, he served as Professor of Molecular and Cellular Physiology and of Biological Sciences at Stanford University Medical Center from September 1982 to February 2001 and as an Investigator at the Howard Hughes Medical Institute from September 1990 to February 2001. He received his first academic appointment to Stanford University in 1982. He was appointed to the position of Professor of Molecular and Cellular Physiology in 1993 and as an Investigator in the Howard Hughes Medical Institute in 1994.

Patrick Y. Yang, Ph.D. was appointed Executive Vice President, Product Operations of Genentech in December 2005. Previously, he served as Senior Vice President, Product Operations from January 2005 through December 2005 and Vice President, South San Francisco Manufacturing and Engineering from December 2003 to January 2005. Prior to joining Genentech, he worked for General Electric from 1980 to 1992 in manufacturing and technology and for Merck & Co. Inc. from 1992 to 2003 in manufacturing. At Merck, he held several executive positions including Vice President, Supply Chain Management from 2001 to 2003 and Vice President, Asia/Pacific Manufacturing Operations from 1997 to 2000.

Marc Tessier-Lavigne, Ph.D. was promoted to Executive Vice President, Research Drug Discovery in June 2008. He previously served as Senior Vice President from September 2003 to June 2008. Prior to joining Genentech, from 2001 to 2003, he served at Stanford University as the Susan B. Ford Professor in the School of Humanities and Sciences, professor of Biological Sciences, and professor of Neurology and Neurological Sciences. He was also an investigator with the Howard Hughes Medical Institute from 1994 to 2003.

Hal Barron, M.D., F.A.C.C. was named Senior Vice President, Development in January 2004 and Chief Medical Officer in March 2004. He previously served as Vice President of Medical Affairs from May 2002 to January 2004, and as Senior Director of Specialty BioTherapeutics from 2001 to 2002. Prior to that, he held positions as Associate Director and Director of Cardiovascular Research. Dr. Barron joined Genentech as a clinical scientist in 1996.

Robert E. Andreatta, was appointed Controller of Genentech in June 2006, Chief Accounting Officer in April 2007, and Vice President, Controller and Chief Accounting Officer in November 2008. Previously at Genentech, he served as Assistant Controller and Senior Director, Corporate Finance from May 2005 to June 2006, Director of Corporate Accounting and Reporting from September 2004 to May 2005, and Director of Collaboration Finance from June 2003 to September 2004. Prior to joining Genentech, he held various officer positions at HopeLink Corporation, a healthcare information technology company, from 2000 to 2003 and was a member of the Board of Directors of

HopeLink from 2002 to 2003. Mr. Andreatta worked for KPMG from 1983 to 2000, including service as an audit partner from 1995 to 2000.

PART II

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

See "Liquidity and Capital Resources—Cash Used in Financing Activities" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this Form 10-K; Note 1, "Description of Business—Redemption of Our Special Common Stock"; Note 10, "Relationship with Roche Holdings, Inc. and Related Party Transactions"; and Note 12, "Capital Stock," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Stock Exchange Listing

Our Common Stock trades on the New York Stock Exchange under the symbol "DNA." We have not paid dividends on our Common Stock. We currently intend to retain all future income for use in the operation of our business and for future stock repurchases and, therefore, we have no plans to pay cash dividends at this time.

Common Stockholders

As of December 31, 2008, there were approximately 2,100 stockholders of record of our Common Stock, one of which is Cede & Co., a nominee for Depository Trust Company (DTC). All of the shares of Common Stock held by brokerage firms, banks and other financial institutions as nominees for beneficial owners are deposited into participant accounts at DTC, and are therefore considered to be held of record by Cede & Co. as one stockholder.

Stock Prices

	Common Stock			
	2008		2007	
	High	Low	High	Low
4th Quarter	$ 89.77	$ 69.17	$ 78.61	$ 65.35
3rd Quarter	99.14	75.01	80.57	71.43
2nd Quarter	82.00	66.80	83.65	72.31
1st Quarter	82.20	65.60	89.73	80.12

Stock Repurchases

See "Liquidity and Capital Resources—Cash Used in Financing Activities" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this Form 10-K for information on our stock repurchases.

Performance Graph

Below is a graph showing the cumulative total return to our stockholders during the period from December 31, 2003 through December 31, 2008 in comparison to the cumulative return on the Standard & Poor's 500 Index, the Standard & Poor's 500 Pharmaceuticals Index, and the Standard & Poor's 500 Biotechnology Index during that same period.(1) The results assume that $100 was invested on December 31, 2003.

	Base Period	Years Ending				
Company / Index	December 2003	December 2004	December 2005	December 2006	December 2007	December 2008
Genentech, Inc.	$ 100	$ 116.36	$ 197.71	$ 173.41	$ 143.36	$ 177.21
S&P 500 Index	100	110.88	116.33	134.70	142.10	89.53
S&P 500 Pharmaceuticals Index	100	92.57	89.46	103.64	108.47	88.73
S&P 500 Biotechnology Index	100	107.61	127.27	123.78	119.55	131.88

(1) The total return on investment (the change in year-end stock price plus reinvested dividends) assumes $100 invested on December 31, 2003 in our Common Stock, the Standard & Poor's 500 Index, the Standard & Poor's 500 Pharmaceuticals Index and the Standard & Poor's 500 Biotechnology Index. At December 31, 2008, the Standard & Poor's 500 Pharmaceuticals Index comprised Abbott Laboratories; Allergan, Inc.; Bristol-Myers Squibb Company; Forest Laboratories, Inc.; Johnson & Johnson; King Pharmaceuticals, Inc.; Merck & Co., Inc.; Mylan Laboratories Inc.; Eli Lilly and Company; Pfizer Inc.; Schering-Plough Corporation; Watson Pharmaceuticals, Inc.; and Wyeth. At December 31, 2008, the Standard & Poor's 500 Biotechnology Index comprised Amgen Inc.; Biogen Idec Inc.; Celgene Corporation; Cephalon, Inc.; Genzyme Corporation; and Gilead Sciences, Inc.

The information under "Performance Graph" is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference in any filing of Genentech under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this 10-K and irrespective of any general incorporation language in those filings.

Item 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data has been derived from our audited consolidated financial statements. The information below is not necessarily indicative of the results of future operations and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Item 1A, "Risk Factors," of this Form 10-K, and the consolidated financial statements and related notes thereto included in Item 8 of this Form 10-K, in order to fully understand factors that may affect the comparability of the information presented below.

SELECTED CONSOLIDATED FINANCIAL DATA
(In millions, except per share amounts)

	2008	2007	2006	2005	2004
Total operating revenue	$ 13,418	$ 11,724	$ 9,284	$ 6,633	$ 4,621
Product sales	10,531	9,443	7,640	5,488	3,749
Royalties	2,539	1,984	1,354	935	641
Contract revenue	348	297	290	210	231
Net income	$ 3,427 (1)	$ 2,769 (1)	$ 2,113 (1)	$ 1,279	$ 785
Basic earnings per share	$ 3.25	$ 2.63	$ 2.01	$ 1.21	$ 0.74
Diluted earnings per share	3.21	2.59	1.97	1.18	0.73
Total assets	$ 21,787	$ 18,940	$ 14,842	$ 12,147	$ 9,403 (2)
Long-term debt	2,329 (2)	2,402 (2)	2,204 (2)	2,083 (2)	412 (2)
Stockholders' equity	15,671	11,905	9,478	7,470	6,782

We have not paid any dividends.

All per share amounts reflect the two-for-one stock split that was effected in 2004.

(1) Net income in 2008, 2007, and 2006 included employee stock-based compensation costs of $262 million, $260 million, and $182 million, net of tax, respectively, due to our adoption of Statement of Financial Accounting Standards No. 123(R), "Share-Based Payment," on a modified prospective basis on January 1, 2006. No employee stock-based compensation expense was recognized in reported amounts in any period prior to January 1, 2006. Net income in 2008 also included (i) a benefit of $(158) million, net of tax, related to the net settlement of the City of Hope National Medical Center (COH) litigation and additional royalties and other amounts owed by us to COH for third-party product sales and settlement of a third-party patent litigation that occurred after the 2002 judgment and (ii) $93 million, net of tax, of charges related to the unsolicited proposal from Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche (the Roche Proposal), including costs related to the retention programs and third-party legal and advisory costs. Net income in 2007 also included certain items associated with the acquisition of Tanox, including a charge for in-process research and development expense of $77 million and a gain pursuant to Emerging Issues Task Force (EITF) Issue No. 04-1, "Accounting for Preexisting Business Relationships between the Parties to a Business Combination" (EITF 04-1), of $73 million, net of tax.

(2)

Long-term debt in 2008, 2007, 2006, and 2005 included $2 billion related to our debt issuance in July 2005, and included $306 million in 2008, $399 million in 2007, $216 million in 2006, and $94 million in 2005 in construction financing obligations related to our agreements with Health Care Properties (HCP, formerly Slough SSF, LLC) and Lonza. Long-term debt in 2008 was reduced by a $200 million financing payment to Lonza related to a the construction of a manufacturing facility in Singapore. Long-term debt in 2005 was also reduced by the repayment of $425 million to extinguish the consolidated debt and noncontrolling interest of a synthetic lease obligation related to our manufacturing facility located in Vacaville, California. Upon adoption of the Financial Accounting Standards Board Interpretation No. 46 (FIN 46), "Consolidation of Variable Interest Entities," in 2003, we consolidated the entity from which we lease our manufacturing facility located in Vacaville, California. Accordingly, we included in property, plant and equipment assets with net book values of $326 million at December 31, 2004. We also consolidated the entity's debt of $412 million and noncontrolling interest of $13 million, which amounts are included in long-term debt and litigation-related and other long-term liabilities, respectively, at December 31, 2004.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

The Company

Genentech is a leading biotechnology company that discovers, develops, manufactures, and commercializes medicines for patients with significant unmet medical needs. We commercialize multiple biotechnology products and also receive royalties from companies that are licensed to market products based on our technology.

Major Developments in 2008

We primarily earn revenue and income, and generate cash from product sales and royalty revenue. Our total operating revenue in 2008 was $13.42 billion, an increase of 14% from $11.72 billion in 2007. Product sales in 2008 were $10.53 billion, an increase of 12% from $9.44 billion in 2007. Product sales represented 78% of our operating revenue in 2008 and 81% in 2007. Royalty revenue was $2.54 billion in 2008, an increase of 28% from $1.98 billion in 2007. Royalty revenue represented 19% of our operating revenue in 2008 and 17% in 2007. Our net income in 2008 was $3.43 billion, an increase of 24% from $2.77 billion in 2007.

Avastin

On February 12, 2008, we announced that AVADO, Roche's study evaluating two doses of Avastin in first-line metastatic breast cancer (BC), met its primary endpoint of prolonging progression-free survival (PFS). Both doses of Avastin in combination with chemotherapy showed statistically significant improvement in the time patients lived without their disease advancing compared to chemotherapy and placebo.

On February 22, 2008, we received accelerated approval from the U.S Food and Drug Administration (FDA) to market Avastin in combination with paclitaxel chemotherapy for the treatment of patients who have not received prior chemotherapy for metastatic human epidermal growth factor receptor 2 (HER2)-negative BC. As a condition of the accelerated approval, we are required to make future submissions to the FDA, including the final study reports for two Phase III studies, AVADO and RIBBON I, which are studies of Avastin in first-line metastatic HER2-negative BC. Based on the FDA's review of our future submissions, the FDA may decide to withdraw or modify the accelerated approval, request additional post-marketing studies, or grant full approval.

On April 20, 2008, we announced an update to the previously reported Roche-sponsored international Phase III clinical study of Avastin (AVAiL) in combination with gemcitabine and cisplatin chemotherapy in patients with advanced, non-squamous, non-small cell lung cancer (NSCLC). The update confirmed the statistically significant improvement in the primary endpoint of PFS for the two different doses of Avastin studied in the trial (15 mg/kg/every-three-weeks and 7.5 mg/kg/every-three-weeks) compared to chemotherapy alone. The study did not demonstrate a statistically significant prolongation of overall survival, a secondary endpoint, for either dose of Avastin in combination with gemcitabine and cisplatin chemotherapy compared to chemotherapy alone. Median survival of patients in all arms of the study exceeded one year, longer than previously reported survival times in this indication.

On November 3, 2008, we announced that we submitted a supplemental Biologic License Application (sBLA) to the FDA for Avastin as a therapy for patients with previously treated glioblastoma. If accepted by the FDA, the application would be considered for an accelerated approval that allows provisional approval of medicines for cancer or other life-threatening diseases based on preliminary evidence suggesting clinical benefit. We plan to initiate a

global Phase III study in the first half of 2009 in patients with newly diagnosed glioblastoma multiforme that will evaluate Avastin with standard of care chemotherapy and radiation.

On November 23, 2008, we announced that a Phase III study (RIBBON I) of Avastin, in combination with taxane, anthracycline-based or capecitabine chemotherapies for first-line treatment of metastatic HER2-negative BC, met its primary endpoint of increasing the time patients lived without their disease advancing, compared to the chemotherapies alone. The primary endpoint of PFS was assessed by the treating physicians in the study (investigator-assessed). The safety profile of Avastin was consistent with previous experience and no new safety signals were observed.

The National Surgical Adjuvant Breast and Bowel Project (NSABP) is sponsoring an ongoing Phase III study (NSABP C-08) of Avastin plus chemotherapy in patients with early-stage colon cancer. During 2008, we announced that the NSABP informed us that the trial would continue, based on recommendations from an independent data monitoring committee after planned interim analyses and that the final efficacy and safety results were expected to be available in 2009 rather than 2010 as was previously anticipated. We also announced that the interim analyses showed no new or unexpected safety events in the Avastin arm. On January 21, 2009, we announced that the NSABP informed us that the results of the study could be known and communicated as early as mid-April 2009. The exact timing of data availability will depend on the timing of disease progression events. If the required number of disease progression events as defined by the study's statistical analytical plan has not occurred as of mid-April, then the NSABP will continue the study and we anticipate that the final results will most likely be known later in the second quarter of 2009.

Rituxan

On April 14, 2008, we and Biogen Idec announced that OLYMPUS, a Phase II/III study of Rituxan for primary-progressive multiple sclerosis (PPMS), did not meet its primary endpoint as measured by the time to confirmed disease progression during the 96-week treatment period.

On April 29, 2008, we announced that the Phase II/III study of Rituxan for systemic lupus erythematosus (SLE, commonly called lupus) did not meet its primary endpoint, defined as the proportion of Rituxan treated patients who achieved a major clinical response or partial clinical response measured by British Isles Lupus Assessment Group, a lupus activity response index, compared to placebo at 52 weeks.

On October 6, 2008, we and Biogen Idec announced that a global Phase III study of Rituxan in combination with fludarabine and cyclophosphamide chemotherapy met its primary endpoint of improving PFS, as assessed by investigators, in patients with previously treated CD20-positive chronic lymphocytic leukemia (CLL) compared to chemotherapy alone. There were no new or unexpected safety signals reported in the study. An independent review of the primary endpoint is being conducted for United States (U.S.) regulatory purposes. Earlier in 2008, Roche announced that another Phase III study of Rituxan, CLL-8, showed that a similar treatment combination improved PFS in patients with CLL who had not previously received treatment.

On December 18, 2008 we and Biogen Idec announced that a Phase III clinical study of Rituxan (IMAGE) in patients with early rheumatoid arthritis (RA) who were not previously treated with methotrexate met its primary endpoint.

Other Products and Pipeline

On October 2, 2008, we announced that we issued a Dear Healthcare Provider letter to inform physicians of a case of progressive multifocal leukoencephalopathy (PML) in a 70-year-old patient who had received Raptiva for more than four years for treatment of chronic plaque psoriasis. The patient subsequently died. On October 16, 2008, revised prescribing information for Raptiva was approved by the FDA. A boxed warning was added that includes the recently reported case of PML and updated information on the risk of serious infections leading to hospitalizations and death in

patients receiving Raptiva. The updated label also includes a warning about certain neurologic events as well as precautions regarding immunizations and pediatric use. A Dear Healthcare Provider letter was issued to communicate this updated prescribing information to physicians. On November 17, 2008, we announced that we issued a Dear Healthcare Provider letter to inform physicians of a second case of PML that resulted in the death of a

73-year old patient who had received Raptiva for approximately four years for treatment of chronic plaque psoriasis. On February 10, 2009, a Dear Healthcare Provider letter was sent to physicians to inform them of a third case of PML in a 47-year-old patient who had received Raptiva for more than three years for the treatment of chronic plaque psoriasis. On February 19, 2009, our collaborator, Merck Serono, and separately the European Medicines Agency (EMEA), announced that the EMEA recommended the suspension of the marketing authorization for Raptiva from Merck Serono, and that the EMEA's Committee for Medicinal Products for Human Use (CHMP) has concluded that the benefits of Raptiva no longer outweigh its risks because of safety concerns, including the occurrence of PML in patients taking the medicine. Also on February 19, 2009, the FDA issued a public health advisory regarding Raptiva, which provided warnings about PML and the use of Raptiva, and advised physicians to periodically re-evaluate patients treated with Raptiva and to consider other approved therapies to control patients' psoriasis. Based on the medical information available for the PML cases, we believe that Raptiva increases the risk of PML and that prolonged exposure to Raptiva or older age may further increase this risk. We have submitted updated labeling to the FDA, and are working with the FDA to determine the appropriate next steps, which may include, among other things, significant restrictions in use of or suspension or withdrawal of regulatory approval for Raptiva.

On October 2, 2008, we announced that we entered into a collaboration agreement with Roche and GlycArt Biotechnology AG (wholly-owned by Roche) in September for the joint development and commercialization of GA101, a humanized anti-CD20 monoclonal antibody for the potential treatment of hematological malignancies and other oncology-related B-cell disorders such as non-Hodgkin's lymphoma (NHL). GA101 is currently in Phase I/II clinical trials for CD20-positive B-cell malignancies, such as NHL and CLL. On October 28, 2008, Biogen Idec exercised their right under our collaboration agreement with them to opt in to this agreement and paid us an up-front fee as part of the opt-in.

On October 5, 2008, we and OSI Pharmaceuticals announced that a randomized Phase III study (BeTa Lung) evaluating Avastin in combination with Tarceva in patients with advanced NSCLC whose disease had progressed following platinum-based chemotherapy did not meet its primary endpoint of improving overall survival compared to Tarceva in combination with a placebo. However, there was evidence of clinical activity with improvements in the secondary endpoints of PFS and response rate when Avastin was added to Tarceva compared to Tarceva alone. No new or unexpected safety signals for either Avastin or Tarceva were observed in the study, and adverse events were consistent with those observed in previous NSCLC clinical trials evaluating the agents.

On November 6, 2008, we and OSI Pharmaceuticals announced that a global Phase III study (SATURN) met its primary endpoint and showed that Tarceva significantly extended the time that patients with advanced NSCLC lived without their cancer getting worse when given Tarceva immediately following initial treatment with platinum-based chemotherapy, compared to placebo. There were no new or unexpected safety signals in the study and adverse events were consistent with those observed in previous NSCLC clinical trials evaluating Tarceva.

On February 2, 2009, we announced that a Phase III study (ATLAS) of Tarceva in combination with Avastin as maintenance therapy following initial treatment with Avastin plus chemotherapy in advanced NSCLC met its primary endpoint. The study was stopped early on the recommendation of an independent data safety monitoring board after a pre-planned interim analysis showed that combining Tarceva and Avastin significantly extended the time patients lived without their disease advancing, as defined by PFS, compared to Avastin plus placebo. A preliminary safety analysis showed that adverse events were consistent with previous Avastin or Tarceva studies, as well as trials evaluating the two medicines together, and no new safety signals were observed.

Legal and Other Matters

On February 25, 2008, the U.S. Patent and Trademark Office (Patent Office) issued a final Patent Office action rejecting all 36 claims of the Cabilly patent. We filed our response to that final Patent Office action on June 6, 2008.

On July 19, 2008, the Patent Office mailed an advisory action replying to our response and confirming the rejection of all claims of the Cabilly patent. We filed a notice of appeal challenging the rejection on August 22, 2008. Our opening appeal brief was filed on December 9, 2008. Subsequent to the filing of our appeal brief, the Patent Office continued the reexamination. On February 12 and 13, 2009, we filed further responses with the Patent Office that included our proposed amendments to three claims of the patent (claims 21, 27, and 32). The claims of the patent remain valid and enforceable throughout the reexamination and appeals processes.

On April 24, 2008, we announced that the California Supreme Court overturned the award of $200 million in punitive damages to the COH but upheld the award of $300 million in compensatory damages resulting from a contract dispute brought by COH. The punitive damages were part of a 2004 decision of the California Court of Appeal, which upheld a 2002 Los Angeles County Superior Court jury verdict awarding these amounts. We paid $476 million to COH in the second quarter of 2008, reflecting the amount of compensatory damages awarded, plus interest thereon from the date of the original decision in 2002. We recorded a favorable litigation settlement as a result of the California Supreme Court decision.

On June 11, 2008, we announced that we settled the patent litigation with MedImmune involving the Cabilly patent. The settlement resolved disputed issues with respect to MedImmune's marketed product Synagis® as well as a related product for which MedImmune is seeking regulatory approval. The settlement also permits MedImmune to obtain licenses for certain additional pipeline products under the Cabilly patent family.

On July 21, 2008, we announced that we received an unsolicited proposal from Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche at a price of $89 in cash per share (the Roche Proposal) and on July 24, 2008 we announced that a special committee of our Board of Directors composed of our independent directors (the Special Committee) was formed to review and consider the terms and conditions of the Roche Proposal, any business combination with Roche or any offer by Roche to acquire our securities, negotiate as appropriate, and, in the Special Committee's discretion, recommend or not recommend the acceptance of the Roche Proposal by the minority shareholders. On August 13, 2008, we announced that the Special Committee had unanimously concluded that the Roche Proposal substantially undervalues the company, but that the Special Committee would consider a proposal that recognizes the value of the company and reflects the significant benefits that would accrue to Roche as a result of full ownership. On January 30, 2009, Roche announced that it intended to commence a cash tender offer which would replace the Roche Proposal that was announced on July 21, 2008. On January 30, 2009, in response to the announcement by Roche, the Special Committee urged shareholders to take no action with respect to the announcement by Roche and that the Special Committee will announce a formal position within 10 business days following the commencement of such a tender offer by Roche. On February 9, 2009, Roche commenced a cash tender offer for all of the outstanding shares of our Common Stock not owned by Roche for $86.50 per share (the Roche Tender Offer). Also on February 9, 2009, the Special Committee urged shareholders to take no action with respect to the Roche Tender Offer. The Special Committee announced that it intended to take a formal position within 10 business days of the commencement of the Roche Tender Offer, and would explain in detail its reasons for that position by filing a Statement on Schedule 14D-9 with the U.S. Securities and Exchange Commission (SEC).

On August 18, 2008, the Special Committee adopted two retention plans and two severance plans that together cover substantially all employees of the company, including our named executive officers. The two retention plans were implemented in lieu of our 2008 annual stock option grant, and the aggregate cost is currently estimated to be approximately $375 million payable in cash.

Our Strategy and Goals

As announced in 2006, our business objectives for the years 2006 through 2010 include bringing at least 20 new molecules into clinical development, bringing at least 15 major new products or indications onto the market, becoming the number one U.S. oncology company in sales, and achieving certain financial growth measures. These objectives are reflected in our revised Horizon 2010 strategy and goals summarized on our website at www.gene.com/gene/about/corporate/growthstrategy.

Economic and Industry-wide Factors

Our strategy and goals are challenged by economic and industry-wide factors that affect our business. Key factors that affect our future growth are discussed below.

Ÿ We face significant competition in the diseases of interest to us from pharmaceutical and biotechnology companies. The introduction of new competitive products or follow-on biologics, new information about existing products, and pricing and distribution decisions by us or our competitors may result in lost market share for us, reduced utilization of our products, lower prices, and/or reduced product sales, even for products protected by patents. We monitor the competitive landscape and develop strategies in response to new information.

Ÿ Our long-term business growth depends on our ability to continue to successfully develop and commercialize important novel therapeutics to treat unmet medical needs. We recognize that the successful development of pharmaceutical products is highly difficult and uncertain, and that it will be challenging for us to continue to discover and develop innovative treatments. Our business requires significant investment in research and development (R&D) over many years, often for products that fail during the R&D process. Once a product receives FDA approval, it remains subject to ongoing FDA regulation, including changes to the product label, new or revised regulatory requirements for manufacturing practices, written advisement to physicians, and product recalls or withdrawals.

Ÿ Our business model requires appropriate pricing and reimbursement for our products to offset the costs and risks of drug development. Some of the pricing and distribution of our products have received negative press coverage and public and governmental scrutiny. We will continue to meet with patient groups, payers, and other stakeholders in the healthcare system to understand their issues and concerns. The pricing and reimbursement environment for our products may change in the future and become more challenging due to, among other reasons, policies of the new presidential administration or new healthcare legislation passed by Congress.

Ÿ As the Medicare and Medicaid programs are the largest payers for our products, rules related to the programs' coverage and reimbursement continue to represent an important issue for our business. New regulations related to hospital and physician payment continue to be implemented annually. In addition, regulations implemented as a result of the Deficit Reduction Act of 2005, the Medicare, Medicaid, and State Children's Health Insurance Program Extension Act of 2007, and the Medicare Improvements for Patients and Providers Act of 2008 will continue to affect the reimbursement for our products paid by Medicare, Medicaid, and other public payers. We consider these rules as we plan our business and as we work to present our point of view to legislators and payers.

Ÿ Intellectual property protection of our products is crucial to our business. Loss of effective intellectual property protection could result in lost sales to competing products and loss of royalty payments (for example, royalty income associated with the Cabilly patent) from licensees. We are often involved in disputes over contracts and intellectual property, and we work to resolve these disputes in confidential negotiations or litigation. We expect legal challenges in this area to continue. We plan to continue to build upon and defend our intellectual property position.

Ÿ Manufacturing pharmaceutical products is difficult and complex, and requires facilities specifically designed and validated to run biotechnology production processes. Difficulties or delays in product manufacturing or in obtaining materials from our suppliers, or difficulties in accurately forecasting manufacturing capacity needs or complying with regulatory requirements, could negatively affect our business. Additionally, we have had, and may continue to have, an excess of available capacity, which could lead to idling of a portion of our manufacturing facilities, during which time we would incur unabsorbed or idle plant charges or other excess capacity charges, resulting in an increase in our cost of sales (COS).

Ÿ Our ability to attract and retain highly qualified and talented people in all areas of the company, and our ability to maintain our unique culture, particularly in light of the Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche, will be critical to our success over the long-term. We are working diligently across the company to make sure that we successfully hire, train, and integrate new employees into the Genentech culture and environment.

Ÿ Since September 2008, the financial markets have experienced high volatility and significant price declines, and the availability of credit has decreased significantly, making it more difficult for businesses to access capital. Various macroeconomic factors impacted by the financial markets could affect our business and the results of our operations. Macroeconomic factors could affect the ability of patients to pay for co-pay costs. Interest rates and the ability to access credit markets could affect the ability of our customers/distributors to purchase, pay for, and effectively distribute our products. Similarly, these macroeconomic factors could also affect the ability of our sole-source or single-source suppliers to remain in business or otherwise supply product; failure by any of them to remain a going concern could affect our ability to manufacture products. In addition, if inflation or other factors were to significantly increase our business costs, it may not be feasible to pass significant price increases on to our customers due to the process by which physician reimbursement for our products is calculated by the government.

Critical Accounting Policies and the Use of Estimates

The accompanying discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements and the related disclosures, which have been prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these Consolidated Financial Statements requires management to make estimates, assumptions, and judgments that affect the reported amounts in our Consolidated Financial Statements and accompanying notes. These estimates form the basis for the carrying values of assets and liabilities. We base our estimates and judgments on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, and we have established internal controls related to the preparation of these estimates. Actual results and the timing of the results could differ materially from these estimates.

We believe the following policies to be critical to understanding our financial condition, results of operations, and expectations for 2009, because these policies require management to make significant estimates, assumptions, and judgments about matters that are inherently uncertain.

Product Sales Allowances

Revenue from U.S. product sales is recorded net of allowances and accruals for rebates, healthcare provider contractual chargebacks, prompt-pay sales discounts, product returns, and wholesaler inventory management allowances, all of which are established at the time of sale. Sales allowances and accruals are based on estimates of the amounts earned or to be claimed on the related sales. The amounts reflected in our Consolidated Statements of Income as product sales allowances have been relatively consistent at approximately seven to eight percent of gross sales. In order to prepare our Consolidated Financial Statements, we are required to make estimates regarding the amounts earned or to be claimed on the related product sales.

Definitions for product sales allowance types are as follows:

Ÿ Rebate allowances and accruals include both direct and indirect rebates. Direct rebates are contractual price adjustments payable to direct customers, mainly to wholesalers and specialty pharmacies that purchase products directly from us. Indirect rebates are contractual price adjustments payable to healthcare providers and organizations such as clinics, hospitals, pharmacies, Medicaid, and group purchasing organizations that do not purchase products directly from us.

Ÿ Product returns allowances are established in accordance with our Product Returns Policy. Our returns policy allows product returns within the period beginning two months prior to and six months following product expiration.

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Prompt-pay sales discounts are credits granted to wholesalers for remitting payment on their purchases within established cash payment incentive periods.

- Wholesaler inventory management allowances are credits granted to wholesalers for compliance with various contractually defined inventory management programs. These programs were created to align purchases with underlying demand for our products and to maintain consistent inventory levels, typically at two to three weeks of sales depending on the product.

- Healthcare provider contractual chargebacks are the result of our contractual commitments to provide products to healthcare providers at specified prices or discounts.

We believe that our estimates related to wholesaler inventory management payments are not material amounts, based on the historical levels of credits and allowances as a percentage of product sales. We believe that our estimates related to healthcare provider contractual chargebacks and prompt-pay sales discounts do not have a high degree of estimation complexity or uncertainty, as the related amounts are settled within a short period of time. We consider rebate allowances and accruals and product returns allowances to be the only estimations that involve material amounts and require a higher degree of subjectivity and judgment to account for the obligations. As a result of the uncertainties involved in estimating rebate allowances and accruals and product returns allowances, there is a possibility that materially different amounts could be reported under different conditions or using different assumptions.

Our rebates are based on definitive agreements or legal requirements (such as Medicaid). Direct rebates are accrued at the time of sale and recorded as allowances against trade accounts receivable; indirect rebates (including Medicaid) are accrued at the time of sale and recorded as liabilities. Rebate estimates are evaluated quarterly and may require changes to better align our estimates with actual results. These rebates are primarily estimated and evaluated using historical and other data, including patient usage, customer buying patterns, applicable contractual rebate rates, contract performance by the benefit providers, changes to Medicaid legislation and state rebate contracts, changes in the level of discounts, and significant changes in product sales trends. Although rebates are accrued at the time of sale, rebates are typically paid out, on average, up to six months after the sale. We believe that our rebate allowances and accruals estimation process provides a high degree of confidence in the annual allowance amounts established. Annual provisions for rebates were approximately 2% of gross product sales between 2006 and 2008. Based on our estimation, the changes in rebate allowances and accruals estimates related to prior years have not exceeded 3% of the rebate allowances and accruals. To further illustrate our sensitivity to changes in the rebate allowances and accruals process, a 10% change in our rebate allowances and accruals provision in 2008 (which is in excess of three times the level of variability that we reasonably expect to observe for rebates) would have an approximately $20 million unfavorable effect on our results (or approximately $0.01 per share). The total rebate allowances and accruals recorded in our Consolidated Balance Sheets were $85 million and $70 million as of December 31, 2008 and 2007, respectively.

At the time of sale, we record product returns allowances based on our best estimate of the portion of sales that will be returned by our customers in the future. Product returns allowances are established in accordance with our returns policy, which allows buyers to return our products with two months or less remaining prior to product expiration and up to six months following product expiration. As part of the estimation process, we compare historical returns data to the related sales on a production lot basis. Historical rates of return are then determined by product and may be adjusted for known or expected changes in the marketplace. Actual annual product returns processed were less than 0.5% of gross product sales between 2006 and 2008, while annual provisions for expected future product returns were less than 1% of gross product sales in all such periods. Although product returns allowances are recorded at the time of sale, the majority of the returns are expected to occur within two years of sale. Therefore, our provisions for product returns allowances may include changes in the estimate for a prior period due to the lag time. However, to date such changes have not been material. For example, in 2008, changes in estimates for product returns allowances related to prior years were approximately 0.3% of 2008 gross product sales. To illustrate our sensitivity to changes in the product returns allowances, if we were to experience an adjustment rate of 0.5% of 2008 gross product sales,

which is nearly twice the level of annual variability that we have historically observed for product returns, that change in estimate would likely have an unfavorable effect of approximately $50 million (or approximately $0.03 per share) on our results of operations. Product returns allowances recorded in our Consolidated Balance Sheets were $100 million and $60 million as of December 31, 2008 and 2007, respectively. The increase in product returns allowances in 2008 was primarily due to the changes in estimates for product returns allowances related to prior years.

All of the aforementioned categories of allowances and accruals are evaluated quarterly and adjusted when trends or significant events indicate that a change in estimate is appropriate. Such changes in estimate could materially affect our results of operations or financial position; however, to date they have not been material. It is possible that we may need to adjust our estimates in future periods. Our Consolidated Balance Sheets reflect estimated product sales allowance reserves and accruals totaling $234 million and $176 million as of December 31, 2008 and 2007, respectively.

Royalties

For many of our agreements with licensees, we estimate royalty revenue and royalty receivables in the period that the royalties are earned, which is in advance of collection. Royalties from Roche, which are approximately 60% of our total royalty revenue, are reported using actual sales reports from Roche. Our royalty revenue and receivables from non-Roche licensees are determined based on communication with some licensees, historical information, forecasted sales trends, and our assessment of collectibility. As all of these factors represent an estimation process, there is inherent uncertainty and variability in our recorded royalty revenue. Differences between actual royalty revenue and estimated royalty revenue are adjusted for in the period in which they become known, typically the following quarter. Since 2006, the changes in estimates for our royalty revenue related to prior periods arising from this estimation process has not exceeded 1% of total annual royalty revenue. To further illustrate our sensitivity to the royalty estimation process, a 1% adjustment to total annual royalty revenue, which is at the upper end of the range of our historic experience, would result in an adjustment to our annual royalty revenue of approximately $25 million (or approximately $0.01 to $0.02 per share, net of any related royalty expenses).

For cases in which the collectibility of a royalty amount is not reasonably assured, royalty revenue is not recorded in advance of payment but is recognized as cash is received. In the case of a receivable related to previously recognized royalty revenue that is subsequently determined to be uncollectible, the receivable is reserved for by reversing the previously recorded royalty revenue in the period in which the circumstances that make collectibility doubtful are determined, and future royalties from the licensee are recognized on a cash basis until it is determined that collectibility is reasonably assured.

Royalties include royalty revenue from confidential licensing agreements related to our patents, including the Cabilly patent. The Cabilly patent, which expires in December 2018, relates to methods that we and others use to make certain antibodies or antibody fragments, as well as cells and DNA used in those methods. The Cabilly patent is the subject of litigation and a Patent Office reexamination proceeding. See also Note 9, “Leases, Commitments, and Contingencies,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for more information on our Cabilly patent litigation and reexamination.

Cabilly patent royalties are generally due 60 days after the end of the quarter in which they are earned. During the fourth quarter of 2008, we changed our process of recognizing royalty revenue from a number of our Cabilly licensees from an accrual basis to a cash basis based on our assessment of collectibility. As a result of this change, royalty revenue decreased approximately $80 million in the fourth quarter of 2008 compared to the third quarter of 2008. As of December 31, 2008, our Consolidated Balance Sheet included no Cabilly patent royalty accounts receivable, reflecting the fact that now all of our Cabilly patent royalties are recorded on a cash basis.

Income Taxes

Our income tax provision is computed using the liability method in accordance with Statement of Financial Accounting Standards (FAS) No. 109, “Accounting for Income Taxes.” Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using tax

rates projected to be in effect for the year in which the differences are expected to reverse. Significant estimates are required in determining our provision for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations, or the findings or expected results from any tax examinations. Various internal and external factors may have favorable or unfavorable effects on our future effective income tax rate. These factors include, but are not limited to, changes in tax laws, regulations, and/or rates; the results of any tax examinations;

changing interpretations of existing tax laws or regulations; changes in estimates of prior years' items; past and future levels of R&D spending; acquisitions; changes in our corporate structure; and changes in overall levels of income before taxes—all of which may result in periodic revisions to our effective income tax rate. Uncertain tax positions are accounted for in accordance with Financial Accounting Standards Board (FASB) Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" (FIN 48). We accrue tax-related interest and penalties related to uncertain tax positions, and include these items with income tax expense in the Consolidated Statements of Income.

Loss Contingencies

We are currently, and have been, involved in certain legal proceedings, including licensing and contract disputes, stockholder lawsuits, and other matters. See Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for more information on these matters. We assess the likelihood of any adverse judgments or outcomes for these legal matters as well as potential ranges of probable losses. We record an estimated loss as a charge to income if we determine that, based on information available at the time, the loss is probable and the amount of loss can be reasonably estimated. If only a range of the probable loss can be reasonably estimated, we accrue a liability at the low end of that range. The nature of these matters is highly uncertain and subject to change; as a result, the amount of our liability for certain of these matters could exceed or be less than the amount of our current estimates, depending on the final outcome of these matters. An outcome of such matters that differs from our current estimates could have a material effect on our financial position or our results of operations in any one quarter.

Inventories

Inventories are stated at the lower of cost or market value. Determining market value requires judgment about the future demand for our products and the likelihood of regulatory approval in the cases of currently marketed products manufactured under a new process or at facilities awaiting regulatory licensure. We capitalize those inventories awaiting regulatory licensure if in our judgment at the time of manufacture, near-term regulatory licensure is reasonably assured. We may be required to expense previously capitalized inventory costs upon a change in our estimate due to, among other potential factors, (i) the denial or delay of approval of a product, (ii) the denial or delay of approval of the licensure of either a manufacturing facility or a new manufacturing process by the necessary regulatory bodies, or (iii) new information that suggests that the inventory will not be salable. As of December 31, 2008 our inventory balance included $133 million of inventories manufactured under a process or at a facility that is awaiting regulatory licensure.

Further, the valuation of inventory requires us to estimate the market value of inventory that may expire prior to use based on our estimates of future demand for our products. If inventory costs exceed expected market value due to obsolescence or lack of demand, reserves are recorded for the difference between the cost and estimated market or recoverable value. These reserves are determined based on significant estimates, particularly estimated future demand for our products. Future product demand estimates are based on management's best estimates, after evaluating numerous market conditions and product factors, including expected market penetration rates, competitive products entrants, intellectual property matters, the reimbursement environment, pricing, our distribution strategy as well as those of our distribution partners, efficacy and safety data from current and future clinical studies, and finalized regulatory actions with respect to product labeling and usage guidelines, among other factors.

Between October 2, 2008 and February 10, 2009, we issued three Dear Healthcare Provider letters to inform physicians of three cases of PML reported in Raptiva-treated patients. On February 19, 2009, the EMEA announced its recommendation to suspend the marketing authorization held by our collaborator, Merck Serono, for Raptiva in the European Union. The EMEA's announcement is not expected to result in an impairment of the value of our Raptiva inventory. Also on February 19, 2009, the FDA issued a public health advisory regarding Raptiva, which provided warnings about PML and the use of Raptiva, and advised physicians to periodically re-evaluate patients treated with

Raptiva and to consider other approved therapies to control patients' psoriasis. We are currently in discussions with the FDA regarding potential label changes and restrictions for the use of Raptiva that could potentially have a materially adverse effect on demand for the product in the U.S. Our discussions with the FDA have not been finalized and we cannot yet reliably estimate the effect of any resultant changes on future demand for Raptiva in the U.S. As of December 31, 2008, we held approximately $130 million of Raptiva work-in-process and finished goods inventory. If future FDA actions or other events or decisions lead to a substantial decrease in expected demand for Raptiva in the U.S., we could experience a material reduction in the market value of our Raptiva inventory and be required to write-down a portion, or all, of that inventory. For example, if our current discussions with the FDA result in significant new regulatory requirements that affect how physicians prescribe Raptiva or other labeling restrictions that would individually or collectively reduce demand for and use of the product to a substantial extent, we believe that such actions would result in the vast majority of our Raptiva inventory value being impaired.

Employee Stock-Based Compensation

Under the provisions of FAS No. 123(R), "Share-Based Payment" (FAS 123R), employee stock-based compensation is estimated at the date of grant based on the employee stock award's fair value using the Black-Scholes option-pricing model and is recognized as

expense ratably over the requisite service period in a manner similar to other forms of compensation paid to employees. The Black-Scholes option-pricing model requires the use of certain subjective assumptions. The most significant of these assumptions are our estimates of the expected volatility of the market price of our stock and the expected term of the award. Due to the redemption of our Special Common Stock in June 1999 (Redemption) by Roche Holdings, Inc. (RHI), there is limited historical information available to support our estimate of certain assumptions required to value our stock options as an option grant cycle lasts ten years. When establishing an estimate of the expected term of an award, we consider the vesting period for the award, our recent historical experience of employee stock option exercises (including post-vesting forfeitures), the expected volatility, and a comparison to relevant peer group data. As required under GAAP, we review our valuation assumptions at each grant date, and, as a result, our valuation assumptions used to value employee stock-based awards granted in future periods may change. See Note 3, “Retention Plans and Employee Stock-Based Compensation,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for more information.

Results of Operations
(In millions, except per share amounts)

				Annual Percentage Change	
	2008	2007	2006	2008/2007	2007/2006
Product sales	$ 10,531	$ 9,443	$ 7,640	12%	24%
Royalties	2,539	1,984	1,354	28	47
Contract revenue	348	297	290	17	2
Total operating revenue	13,418	11,724	9,284	14	26
Cost of sales	1,744	1,571	1,181	11	33
Research and development	2,800	2,446	1,773	14	38
Marketing, general and administrative	2,405	2,256	2,014	7	12
Collaboration profit sharing	1,228	1,080	1,005	14	7
Write-off of in-process research and development related to acquisition	–	77	–	(100)	–
Gain on acquisition	–	(121)	–	(100)	–
Recurring amortization charges related to redemption and acquisition	172	132	105	30	26
Special items: litigation-related	(260)	54	54	(581)	0
Total costs and expenses	8,089	7,495	6,132	8	22
Operating income	5,329	4,229	3,152	26	34
Other income (expense):					
Interest and other income, net	184	273	325	(33)	(16)
Interest expense	(82)	(76)	(74)	8	3
Total other income, net	102	197	251	(48)	(22)
Income before taxes	5,431	4,426	3,403	23	30
Income tax provision	2,004	1,657	1,290	21	28
Net income	$ 3,427	$ 2,769	$ 2,113	24	31
Earnings per share:					
Basic	$ 3.25	$ 2.63	$ 2.01	24	31
Diluted	$ 3.21	$ 2.59	$ 1.97	24	31
Cost of sales as a % of product sales	17%	17%	15%		

Research and development as a % of total operating revenue	21	21	19
Marketing, general and administrative as a % of total operating revenue	18	19	22
Pretax operating margin	40	36	34
Net income as a % of total operating revenue	26	24	23
Effective income tax rate	37	37	38

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Percentages in this table and throughout our discussion and analysis of financial condition and results of operations may reflect rounding adjustments.

Total Operating Revenue

Total operating revenue increased 14% to $13,418 million in 2008 and increased 26% to $11,724 million in 2007. These increases were primarily due to higher product sales and royalty revenue, and are further discussed below.

Total Product Sales
(In millions)

				Annual Percentage Change	
Product Sales	2008	2007	2006	2008/2007	2007/2006
Net U.S. product sales					
Avastin	$ 2,686	$ 2,296	$ 1,746	17%	32%
Rituxan	2,587	2,285	2,071	13	10
Herceptin	1,382	1,287	1,234	7	4
Lucentis	875	815	380	7	114
Xolair	517	472	425	10	11
Tarceva	457	417	402	10	4
Nutropin products	358	371	378	(4)	(2)
Thrombolytics	275	268	243	3	10
Pulmozyme	257	223	199	15	12
Raptiva	108	107	90	1	19
Total net U.S. product sales	9,503	8,540	7,169	11	19
Net product sales to collaborators	1,028	903	471	14	92
Total net product sales	$ 10,531	$ 9,443	$ 7,640	12	24

The totals shown above may not appear to sum due to rounding.

Total net product sales increased 12% to $10,531 million in 2008 and increased 24% to $9,443 million in 2007. Net U.S. sales increased 11% to $9,503 million in 2008 and increased 19% to $8,540 million in 2007. These increases in U.S. sales were due to higher sales across almost all products, in particular higher sales of our oncology products and sales resulting from the approval of Lucentis on June 30, 2006. Increased U.S. sales volume accounted for 74%, or approximately $710 million, of the increase in U.S. net product sales in 2008, and 83%, or approximately $1,100 million in 2007. Changes in net U.S. sales prices across the majority of products in the portfolio accounted for most of the remainder of the increases in U.S. net product sales in 2008 and 2007.

References below to market adoption and penetration, as well as patient share, are derived from our analyses of market tracking studies and surveys that we undertake with physicians. We consider these tracking studies and surveys indicative of trends and information with respect to the usage and buying patterns of the end-users of our products, and as indicative of the purchasing patterns of our wholesaler customers. We use statistical analyses and management judgment to interpret the data that we obtain, and as such, the adoption, penetration, and patient share data presented herein represent management’s best estimates. In general, we have rounded our percentage estimates to the nearest 5% due to inherent margins of error that exist due to limitations in sample size and the timeliness in receiving and analyzing this data. We may modify our market study methodology in response to changes in the marketplace and how we manage the business. If we have such a change, we will provide comparative prior period data using the new methodology, if it is available.

Avastin

Net U.S. sales of Avastin increased 17% to $2,686 million in 2008 and 32% to $2,296 million in 2007. Net U.S. sales in 2008 excluded net revenue of $5 million that was deferred in connection with our Avastin Patient Assistance Program, and net U.S. sales in 2007 included the net recognition of $7 million of previously deferred revenue related to the program. The increase in sales in 2008 was primarily due to increased use of Avastin for first-line treatment of metastatic BC, which received accelerated approval from the FDA on February 22, 2008, as well as from increased use in metastatic NSCLC. The increase in sales in 2007 was primarily a result of increased use of Avastin in first-line metastatic NSCLC, and in metastatic BC, an unapproved use of Avastin during 2007.

Among the approximately 50% to 60% of patients in first-line metastatic lung cancer who are eligible for Avastin therapy, we estimate that penetration in the fourth quarter of 2008 was approximately 65%, which is in-line with penetration throughout the year, but an increase relative to in the fourth quarter of 2007. Use of the standard dose, defined as at least 5 mg/kg/weekly-equivalent, during the fourth quarter of 2008 was approximately 75%, in-line with the third quarter of 2008. The labeled dose of Avastin in lung cancer is 15 mg/kg, administered intravenously every three weeks. On April 20, 2008, we announced an update to the previously reported Roche-sponsored international Phase III clinical study of Avastin (AVAiL) in combination with gemcitabine and cisplatin chemotherapy in patients with advanced, non-squamous, NSCLC. The update confirmed the statistically significant improvement in the primary endpoint of PFS for the two different doses of Avastin studied in the trial (15 mg/kg/every-three-weeks and 7.5 mg/kg/every-three-weeks) compared to chemotherapy alone. The study did not demonstrate a statistically significant prolongation of overall survival, a secondary endpoint, for either dose in combination with gemcitabine and cisplatin chemotherapy compared to chemotherapy alone. Median survival of patients in all arms of the study exceeded one year, longer than previously reported survival times in this indication.

In first-line metastatic BC patients, we estimate Avastin penetration in the fourth quarter of 2008 was approximately 40%, which is consistent with the prior quarter. With respect to dose, the percentage of metastatic BC patients receiving the standard dose of Avastin, defined as 5 mg/kg/weekly-equivalent, was in-line with that seen in previous quarters. The U.S. labeled dose of Avastin in metastatic BC is 10 mg/kg, administered intravenously every two weeks. On November 23, 2008, we announced that the RIBBON I study of Avastin in combination with taxane, anthracycline-based or capecitabine chemotherapies for first-line treatment of metastatic HER2-negative BC met its primary endpoint of increasing the time that patients lived without their disease advancing, compared to chemotherapies alone. Data from RIBBON I along with data from AVADO, the Roche-sponsored, placebo-controlled Phase III trial, which evaluated two dose levels of Avastin, a 7.5 mg/kg/every-three-weeks dose and a 15 mg/kg/every-three-week dose, in combination with docetaxel chemotherapy, will be submitted to the FDA by mid-2009, and are required for the FDA under the conditions of the accelerated approval we received on February 22, 2008. These data will be reviewed by the FDA and may affect the Avastin approval in BC.

In both first-line and second-line metastatic colorectal cancer (CRC), penetration in the fourth quarter of 2008 was in-line with the third quarter of 2008 and the fourth quarter of 2007.

On September 30, 2008, we announced that we submitted an sBLA to the FDA for Avastin as potential treatment for patients with advanced renal cell carcinoma.

On November 3, 2008, we announced that we submitted an sBLA to the FDA for Avastin as a potential treatment for patients with previously treated glioblastoma. If accepted by the FDA, the application would be considered for an accelerated approval that allows provisional approval of medicines for cancer or other life-threatening diseases based on preliminary evidence suggesting clinical benefit. We plan to initiate a global Phase III study in patients with newly diagnosed glioblastoma multiforme in the first half of 2009 that will evaluate Avastin with standard of care chemotherapy and radiation.

The NSABP is sponsoring an ongoing Phase III study (NSABP C-08) of Avastin plus chemotherapy in patients with early-stage colon cancer. During 2008, we announced that the NSABP informed us that the trial would continue, based on recommendations from an independent data monitoring committee after planned interim analyses and that the final efficacy and safety results were expected to be available in 2009 rather than 2010 as was previously anticipated. We also announced that the interim analyses showed no new or unexpected safety events in the Avastin arm. On January 21, 2009, we announced that the NSABP informed us that the results of the study could be known and communicated as early as mid-April 2009. The exact timing of data availability will depend on the timing of disease progression events. If the required number of disease progression events as defined by the study's statistical

analytical plan has not occurred as of mid-April, then the NSABP will continue the study and we anticipate that the final results will most likely be known later in the second quarter of 2009.

Rituxan

Net U.S. sales of Rituxan increased 13% to $2,587 million in 2008 and 10% to $2,285 million in 2007. Sales growth in 2008 and 2007 resulted from increased use of Rituxan in the oncology setting and in the RA setting, and from price increases in both years.

In the oncology setting, the increases were due to the use of Rituxan following chemotherapy in indolent NHL, including areas of unapproved use, and CLL, an unapproved use. We estimate that Rituxan's overall adoption rate in the combined markets of NHL and CLL was approximately 85% for the fourth quarter of 2008, an increase compared to the fourth quarter of 2007.

Primary drivers of growth in the RA setting in 2008 were increased new patient starts and increased total numbers of prescribers to an estimated 80% of targeted rheumatologists. It remains difficult to precisely determine the sales split between Rituxan use in oncology and immunology settings since many treatment centers treat both types of patients, but we estimate that sales in the immunology setting represented approximately 11% to 13% of total Rituxan sales for 2008 compared to our revised estimate of approximately 8% to 10% of total Rituxan sales for 2007.

In January 2008, results from Rituxan Phase III SUNRISE trial met its primary endpoint. This study was a controlled retreatment study for patients with RA who have had an inadequate response to previous treatment with one or more tumor necrosis factor (TNF) antagonist therapies. A preliminary review of the safety data revealed no new safety signals.

On January 24, 2008 we announced that the SERENE Phase III clinical study of Rituxan in patients who have not been previously treated with a biologic met its primary endpoint of a significantly greater proportion of Rituxan-treated patients achieving an American College of Rheumatology (ACR) 20 response at week 24, compared to placebo. In this study, patients who received a single treatment course of two infusions of either 500 milligrams or 1,000 milligrams of Rituxan in combination with a stable dose of methotrexate displayed a statistically significant improvement in ACR20 scores compared to patients who received placebo in combination with methotrexate. Although the study was not designed to compare the Rituxan doses, treatment efficacy appears to be similar between both Rituxan doses.

On January 25, 2008, the FDA approved our sBLA to expand the label for Rituxan to include slowing the progression of structural damage in adult patients with moderate-to-severe RA who have failed TNF antagonist therapies.

On April 14, 2008, we and Biogen Idec announced that OLYMPUS, a Phase II/III study of Rituxan for PPMS, did not meet its primary endpoint as measured by the time to confirmed disease progression during the 96-week treatment period.

On April 29, 2008, we announced that the Phase II/III study of Rituxan for SLE did not meet its primary endpoint defined as the proportion of Rituxan treated patients who achieved a major clinical response or partial clinical response measured by British Isles Lupus Assessment Group, a lupus activity response index, compared to placebo at 52 weeks.

On October 6, 2008, we and Biogen Idec announced that a global Phase III study of Rituxan in combination with fludarabine and cyclophosphamide chemotherapy met its primary endpoint of improving PFS, as assessed by investigators, in patients with previously treated CD20-positive CLL compared to chemotherapy alone. There were no new or unexpected safety signals reported in the study. An independent review of the primary endpoint is being conducted for U.S. regulatory purposes. Earlier in 2008, Roche announced that another Phase III study of Rituxan,

CLL-8, showed that a similar treatment combination improved PFS in patients with CLL who had not previously received treatment.

On December 18, 2008, we announced that the IMAGE trial, a Phase III study in patients with early RA who have not been previously treated with methotrexate, met its primary endpoint. Patients in the study received two infusions of either 500 milligrams or 1,000 milligrams of Rituxan or placebo in combination of methotrexate. At 52 weeks, patients in the 1,000 milligrams treatment group met the primary endpoint of prevention of progression of structural damage. The safety data was consistent with previous studies and preliminary analysis did not reveal any new or unexpected safety signals.

Herceptin

Net U.S. sales of Herceptin increased 7% to $1,382 million in 2008 and 4% to $1,287 million in 2007. The sales growth in 2008 and 2007 was primarily due to price increases that occurred from 2006 through 2008, and increased use of Herceptin in the treatment of early-stage HER2-positive BC. We estimate that Herceptin's penetration in the adjuvant setting was approximately 75% for the fourth quarter of 2008, which was in-line with the fourth quarter of 2007. In first-line HER2-positive metastatic BC patients, we estimate that Herceptin's penetration was approximately 75% for the fourth quarter of 2008, which was also in-line with the fourth quarter of 2007.

On January 18, 2008, the FDA expanded the Herceptin label, based on the HERA study, for the treatment of patients with early-stage HER2-positive BC to include treatment for patients with node-negative BC.

On May 29, 2008, the FDA expanded the Herceptin label, based on the BCIRG 006 study, for the treatment of patients with early-stage HER2-positive BC to include Herceptin given with docetaxel and carboplatin. Herceptin also may now be administered for one year in an every-three-week dosing schedule, instead of weekly.

Lucentis

Lucentis was approved by the FDA for the treatment of neovascular (wet) age-related macular degeneration (AMD) on June 30, 2006. Net U.S. sales of Lucentis increased 7% to $875 million in 2008 and 114% to $815 million in 2007. The primary drivers of growth in 2008 were increased dosing and an improving market environment. Our most recent market research on dosing has shown an increase in the number of Lucentis injections in the patients' first and second year of treatment. We believe that approximately 40% of newly diagnosed patients with wet AMD were treated with Lucentis during the fourth quarter of 2008, which remained broadly stable throughout 2008, and decreased from approximately 50% in the fourth quarter of 2007. We believe that key factors affecting Lucentis sales in 2008 and 2007 were the continued unapproved use of Avastin and reimbursement concerns from retinal specialists. Lucentis received a permanent J-code classification from the Centers for Medicare and Medicaid Services in January 2008, which we believe addressed some of the reimbursement concerns. The launch of improved patient access programs in March 2008, a revised promotional campaign, and enhanced distribution options for Lucentis that began in May 2008 also contributed to the sales growth in 2008. In October 2007 we announced that we planned to no longer allow compounding pharmacies the ability to purchase Avastin directly from wholesale distributors, and this change in distribution was made effective on January 1, 2008. However, physicians can purchase Avastin from authorized distributors and ship to the destination of the physicians' choice.

Although sales increased in 2008, the AMD market remains challenging with the continued unapproved use of Avastin and reimbursement concerns of retinal specialists. We expect these factors to persist and limit Lucentis share growth.

In December, 2008, we issued a Dear Healthcare Provider letter to inform prescribing physicians that multiple cases of intraocular adverse events, including serious intraocular inflammatory reactions, following injection with Avastin had been reported in Canada. A single lot of Avastin which was distributed in Canada and 11 other countries outside

the U.S. accounted for 25 of the 36 cases. We and Roche confirmed that the Avastin production lot had passed all quality inspections for its approved intravenous use in oncology.

Xolair

Net U.S. sales of Xolair increased 10% to $517 million in 2008 and 11% to $472 million in 2007. Sales growth in 2008 and 2007 was driven by increased penetration in the asthma market and, to a lesser extent, price increases effective between 2006 and 2008. Increased sales in 2008 were consistent with our efforts to increase adoption of the National Heart, Lung, and Blood Institute asthma guidelines, which recommend that physicians consider Xolair as a standard part of therapy. At the FDA's request, we and Novartis Pharma AG and affiliates (Novartis), our co-promotion collaborator, updated the Xolair product label in June 2007 with a boxed warning regarding the risk of anaphylaxis in patients receiving Xolair. As part of our continuing discussions with the FDA, on January 29, 2009, the FDA requested that we, as the BLA holder, submit a draft Risk Evaluation and Mitigation Strategy.

In the fourth quarter of 2008, we submitted an sBLA for Xolair to extend our current asthma indication to include children six years and older.

Tarceva

Net U.S. sales of Tarceva increased 10% to $457 million in 2008 and 4% to $417 million in 2007. The sales growth in 2008 was primarily due to price increases in 2008 and 2007 and slightly lower return reserve requirements compared to 2007. We estimate that Tarceva's penetration in second-line NSCLC was approximately 25% for the fourth quarter of 2008, which was in-line with the fourth quarter of 2007. In the first-line pancreatic cancer setting, we estimate that Tarceva's penetration was approximately 40% in 2008, which was also in-line compared to the fourth quarter of 2007.

Sales in 2007 were positively affected by price increases during 2007 and 2006. These increases, however, were partially offset by higher product returns and return reserve requirements in the second and third quarters of 2007 and by modest decreases in volume in 2007.

On October 5, 2008, we and OSI Pharmaceuticals announced that a randomized Phase III study (BeTa Lung) evaluating Avastin in combination with Tarceva in patients with advanced NSCLC whose disease had progressed following platinum-based chemotherapy did not meet its primary endpoint of improving overall survival compared to Tarceva in combination with a placebo. However, there was evidence of clinical activity with improvements in the secondary endpoints of PFS and response rate when Avastin was added to Tarceva compared to Tarceva alone. No new or unexpected safety signals for either Avastin or Tarceva were observed in the study, and adverse events were consistent with those observed in previous NSCLC clinical trials evaluating the agents.

On November 6, 2008, we and OSI Pharmaceuticals announced that a global Phase III study (SATURN) met its primary endpoint and showed Tarceva significantly extended the time patients with advanced NSCLC lived without their cancer getting worse when given immediately following initial treatment with platinum-based chemotherapy, compared to placebo. There were no new or unexpected safety signals in the study and adverse events were consistent with those observed in previous NSCLC clinical trials evaluating Tarceva. We and OSI Pharmaceuticals will discuss a potential U.S. filing based on SATURN with the FDA in 2009.

On February 2, 2009, we announced that a Phase III study (ATLAS) of Tarceva in combination with Avastin as maintenance therapy following initial treatment with Avastin plus chemotherapy in advanced NSCLC met its primary endpoint. The study was stopped early on the recommendation of an independent data safety monitoring board after a pre-planned interim analysis showed that combining Tarceva and Avastin significantly extended the time patients lived without their disease advancing, as defined by PFS, compared to Avastin plus placebo. A preliminary safety analysis showed that adverse events were consistent with previous Avastin or Tarceva studies, as well as trials evaluating the two medicines together, and no new safety signals were observed.

Nutropin Products

Combined net U.S. sales of our Nutropin products decreased 4% to $358 million in 2008 and decreased 2% to $371 million in 2007.

Thrombolytics

Combined net U.S. sales of our three thrombolytics products—Activase, Cathflo Activase, and TNKase—increased 3% to $275 million in 2008 and 10% to $268 million in 2007.

Pulmozyme

Net U.S. sales of Pulmozyme increased 15% to $257 million in 2008 and 12% to $223 million in 2007.

Raptiva

Net U.S. sales of Raptiva increased 1% to $108 million in 2008 and increased 19% to $107 million in 2007.

On October 2, 2008, we announced that we issued a Dear Healthcare Provider letter to inform physicians of a case of PML in a 70-year-old patient who had received Raptiva for more than four years for treatment of chronic plaque psoriasis. The patient subsequently died. On October 16, 2008, revised prescribing information for Raptiva was approved by the FDA. A boxed warning was added that includes the recently reported case of PML and updated information on the risk of serious infections leading to hospitalizations and death in patients receiving Raptiva. The updated label also includes a warning about certain neurologic events as well as precautions regarding immunizations and pediatric use. A Dear Healthcare Provider letter was issued to communicate this updated prescribing information to physicians. On November 17, 2008, we announced that we issued a Dear Healthcare Provider letter to inform physicians of a second case of PML that resulted in the death of a 73-year old patient who had received Raptiva for approximately four years for treatment of chronic plaque psoriasis. On February 10, 2009, a Dear Healthcare Provider letter was sent to physicians to inform them of a third case of PML in a 47-year-old patient who had received Raptiva for more than three years for the treatment of chronic plaque psoriasis. On February 19, 2009, our collaborator, Merck Serono, and separately the EMEA, announced that the EMEA recommended the suspension of the marketing authorization for Raptiva from Merck Serono, and that the EMEA's CHMP has concluded that the benefits of Raptiva no longer outweigh its risks because of safety concerns, including the occurrence of PML in patients taking the medicine. Also on February 19, 2009, the FDA issued a public health advisory regarding Raptiva, which provided warnings about PML and the use of Raptiva, and advised physicians to periodically re-evaluate patients treated with Raptiva and to consider other approved therapies to control patients' psoriasis. We believe that Raptiva increases the risk of PML and that prolonged exposure to Raptiva or older age may further increase this risk. It is likely that this new safety information will affect usage patterns of Raptiva and we will likely see a reduction in demand in the future. We have submitted updated labeling to the FDA, and are working with the FDA to determine the appropriate next steps, which may include, among other things, significant restrictions in the use of or suspension or withdrawal of regulatory approval for Raptiva.

Sales to Collaborators

Product sales to collaborators, which were for non-U.S. markets, increased 14% to $1,028 million in 2008 and 92% to $903 million in 2007. The increase in 2008 was primarily due to increased sales of Avastin, Rituxan, and Herceptin to Roche. The increase in 2007 was primarily due to more favorable Herceptin pricing terms that were part of the supply agreement with Roche signed in the third quarter of 2006 and increased sales volume of Avastin and Herceptin. The favorable Roche Herceptin pricing terms concluded at the end of 2008.

For 2009, we expect sales to collaborators to decrease mainly due to lower volume and the conclusion of the favorable Roche Herceptin pricing terms, but the timing and amount of these sales can vary based on the production and order plan and other contractual issues.

Royalties

Royalty revenue increased 28% to $2,539 million in 2008 and 47% to $1,984 million in 2007. The increases were due to higher sales by Roche of Herceptin, Avastin, and Rituxan (which is marketed as MabThera® in most countries outside of the U.S.) in 2008 and 2007, and higher sales by various other licensees, including increased sales by Novartis of Lucentis. The increase in 2007 was also due to an acceleration of royalties during 2007, as discussed below. Approximately $115 million of the increase in 2008 was due to net foreign-exchange-related benefits from the weaker U.S. dollar during the year compared to 2007. Of the overall royalties recognized, royalty revenue from Roche represented 61% in 2008 and 2007 and 62% in 2006.

In June 2007, we entered into a transaction with an existing licensee to license from it the right to co-develop and commercialize certain molecules. In exchange, we released the licensee from its obligation to make certain royalty payments to us that would have otherwise been owed between January 2007 and June 2010, and that period may be extended contingent upon certain events as defined in the agreement. We estimate that the fair value of the royalty revenue owed to us over the three-and-a-half-year period, less any amount recognized in the first quarter of 2007, was approximately $65 million, and this amount was recognized as royalty revenue in the second quarter of 2007. We also recognized a similar amount as R&D expense for the purchase of the new license, and thus the net earnings per share (EPS) effect of entering into this new collaboration was not significant in 2007.

Royalties include royalty revenue from confidential licensing agreements related to our patents, including the Cabilly patent. The Cabilly patent expires in December 2018, but is the subject of litigation and a Patent Office reexamination proceeding. During the fourth quarter of 2008, we changed our process of recognizing royalty revenue from a number of our Cabilly licensees from an accrual basis to a cash basis. As a result of this change, royalty revenue decreased approximately $80 million in the fourth quarter of 2008 compared to the third quarter of 2008. The contributions related to the Cabilly patent were as follows (in millions, except per share amounts):

	2008	2007
Royalty revenue	$ 298	$ 256
COH's share of royalty revenue	$ 61	$ 50
Net of tax effect of our Cabilly licensing agreements on diluted EPS(1)	$ 0.14	$ 0.12

(1) In addition, we record royalty expense in our COS for Cabilly-related payments to COH based on our U.S. product sales. Including the effect of these COS royalties, the net of tax effect of the Cabilly patent on diluted EPS was $0.09 and $0.08 in 2008 and 2007, respectively.

See also Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for more information on our Cabilly patent reexamination and the Centocor, Inc. (a wholly-owned subsidiary of Johnson & Johnson) lawsuit related to the Cabilly patent.

Cash flows from royalty income include revenue denominated in foreign currencies. We currently enter into foreign currency option contracts (options) and forwards to hedge a portion of these foreign currency cash flows. These options and forwards are due to expire in 2009 and 2010. See also Note 2, "Summary of Significant Accounting Policies," and Note 4, "Investment Securities and Financial Instruments—Derivative Financial Instruments," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Royalties are difficult to forecast because of the number of products involved, ongoing licensing and intellectual property disputes, and the volatility of foreign currency exchange rates. In 2009, we have the particular uncertainties associated with recent U.S. dollar volatility and the unknown effect of the current macroeconomic environment on our licensees' product sales. Roche's royalty rate for Rituxan will decrease during 2009 in a number of countries that make up a significant portion of European sales, which will cause a reduction in our 2009 royalties in the range of $125 million to $150 million, offset by a corresponding decrease in our marketing, general and administrative (MG&A) expenses based on a decrease in the royalty expense that we will pay Biogen Idec.

Contract Revenue

Contract revenue increased 17% to $348 million in 2008, and increased 2% to $297 million in 2007. The increase in 2008 was mainly due to reimbursements from Roche related to R&D efforts, recognition of a portion of the previously deferred opt-in payment received from Roche related to our trastuzumab drug conjugate products, and new product opt-ins from Roche. Contract revenue in 2008 also included our share of European profits related to Xolair and manufacturing service payments related to Xolair, which Novartis pays us as a result of our acquisition of Tanox in 2007. However, these increases were partially offset by lower reimbursements from Roche related to R&D efforts on Avastin and the receipt of a milestone payment from Novartis in 2007 for European Union approval of

Lucentis for the treatment of patients with AMD. Included in contract revenue in 2008 was $227 million of R&D expense reimbursements that were received from certain collaborators. Included in contract revenue in 2007 was $196 million of R&D expense reimbursements that were received from certain collaborators. The increase in 2007 was primarily due to the previously mentioned Lucentis milestone payment from Novartis, higher reimbursements from Biogen Idec related to R&D efforts on ocrelizumab, and recognition of previously deferred revenue from an opt-in payment from Roche on Rituxan. See “Related Party Transactions” below for more information on contract revenue from Roche.

Contract revenue varies each quarter and is dependent on a number of factors, including the timing and level of reimbursements from ongoing development efforts, milestone and opt-in payments received, changes in the relationships we have with our partners, and new contract arrangements.

Cost of Sales

Cost of sales (COS) as a percentage of net product sales was 17% in 2008 and 2007, and 15% in 2006. COS in 2008 included approximately $90 million in charges related to unexpected failed lots, delays from manufacturing start-up campaigns at one of our facilities, and excess capacity. COS in 2008 also included employee stock-based compensation expense of $82 million.

The increase in COS as a percentage of sales in 2007 was due to the recognition of employee stock-based compensation expense of $71 million, related to products sold for which employee stock-based compensation expense was previously capitalized as part of inventory costs in 2006, and a higher volume of lower margin sales to collaborators. COS in 2007 included a non-recurring charge of approximately $53 million, resulting from our decision to cancel and buy out a future manufacturing obligation. However, COS as a percentage of product sales in 2007 was favorably affected by increased U.S. sales of our higher margin products, primarily Avastin, Lucentis, Rituxan, and Herceptin, and the effects of a price increase on sales of Herceptin to Roche, which started in the third quarter of 2006 and concluded at the end of 2008.

Research and Development

Research and development (R&D) expenses increased 14% in 2008 and 38% in 2007 to $2,800 million and $2,446 million, respectively. R&D expense as a percentage of total operating revenue was 21% in 2008 and 2007, and 19% in 2006.

The increase in 2008 was primarily due to (i) increased development expenses, resulting from increased spending on clinical programs, mainly related to our GDC 0449 (Hedgehog Pathway Inhibitor) program, immunology programs, our drug conjugate products and other programs, including those related to collaboration arrangements entered into in 2007, and early-stage projects, (ii) expenses related to the retention plans approved by the Special Committee in 2008 of $66 million, and (iii) increased research costs, mainly due to increased internal personnel and related expenses. R&D expense in 2008 also included $105 million of in-licensing expense related to our new collaboration entered into with Roche and GlycArt for GA101.

The increase in 2007 was due to (i) increased development expenses resulting from increased activity across our entire product portfolio, increased spending on clinical programs, early stage projects and higher clinical manufacturing expenses in support of our clinical trials, (ii) increased research expenses, mainly due to increased internal personnel and related expenses, and (iii) increased in-licensing expense due to new collaborations with Abbott for the global research, development, and commercialization of two of Abbott’s investigational anti-cancer, small molecule compounds: ABT-263 and ABT-869; Seattle Genetics, Inc. for the development and commercialization of a humanized monoclonal antibody clinical trials for multiple myeloma, CLL, NHL, and diffuse large B-cell lymphoma;

BioInvent to co-develop and commercialize a monoclonal antibody for the potential treatment of cardiovascular disease; and Altus related to a subcutaneously administered, once-per-week formulation of human growth hormone. The collaboration with Altus was terminated in 2007.

Marketing, General and Administrative

Overall marketing, general and administrative (MG&A) expenses increased 7% to $2,405 million in 2008 and 12% to $2,256 million in 2007. MG&A as a percentage of total operating revenue was 18% in 2008, 19% in 2007 and 22% in 2006. The decline in this ratio primarily reflects the increase in operating revenue and our efforts to manage our infrastructure and support costs.

The increase in 2008 expense relative to 2007 was primarily due to: (i) expenses related to retention plans approved by the Special Committee of $69 million, (ii) an increase in royalty expense of $67 million, primarily to Biogen Idec resulting from higher sales of Rituxan by Roche, and (iii) legal and advisory fees incurred on behalf of the Special Committee and by the company in connection with the Roche Proposal. These increases were partially offset by lower property and equipment write-offs compared to 2007.

The increase in 2007 expense relative to 2006 was primarily due to: (i) an increase in royalty expense, primarily to Biogen Idec resulting from higher sales of Rituxan by Roche, (ii) increases resulting from ongoing marketing efforts with established products, primarily Herceptin, and newly launched products, including Rituxan for RA and Lucentis, (iii) increases in charitable contributions related to increased donations to independent public charities that provide co-pay assistance to eligible patients, (iv) an increase related to post-acquisition costs for Tanox, and (v) an increase related to property and equipment write-offs.

Collaboration Profit Sharing

Collaboration profit sharing expenses increased 14% to $1,228 million in 2008 and 7% to $1,080 million in 2007 primarily due to higher sales of Rituxan as well as higher U.S. sales of Tarceva and Xolair. The increase in 2007 was partially offset by a decrease in profit sharing expense related to Xolair operations outside the U.S.

The following table summarizes the amounts resulting from the respective profit sharing collaborations, for the periods presented (in millions):

				Annual Percentage Change	
	2008	2007	2006	2008/2007	2007/2006
U.S. Rituxan profit sharing expense	$ 848	$ 730	$ 672	16%	9%
U.S. Tarceva profit sharing expense	191	165	146	16	13
Xolair profit sharing expense	189	185	187	2	(1)
Total collaboration profit sharing expense	$ 1,228	$ 1,080	$ 1,005	14	7

We and Novartis share the U.S. and European operating profits for Xolair according to prescribed profit sharing percentages. Generally, we evaluate whether we are a net recipient or payer of funds on an annual basis in our cost and profit sharing arrangements. Net amounts received on an annual basis under such arrangements are classified as contract revenue, and net amounts paid on an annual basis are classified as collaboration profit sharing expense. With respect to the U.S. operating results, for the full years 2008, 2007 and 2006 we were a net payer to Novartis. As a result, for 2008, 2007, and 2006 the portion of the U.S. operating results that we owed to Novartis was recorded as collaboration profit sharing expense. With respect to the European operating results, for the full year of 2008, we were a net recipient from Novartis and for the full years in 2007 and 2006 we were a net payer to Novartis. As a result, for 2008, the portion of the European operating results that Novartis owed us was recorded as contract revenue. For the same periods in 2007 and 2006, however, our portion of the European operating results was recorded as collaboration profit sharing expense. Effective with our 2007 acquisition of Tanox, Novartis also makes additional profit sharing payments to us on U.S. sales of Xolair, which reduces our profit sharing expense.

Currently, our most significant collaboration profit sharing agreement is with Biogen Idec, with whom we co-promote Rituxan in the U.S. Under the collaboration agreement, Biogen Idec granted us a worldwide license to develop, commercialize, and market Rituxan in multiple indications. In exchange for these worldwide rights, Biogen Idec has co-promotion rights in the U.S. and a contractual arrangement under which we share a portion of the pretax

U.S. co-promotion profits of Rituxan, and we pay royalty expense based on sales of Rituxan by collaborators. In June 2003, we amended and restated the collaboration agreement with Biogen Idec to include the development and commercialization of one or more anti-CD20 antibodies targeting B-cell disorders, in addition to Rituxan, for a broad range of indications. In October 2008, Biogen Idec exercised their right under this agreement to opt in to our collaboration agreement with Roche and GlycArt for the joint development and commercialization of GA101.

Under the amended and restated collaboration agreement, our share of the current pretax U.S. co-promotion profit sharing formula is approximately 60% of operating profits, and Biogen Idec's share is approximately 40% of operating profits. For each calendar year or portion thereof following the approval date of the first new anti-CD20 product, after a period of transition, our share of the pretax U.S. co-promotion profits will change to approximately 70% of operating profits, and Biogen Idec's share will be approximately 30% of operating profits.

Collaboration profit sharing expense, exclusive of R&D expenses, related to Biogen Idec for the years ended December 31, 2008, 2007, and 2006, consisted of the following commercial activity (in millions):

				Annual Percentage Change	
	2008	2007	2006	2008/2007	2007/2006
Product sales, net	$ 2,587	$ 2,285	$ 2,071	13%	10%
Combined commercial costs and expenses	579	552	489	5	13
Combined co-promotion profits	$ 2,008	$ 1,733	$ 1,582	16	10
Amount due to Biogen Idec for their share of co-promotion profits–included in collaboration profit sharing expense	$ 848	$ 730	$ 672	16	9

In addition to Biogen Idec's share of the combined co-promotion profits for Rituxan, collaboration profit sharing expense includes the quarterly settlement of Biogen Idec's portion of the combined commercial costs. Since we and Biogen Idec each individually incur commercial costs related to Rituxan, and the spending mix between the parties can vary, collaboration profit sharing expense as a percentage of sales can also vary accordingly.

Total revenue and expenses related to our collaboration with Biogen Idec included the following (in millions):

				Annual Percentage Change	
	2008	2007	2006	2008/2007	2007/2006
Contract revenue from Biogen Idec (R&D reimbursement)	$ 122	$ 108	$ 79	13%	37%
Co-promotion profit sharing expense	$ 848	$ 730	$ 672	16	9
Royalty expense on sales of Rituxan outside the U.S. and other patent costs–included in MG&A expense	$ 294	$ 247	$ 175	19	41

Contract revenue from Biogen Idec primarily reflects the net reimbursement to us for development and post-marketing costs we incurred on joint development projects less amounts owed to Biogen Idec on their development efforts on these projects.

Write-off of In-process Research and Development Related to Acquisition

In connection with the acquisition of Tanox in the third quarter of 2007, we recorded a $77 million charge for in-process research and development. This charge primarily represents acquired R&D for label extensions for Xolair that have not yet been approved by the FDA and require significant further development. We expect to continue further developing these label extensions until a decision is made to file for a label extension or to discontinue development efforts. We expect these development efforts to be completed from 2009 to 2013, if they are not abandoned sooner.

Gain on Acquisition

The acquisition of Tanox is considered to include the settlement of our 1996 license arrangement of certain intellectual property and rights thereon from Tanox. Under EITF 04-1, a business combination between parties with a preexisting relationship should be evaluated to determine if a settlement of that preexisting relationship exists. We measured the amount that the license arrangement is favorable, from our perspective, by comparing it to estimated pricing for current market transactions for intellectual property rights similar to Tanox's intellectual property rights related to Xolair. In connection with the settlement of this license arrangement, we recorded a gain of $121 million on a pretax basis, in accordance with EITF 04-1.

Recurring Charges Related to Redemption and Acquisition

On June 30, 1999, RHI exercised its option to cause us to redeem all of our Special Common Stock held by stockholders other than RHI. The Redemption was reflected as the purchase of a business, which under GAAP required push-down accounting to reflect in our financial statements the amounts paid for our stock in excess of our net book value (see Note 1, "Description of Business—Redemption of Our Special Common Stock," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K).

In the third quarter of 2007, we acquired Tanox. In connection with the acquisition, we recorded approximately $814 million of intangible assets, representing developed product technology and core technology, which are being amortized over 12 years.

We recorded recurring charges related to the amortization of intangibles associated with the Redemption and push-down accounting and our 2007 acquisition of Tanox. These charges were $172 million in 2008, $132 million in 2007, and $105 million in 2006.

Special Items: Litigation-Related

The California Supreme Court heard our appeal on the COH matter on February 5, 2008, and on April 24, 2008 overturned the award of $200 million in punitive damages to COH but upheld the award of $300 million in compensatory damages. As a result of the California Supreme Court decision, we reversed a $300 million net litigation accrual related to the punitive damages and accrued interest, which we recorded as "Special items: litigation related" in our Consolidated Statements of Income for 2008. In 2007 and 2006, we recorded accrued interest and bond costs on both the compensatory and punitive damages totaling $54 million. We and COH have had discussions, but have not reached agreement, regarding additional royalties and other amounts owed by us to COH under the 1976 agreement for third-party product sales and settlement of a third-party patent litigation that occurred after the 2002 judgment. We recorded additional costs of $40 million in 2008 as "Special items: litigation-related" based on our estimate of our range of liability in connection with the resolution of these issues. See Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for further information regarding our litigation.

Operating Income

Operating income increased 26% to $5,329 million in 2008 and increased 34% to $4,229 million in 2007. Our operating income as a percentage of operating revenue (pretax operating margin) was 40% in 2008, 36% in 2007, and 34% in 2006.

Other Income (Expense)

The components of "Other income (expense)" are as follows (in millions):

	2008	2007	2006	Annual Percentage Change 2008/2007	Annual Percentage Change 2007/2006
Gains on sales of biotechnology equity securities, net	$ 109	$ 22	$ 93	395%	(76) %
Write-downs of biotechnology debt and equity securities	(16)	(20)	(4)	(20)	400
Interest income					
Investment income	157	300	230	(48)	30
Impairment charges	(67)	(30)	–	123	–
Interest expense	(82)	(76)	(74)	8	3
Other miscellaneous income	1	1	6	0	(83)
Total other income, net	$ 102	$ 197	$ 251	(48)	(22)

Total other income, net, decreased 48% to $102 million in 2008, and decreased 22% to $197 million in 2007. For 2008, the decrease was driven primarily by lower investment income due to lower yields, losses on the sale of investments and by unrealized losses on our trading portfolios. In addition, we recorded impairment charges of $67 million in 2008 on certain U.S. government agency and financial institution securities compared to a $30 million write-off of a fixed income investment in 2007. These losses and charges were partially offset by net gains on sales of biotechnology equity securities.

For 2007, gains on sales of biotechnology equity securities, net, were lower compared to 2006, mainly due to 2006 gains on sales of approximately $79 million related to Amgen's acquisition of Abgenix, Pfizer's acquisition of Rinat, Stiefel Laboratories' acquisition of Connetics Corporation, and AstraZeneca's acquisition of Cambridge Antibody Technology. Investment income in 2007 was higher compared to 2006 due to higher average cash balances, partially offset by lower yields.

Income Tax Provision

The effective income tax rate was 37% in 2008 and 2007, and 38% in 2006. The effective income tax rate in 2008 included a settlement with the Internal Revenue Services (IRS) for an item related to prior years. The effective income tax rate in 2007 was lower than in 2006, primarily due to the increase in the domestic manufacturing deduction.

We adopted the provisions of FIN 48 on January 1, 2007. Implementation of FIN 48 did not result in any adjustment to our Consolidated Statements of Income or a cumulative adjustment to retained earnings. As a result of the implementation of FIN 48, we reclassified $147 million of unrecognized tax benefits from current liabilities to long-term liabilities.

Various internal and external factors may have favorable or unfavorable effects on our future effective income tax rate. These factors include, but are not limited to, changes in tax laws, regulations and/or rates, the results of any tax examinations, changing interpretations of existing tax laws or regulations, changes in estimates to prior years' items, past and future levels of R&D spending, acquisitions, changes in our corporate structure, and changes in overall levels of income before taxes; all of which may result in periodic revisions to our effective income tax rate.

Relationship with Roche

As a result of the Redemption and subsequent public offerings, we amended our certificate of incorporation and bylaws, amended our licensing and marketing agreement with Roche Holding AG and affiliates (Roche), and entered into or amended certain agreements with RHI, which are discussed below.

Affiliation Arrangements

Our Board of Directors consists of three RHI directors, three independent directors nominated by a nominating committee currently controlled by RHI, and one Genentech employee. However, under our bylaws, RHI has the right to obtain proportional representation on our Board at any time.

Except as follows, the affiliation arrangements do not limit RHI's ability to buy or sell our Common Stock. If RHI and its affiliates sell their majority ownership of shares of our Common Stock to a successor, RHI has agreed that it will cause the successor to agree to purchase all shares of our Common Stock not held by RHI as follows:

Ÿ with consideration, if that consideration is composed entirely of either cash or equity traded on a U.S. national securities exchange, in the same form and amounts per share as received by RHI and its affiliates; and

Ÿ in all other cases, with consideration that has a value per share not less than the weighted-average value per share received by RHI and its affiliates as determined by a nationally recognized investment bank that will be appointed by a committee of our independent directors.

If RHI owns more than 90% of our Common Stock for more than two months, RHI has agreed that it will, as soon as reasonably practicable, effect a merger of Genentech with RHI or an affiliate of RHI in compliance with the terms of the Affiliation Agreement.

RHI has agreed, as a condition to any merger of Genentech with RHI or the sale of our assets to RHI:

Ÿ the merger or sale must be authorized by the favorable vote of a majority of non-RHI stockholders, provided no person will be entitled to cast more than 5% of the votes at the meeting; or

Ÿ in the event such a favorable vote is not obtained, the value of the consideration to be received by non-RHI stockholders would be equal to or greater than the average of the means of the ranges of fair values for the Common Stock as determined by two nationally recognized investment banks that will be appointed by a committee of our independent directors.

The July 1999 Affiliation Agreement with RHI (Affiliation Agreement) provides that without the prior approval of the directors designated by RHI, we may not approve:

Ÿ any acquisition, sale, or other disposal of all or a portion of our business representing 10% or more of our assets, net income, or revenue;

Ÿ any issuance of capital stock except under certain circumstances; or

Ÿ any repurchase or redemption of our capital stock other than a redemption required by the terms of any security and purchases made at fair market value in connection with any deferred compensation plans.

Licensing Agreements Related to Genentech Products

We have a July 1999 amended and restated licensing and marketing agreement with Roche and its affiliates granting them an option to license, use, and sell our products in non-U.S. markets. The major provisions of that agreement include the following:

Ÿ Roche may exercise its option to license our products upon the occurrence of any of the following: (1) the filing of the first Investigational New Drug Application (IND) for a product; (2) the date by which Genentech has clinical trial data and other information sufficient to enable the first Phase III trial in the U.S. (Phase II Completion) for a product; or (3) provided Roche has paid a fee of $10 million (Option Extension Fee) within a certain time following its decision not to exercise the option in (2) above, the date by which the first Phase III Trial for a product is completed and the results are known, available, analyzed and, in Genentech's reasonable judgment, enable a U.S. BLA/NDA filing;

- Roche's options expire on October 25, 2015 except that Roche maintains: (1) a Phase II Completion option for those products for which Genentech has filed an IND prior to October 25, 2015, but which have not reached Phase II Completion; and (2) an option at Phase III completion for those products for which Roche had paid the Option Extension Fee at the Phase II Completion prior to October 25, 2015;

- If Roche exercises its option to license a product, it has agreed to reimburse Genentech for development costs as follows: (1) if exercise occurs upon the filing of an IND, Roche will pay 50% of development costs incurred prior to the filing and 50% of development costs subsequently incurred; (2) if exercise occurs at the completion of the first Phase II trial, Roche will pay 50% of development costs incurred through completion of the trial, 75% of development costs subsequently incurred for the initial indication, and 50% of subsequent development costs for new indications, formulations or dosing schedules; (3) if the exercise occurs at the completion of a Phase III trial, Roche will pay 50% of development costs incurred through completion of Phase II, 75% of development costs incurred through completion of Phase III, and 75% of development costs subsequently incurred; and half of the Option Extension Fee paid by Roche to preserve its right to exercise its option at the completion of a Phase III trial will be credited against the total development costs payable to Genentech upon the exercise of the option; and (4) each of Genentech and Roche have the right to "opt-out" of sharing development costs for an additional indication for a product for which Roche exercised its option, but could "opt-back-in" within 30 days of the other party's decision to file for approval of the indication by paying twice what they would have owed for development of the indication if they had not opted out;

- We agreed, in general, to manufacture for and supply to Roche its clinical requirements of our products at cost, and its commercial requirements at cost plus a margin of 20%; however, Roche will have the right to manufacture our products under certain circumstances;

- Roche has agreed to pay, for each product for which Roche exercises its licensing option upon the filing of an IND or completion of the first Phase II trial, a royalty of 12.5% on the first $100 million on its aggregate sales of that product and thereafter a royalty of 15% on its aggregate sales of that product in excess of $100 million until the later in each country of the expiration of our last relevant patent or 25 years from the first commercial introduction of that product;

- Roche will pay, for each product for which Roche exercises its licensing option after completion of a Phase III trial, a royalty of 15% on its sales of that product until the later in each country of the expiration of our last relevant patent or 25 years from the first commercial introduction of that product; however, the second half of the Option Extension Fee paid by Roche related to a product will be credited against royalties payable to us in the first calendar year of sales by Roche in which aggregate sales of that product exceed $100 million; and

- For certain products for which Genentech is paying a royalty to Biogen Idec, including Rituxan, Roche shall pay Genentech a royalty of 20% on sales of such product in Roche's licensed territory. Once Genentech is no longer obligated to pay a royalty to Biogen Idec on sales of such products in each country, Roche shall then pay Genentech a royalty on sales of 10% on the first $75 million on its aggregate sales of that product and thereafter a royalty of 8% on its aggregate sales of that product in excess of $75 million until the later in each country of the expiration of our last relevant patent or 25 years from the first commercial introduction of that product. During the fourth quarter of 2008, our obligation to pay a royalty to Biogen Idec on sales of Rituxan ended in certain countries. The shift from the 20% royalty on Rituxan to the lower 8% to 10% royalty rate will occur in certain countries during 2009 and beyond.

We have further amended this licensing and marketing agreement with Roche to delete or add certain Genentech products under Roche's commercialization and marketing rights for Canada.

We also have a July 1998 licensing and marketing agreement related to anti-HER2 antibodies (including Herceptin and pertuzumab) with Roche, providing them with exclusive marketing rights outside of the U.S. Under the agreement, Roche funds one-half of the global development costs incurred in connection with developing anti-HER2

antibody products under the agreement. Either Genentech or Roche has the right to "opt-out" of developing an additional indication for a product and would not share the costs or benefits of the additional indication, but could "opt-back-in" within 30 days of the other party's decision to file for approval of the indication by paying twice what would have been owed for development of the indication if no opt-out had occurred. Roche has also agreed to make royalty payments of 20% on aggregate net sales of a product outside the U.S. up to $500 million in each calendar year and 22.5% on such sales in excess of $500 million in each calendar year. In December 2007, Roche opted-in to our trastuzumab drug conjugate products under terms similar to those of the existing anti-HER2 agreement (see also "Related Party Transactions" below).

Licensing Agreements Related to Roche Products

We have entered into certain licensing agreements with Roche and its affiliates that grant us licenses to develop and commercialize products discovered by Roche and its affiliates.

In May 2008, Roche acquired Piramed Limited (Piramed), a privately held entity based in the United Kingdom. Prior to the Roche acquisition of Piramed, we had entered into a licensing agreement with Piramed related to molecules targeting the PI3 kinase pathway. As a result of Roche's acquisition of Piramed, we now are party to this agreement with Roche and Piramed. Under the terms of the agreement Genentech could make future milestone and royalty payments to Roche. Roche retains the option to acquire rights to develop and commercialize certain products outside of the United States at the end of Phase II in exchange for an opt-in fee, royalties and a potential share of future development costs.

In June 2008, we entered into a licensing agreement with Roche under which we obtained rights to a preclinical small-molecule drug development program. The future R&D costs incurred under the agreement and any profit and loss from global commercialization are to be shared equally with Roche.

In September 2008, we entered into a collaboration agreement with Roche and GlycArt for the joint development and commercialization of GA101, a humanized anti-CD20 monoclonal antibody for the potential treatment of hematological malignancies and other oncology-related B-cell disorders such as NHL. The future global R&D costs incurred under the agreement are to be shared equally with Roche. We received commercialization rights in the U.S. and have the right to manufacture our own commercial requirements for the U.S. In October 2008, Biogen Idec exercised the right under our collaboration agreement with them to opt in to this agreement.

Research Collaboration Agreement

We have an April 2004 research collaboration agreement with Roche that outlines the process by which Roche and Genentech may agree to conduct and share in the costs of joint research on certain molecules. The agreement further outlines how development and commercialization efforts will be coordinated with respect to select molecules, including the financial provisions for a number of different development and commercialization scenarios undertaken by either or both parties.

Manufacturing Agreements

We signed two product supply agreements with Roche in July 2006, each of which was amended in November 2007. The Umbrella Manufacturing Supply Agreement (Umbrella Agreement) supersedes our existing product supply agreements with Roche. The Short-Term Supply Agreement (Short-Term Agreement) supplements the terms of the Umbrella Agreement. Under the Short-Term Agreement, Roche has agreed to purchase specified amounts of Herceptin, Avastin and Rituxan through 2008. Under the Umbrella Agreement, Roche has agreed to purchase specified amounts of Herceptin and Avastin through 2012 and, on a perpetual basis, either party may order other

collaboration products from the other party, including Herceptin and Avastin after 2012, pursuant to certain forecast terms. The Umbrella Agreement also provides that either party may terminate its obligation to purchase and/or supply Avastin and/or Herceptin with six years notice on or after December 31, 2007. To date, we have not provided to or received from Roche such notice of termination.

In July 2008, we signed an agreement with Chugai Pharmaceutical Co., Ltd., a Japan-based entity and part of Roche, under which we agreed to manufacture Actemra, a product of Chugai, at our Vacaville, California facility. After an initial term of five years, the agreement may be terminated subject to certain terms and conditions under the contract.

Tax Sharing Agreement

We have a tax sharing agreement with RHI. If we and RHI elect to file a combined state and local tax return in certain states where we may be eligible, our tax liability or refund with RHI for such jurisdictions will be calculated on a stand-alone basis.

RHI's Ability to Maintain Percentage Ownership Interest in Our Stock

We issue shares of Common Stock in connection with our stock option and stock purchase plans, and we may issue additional shares for other purposes. Our Affiliation Agreement with RHI provides, among other things, that with respect to any issuance of our Common Stock in the future, we will repurchase a sufficient number of shares so that immediately after such issuance, the percentage of our Common Stock owned by RHI will be no lower than 2% below the "Minimum Percentage" (subject to certain conditions). The Minimum Percentage equals the lowest number of shares of Genentech Common Stock owned by RHI since the July 1999 offering (to be adjusted in the future for dispositions of shares of Genentech Common Stock by RHI as well as for stock splits or stock combinations) divided by 1,018,388,704 (to be adjusted in the future for stock splits or stock combinations), which is the number of shares of Genentech Common Stock outstanding at the time of the July 1999 offering, as adjusted for stock splits. We have repurchased shares of our Common Stock since 2001 (see discussion below in "Liquidity and Capital Resources"). The Affiliation Agreement also provides that, upon RHI's request, we will repurchase shares of our Common Stock to increase RHI's ownership to the Minimum Percentage. In addition, RHI will have a continuing option to buy stock from us at prevailing market prices to maintain its percentage ownership interest. Under the terms of the Affiliation Agreement, RHI's Minimum Percentage is 57.7% and RHI's ownership percentage is to be no lower than 55.7%. At December 31, 2008, RHI's ownership percentage was 55.8%.

The Roche Proposal and the Roche Tender Offer

We announced on July 21, 2008 that we received the Roche Proposal and on July 24, 2008 we announced that the Special Committee was formed to review and consider the terms and conditions of the Roche Proposal, any business combination with Roche or any offer by Roche to acquire our securities, negotiate as appropriate, and, in the Special Committee's discretion, recommend or not recommend the acceptance of the Roche Proposal by the minority shareholders. On August 13, 2008, we announced that the Special Committee had unanimously concluded that the Roche Proposal substantially undervalues the company, but that the Special Committee would consider a proposal that recognizes the value of the company and reflects the significant benefits that would accrue to Roche as a result of full ownership. On January 30, 2009, Roche announced that it intended to commence a tender offer which would replace the Roche Proposal that was announced on July 21, 2008. On January 30, 2009, in response to the announcement by Roche, the Special Committee urged shareholders to take no action with respect to the announcement by Roche and that the Special Committee will announce a formal position within 10 business days following the commencement of such a tender offer by Roche. On February 9, 2009, Roche commenced the Roche Tender Offer. The Roche Tender Offer is conditional upon, among other things, (i) a non-waivable condition that holders of at least a majority of the outstanding publicly-held Genentech shares tender their shares in the Roche Tender Offer and (ii) a condition, which may be waived by Roche in its sole discretion, that Roche has obtained sufficient financing to purchase all outstanding publicly-held Genentech shares and all Genentech shares issuable upon exercise of outstanding options and to pay related fees and expenses. The Roche Tender Offer includes other conditions as identified in Roche's Schedule TO that was filed with the SEC on February 9, 2009. Also on February 9, 2009, the Special Committee urged shareholders to

take no action with respect to the Roche Tender Offer. The Special Committee also announced that it intended to take a formal position within 10 business days of the commencement of the Roche Tender Offer, and will explain in detail its reasons for that position by filing a Statement on Schedule 14D-9 with the SEC.

Roche Proposal-Related Costs

On August 18, 2008, we announced that the Special Committee adopted two retention plans that were implemented in lieu of our 2008 annual stock option grant and two severance plans that were adopted in addition to our existing severance plans. See Note 3, “Retention Plans and Employee Stock-Based Compensation,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for more information on the retention plans. In addition, the Special Committee and the company have incurred and will continue to incur third-party legal and advisory costs in connection with the Roche Proposal and the Roche Tender Offer that are included in the “Marketing, general and administrative” expenses line of our Consolidated Statements of Income.

The cost of the retention plans adopted by the Special Committee on August 18, 2008 is estimated to be approximately $375 million payable in cash. The cash amount is approximately equal to the value of the stock options that would have been granted in our 2008 option grant program, calculated with the methodology used in our financial statements to value our options (Black-Scholes) and applying a discount rate. The discount rate reflects the earlier payment dates of the retention bonus relative to the vesting schedule that would have applied to the planned option grants. The timing of the payments related to these plans will depend on the outcome of the Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche. If a merger of Genentech with Roche or an affiliate of Roche has not occurred on or before June 30, 2009, we will pay the retention bonus at that time, in accordance with the terms of the plans. We are currently recognizing the retention plan costs in our financial statements ratably over the period from August 18, 2008 to June 30, 2009. If a merger of Genentech with Roche or an affiliate of Roche has occurred on or before June 30, 2009, the timing of the payments and the recognition of the expense will depend upon the terms of the merger. During 2008, total costs for the retention plans were $162 million, of which $135 million was recognized as expense and $27 million was capitalized into inventory, which will be recognized as COS as products manufactured after the initiation of the retention plans are estimated to be sold.

In addition, the Special Committee and the company retained attorneys and third-party advisors in connection with the Roche Proposal and the Roche Tender Offer. The amount and timing of the payment of the third-party legal and advisory costs also depends on the resolution of matters relating to the Roche Proposal and the Roche Tender Offer. Third-party legal and advisory costs incurred in 2008 were $18 million.

The retention plan and third-party legal and advisory costs were as follows (in millions):

		2008
Retention plan costs(1)		
Research and development	$	66
Marketing, general and administrative		69
Total retention plan costs		135
Third-party legal and advisory costs incurred by us on behalf of the Special Committee		14
Other third-party legal and advisory costs		4
Total retention plan costs and legal and advisory costs		153
Tax effect related to Roche Proposal-related costs		(60)
Roche Proposal-related costs, net of tax	$	93
Effect on earnings per share:		
Basic	$	0.09
Diluted	$	0.09

(1)

In 2008, an additional $27 million of retention plan costs were capitalized into inventory, which will be recognized as COS as products that were manufactured after the initiation of the retention plans are estimated to be sold.

Related Party Transactions

We enter into transactions with our related parties, Roche and Novartis. The accounting policies that we apply to our transactions with our related parties are consistent with those applied in transactions with independent third parties.

In our royalty and supply arrangements with related parties, we are the principal, as defined under EITF Issue No. 99-19, "Reporting Revenue Gross as a Principal versus Net as an Agent" (EITF 99-19), because we bear the manufacturing risk, general inventory risk, and the risk to defend our intellectual property. For circumstances in which we are the principal in the transaction, we record the transaction on a gross basis in accordance with EITF 99-19. Otherwise, our transactions are recorded on a net basis.

Roche

Under the July 1999 amended and restated licensing and commercialization agreement, Roche has the right to opt in to development programs that we undertake on our products at certain pre-defined stages of development. Previously, Roche also had the right to develop certain products under the July 1998 licensing and commercialization agreement related to anti-HER2 antibodies (including Herceptin, pertuzumab, and trastuzumab-DM1). When Roche opts in to a program, we generally record the opt-in payments that we receive as deferred revenue, which we recognize over the expected development periods or product life, as appropriate. During 2008, we received approximately $110 million from Roche related to opt-ins to various programs, most of which was recorded as deferred revenue. As of December 31, 2008, the amounts in short-term and long-term deferred revenue related to opt-in payments received from Roche were $57 million and $214 million, respectively. In 2008, 2007, and 2006, we recognized $76 million, $40 million, and $27 million, respectively, as contract revenue related to opt-in payments previously received from Roche.

In February 2008, Roche acquired Ventana Medical Systems, Inc., and as a result of the acquisition, Ventana is considered a related party. We have engaged in transactions with Ventana prior to and since the acquisition.

In May 2008, Roche acquired Piramed. Prior to the Roche acquisition of Piramed, we had entered into a licensing agreement with Piramed related to molecules targeting the PI3 kinase pathway.

In June 2008, we entered into a licensing agreement with Roche under which we obtained rights to a preclinical small-molecule drug development program. We recorded $35 million in R&D expense in the second quarter of 2008 related to this agreement. The future R&D costs incurred under the agreement and any profit and loss from global commercialization will be shared equally with Roche.

In July 2008, we signed an agreement with Chugai Pharmaceutical Co., Ltd., a Japan-based entity and part of Roche, under which we agreed to manufacture Actemra, a product of Chugai, at our Vacaville, California facility. After an initial term of five years, the agreement may be terminated subject to certain terms and conditions under the contract.

In August 2008, we entered into a Companion Diagnostics Master Agreement with Roche Molecular Systems (RMS) under which we have the ability to work with RMS to develop companion diagnostics based on RMS' polymerase chain reaction platform technology.

In September 2008, we entered into a collaboration agreement with Roche and GlycArt for the joint development and commercialization of GA101, a humanized anti-CD20 monoclonal antibody for the potential treatment of hematological malignancies and other oncology-related B-cell disorders such as NHL. We recorded $105 million in R&D expense in 2008 related to this collaboration. The future global R&D costs incurred under the agreement will be shared equally with Roche. We received commercialization rights in the U.S. and have the right to manufacture our own commercial requirements for the U.S. In October 2008, Biogen Idec exercised the right under our collaboration agreement with them to opt in to this agreement and paid us an up-front fee of $32 million as part of the opt-in, which we will recognize ratably as contract revenue over the future development period.

We currently have no commercialized products subject to profit sharing arrangements with Roche.

Under our existing arrangements with Roche, including our licensing and marketing agreement, we recognized the following amounts (in millions):

	2008	2007	2006
Product sales to Roche	$ 868	$ 768	$ 359
Royalties earned from Roche	$ 1,544	$ 1,206	$ 846
Contract revenue from Roche	$ 138	$ 95	$ 125
Cost of sales on product sales to Roche	$ 472	$ 422	$ 268
R&D expenses incurred on joint development projects with Roche	$ 336	$ 259	$ 213
In-licensing expenses to Roche	$ 145	–	–

Certain R&D expenses are partially reimbursable to us by Roche. Amounts that Roche owes us, net of amounts reimbursable to Roche by us on those projects, are recorded as contract revenue. Conversely, R&D expenses may include the net settlement of amounts we owe Roche for R&D expenses that Roche incurred on joint development projects, less amounts reimbursable to us by Roche on these projects.

Novartis

Based on information available to us at the time of filing this Form 10-K, we believe that Novartis holds approximately 33.3% of the outstanding voting shares of Roche. As a result of this ownership, Novartis is deemed to have an indirect beneficial ownership interest under FAS No. 57, “Related Party Disclosures” (FAS 57), of more than 10% of our voting stock.

We have an agreement with Novartis Pharma AG (a wholly-owned subsidiary of Novartis AG) under which Novartis Pharma AG has the exclusive right to develop and market Lucentis outside the U.S. for indications related to diseases or disorders of the eye. As part of this agreement, the parties share the cost of certain of our ongoing development expenses for Lucentis.

We and Novartis are co-promoting Xolair in the U.S and co-developing Xolair in both the U.S. and Europe. We record sales, COS, and marketing and sales expenses in the U.S.; Novartis markets the product in and records sales, COS, and marketing and sales expenses in Europe and also records marketing and sales expenses in the U.S. We and Novartis share the resulting U.S. and European operating profits according to prescribed profit sharing percentages. Generally, we evaluate whether we are a net recipient or payer of funds on an annual basis in our cost and profit sharing arrangements. Net amounts received on an annual basis under such arrangements are classified as contract revenue, and net amounts paid on an annual basis are classified as collaboration profit sharing expense. With respect to the U.S. operating results, for the full years of 2008, 2007, and 2006 we were a net payer to Novartis. As a result, for 2008, 2007, and 2006, the portion of the U.S. operating results that we owed to Novartis was recorded as collaboration profit sharing expense. With respect to the European operating results, for the full year of 2008, we were a net recipient from Novartis and for the full years of 2007 and 2006 we were a net payer to Novartis. As a result, for 2008, the portion of the European operating results that Novartis owed us was recorded as contract revenue. For the same periods in 2007 and 2006, however, our portion of the European operating results was recorded as collaboration profit sharing expense. Effective with our acquisition of Tanox on August 2, 2007, Novartis also makes: (1) additional profit sharing payments to us on U.S. sales of Xolair, which reduces our profit sharing expense; (2) royalty payments

to us on sales of Xolair worldwide, which we record as royalty revenue; and (3) manufacturing service payments related to Xolair, which we record as contract revenue.

Under our existing arrangements with Novartis, we recognized the following amounts (in millions):

	2008	2007	2006
Product sales to Novartis	$ 12	$ 10	$ 5
Royalties earned from Novartis	$ 241	$ 95	$ 3
Contract revenue from Novartis	$ 60	$ 70	$ 40
Cost of sales on product sales to Novartis	$ 9	$ 10	$ 4
R&D expenses incurred on joint development projects with Novartis	$ 43	$ 43	$ 38
Collaboration profit sharing expense to Novartis	$ 189	$ 185	$ 187

Contract revenue in 2007 included a $30 million milestone payment from Novartis for European Union approval of Lucentis for the treatment of neovascular (wet) AMD.

Certain R&D expenses are partially reimbursable to us by Novartis. The amounts that Novartis owes us, net of amounts reimbursable to Novartis by us on those projects, are recorded as contract revenue. Conversely, R&D expenses may include the net settlement of amounts we owe Novartis for R&D expenses that Novartis incurred on joint development projects, less amounts reimbursable to us by Novartis on these projects.

See Note 11, “Acquisition of Tanox, Inc.,” in Part II, Item 8 of this Form 10-K for information on Novartis’ share of the proceeds resulting from our acquisition of Tanox.

Financial Assets and Liabilities

On January 1, 2008, we adopted FAS No. 157, “Fair Value Measurements” (FAS 157), which established a framework for measuring fair value in GAAP and clarified the definition of fair value within that framework. FAS 157 also established a fair value hierarchy that prioritizes the use inputs used in valuation techniques into the following three levels:

Level 1—quoted prices in active markets for identical assets and liabilities
Level 2—observable inputs other than quoted prices in active markets for identical assets and liabilities
Level 3—unobservable inputs

A substantial majority of our financial instruments are Level 1 and Level 2 assets. As of December 31, 2008, the fair value of our Level 1 assets was $3.9 billion consisting primarily of cash, money market instruments, U.S. Treasury securities and marketable equity securities in biotechnology companies with which we have collaboration agreements. Included in this amount were gross unrecognized gains and losses of approximately $257 million and $1 million respectively, primarily related to marketable equity securities.

Our Level 2 assets include corporate bonds, commercial paper, government and agency securities, municipal bonds, asset-backed securities, preferred securities, and other derivatives. As of December 31, 2008, the fair value of our Level 2 assets was $5.6 billion, consisting primarily of corporate bonds, commercial paper, government and agency securities, municipal bonds and bonds denominated in foreign currencies but hedged to U.S. dollars. During 2008, we significantly reduced or eliminated our holdings in investments with a higher risk profile such as commodities,

non-investment grade debt, preferred and asset-backed securities. Asset-backed securities and preferred securities represented about 1% of the total value of Level 2 assets as of December 31, 2008. Included in our Level 2 assets were gross unrecognized losses of approximately $45 million primarily related to corporate bonds offset by approximately $45 million of gross unrecognized gains primarily related to government-backed securities. In addition, the fair value of our Level 2 assets included approximately $45 million in gross unrecognized gains related to foreign currency derivative contracts that are held to hedge forecasted foreign-currency-denominated royalty

revenue and interest rate swaps used to hedge interest rate movements that impact the fair value of our Senior Notes. In 2008, the U.S. Treasury announced actions that significantly reduced the value of U.S. government agency preferred securities, which we hold as investments. As a result, we recorded an impairment charge of $46 million during 2008.

As of December 31, 2008, our Level 3 assets consisted of student loan auction-rate securities and the preferred securities of an insolvent company. As of December 31, 2008, we held $145 million of investments, which were measured using unobservable (Level 3) inputs, representing about 2% of the total fair value of our investment portfolio. Student loan auction-rate securities of $145 million were valued based on broker-provided valuation models, which approximate fair value. In addition our Level 3 assets included preferred securities in a financial institution that declared bankruptcy during 2008. We recorded an impairment charge of $21 million during 2008 to fully impair these preferred securities, because we do not expect to recover the value of these assets during the bankruptcy proceedings. We also transferred the preferred securities to Level 3 assets from Level 2 assets.

The following table sets forth the fair value of our financial assets and liabilities reported on a recurring basis, including those pledged as collateral, or restricted (in millions).

	December 31, 2008		December 31, 2007	
	Assets	Liabilities	Assets	Liabilities
Cash and cash equivalents	$ 4,533	$ –	$ 2,514	$ –
Restricted cash	–	–	788	–
Short-term investments	1,665	–	1,461	–
Long-term marketable debt securities	3,060	–	1,674	–
Total fixed income investment portfolio	9,258	–	6,437	–
Long-term marketable equity securities	287	–	416	–
Total derivative financial instruments	83	31	30	19
Total	$ 9,628	$ 31	$ 6,883	$ 19

Liquidity and Capital Resources

(In millions)	2008	2007	2006
December 31:			
Unrestricted cash, cash equivalents, short-term investments and long-term marketable debt and equity securities	$ 9,545	$ 6,065	$ 4,325
Net receivable—equity hedge instruments	40	24	50
Total unrestricted cash, cash equivalents, short-term investments, long-term marketable debt and equity securities, and equity hedge instruments	$ 9,585	$ 6,089	$ 4,375
Working capital	$ 6,978	$ 4,835	$ 3,547
Current ratio	3.3:1	2.2:1	2.6:1
Year ended December 31:			
Cash provided by (used in):			
Operating activities	$ 3,955	$ 3,230	$ 2,138
Investing activities	(1,667)	(1,865)	(1,681)
Financing activities	(269)	(101)	(432)
Capital expenditures (included in investing activities above)	(751)	(977)	(1,214)

Total unrestricted cash, cash equivalents, short-term investments, and long-term marketable securities, including the estimated fair value of the related equity hedge instruments, were $9.6 billion at December 31, 2008, an increase of $3.5 billion, or 57%, from December 31, 2007. This increase primarily reflects cash generated from operations, increases from stock option exercises, and the release of restricted cash and investments as a result of the COH litigation settlement; partially offset by cash used for the repurchase of our Common Stock, capital expenditures, the COH litigation settlement payment, and a financing payment related to the construction of a manufacturing facility in

Singapore. To mitigate the risk of market value fluctuations, one of our biotechnology equity securities is hedged with forward contracts, which are carried at estimated fair value. See Note 2, “Summary of Significant Accounting Policies—Comprehensive Income,” in the Notes to the Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for further information regarding activity in our marketable investment portfolio and derivative instruments.

See “Our Affiliation Agreement with RHI could limit our ability to make acquisitions or divestitures” and “To pay our indebtedness will require a significant amount of cash and may adversely affect our operations and financial results,” in Part I, Item 1A “Risk Factors,” and Note 9, “Leases, Commitments, and Contingencies,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for factors that could negatively affect our cash position.

Cash Provided by Operating Activities

Cash provided by operating activities is primarily driven by our net income. However, operating cash flows differ from net income as a result of non-cash charges or differences in the timing of cash flows and earnings recognition. Significant components of cash provided by operating activities are as follows:

Changes in accounts payable, other accrued liabilities, and other long-term liabilities provided $62 million in 2008 mainly due to an increase in accrued compensation, mainly as a result of the retention plans; accrued collaborations; and accrued royalties, mostly due to increased sales; partially offset by the timing of payments.

Inventories decreased $209 million in 2008, as more products were sold than produced during the year. The decrease in inventories was due in part to failed lots and delays in start-up campaigns that we experienced during 2008.

Receivables and other assets increased $132 million in 2008. Accounts receivable—product sales increased $192 million primarily due to timing of sales to Roche in the fourth quarter of 2008. The average collection period of our accounts receivable—product sales as measured in days sales outstanding (DSO) was 36 days as of December 31, 2008, 33 days as of December 31, 2007, and 46 days as of December 31, 2006. The increase in DSO in 2008 over 2007 was primarily due to the timing of sales to Roche in the fourth quarter of 2008. The decrease in DSO in 2007 over 2006 was primarily due to the extended payment terms that we offered certain wholesalers in conjunction with the launch of Lucentis on June 30, 2006. The extended payment terms for Lucentis were reduced in 2007, but are longer than the payment terms for most of our other products.

As a result of the April 24, 2008 California Supreme Court ruling on the COH matter, we reversed a $300 million net litigation accrual related to the punitive damages and accrued interest in 2008, and we paid COH $476 million in the second quarter of 2008 for compensatory damages awarded plus interest, which reduced our cash from operations. We also recorded additional costs of $40 million as “Special items: litigation-related” in the third quarter of 2008 related to the ongoing discussions with COH about additional royalties and other amounts owed by us to COH under the 1976 agreement for third-party product sales and settlement of a third-party patent litigation that occurred after the 2002 judgment.

Cash Used in Investing Activities

Cash used in investing activities was primarily due to purchases, sales and maturities of investments and capital expenditures. Capital expenditures were $751 million during 2008, excluding the $200 million construction financing payment made during the year, compared to $1.0 billion during 2007 and $1.2 billion during 2006. During 2008, capital expenditures were related to construction of our fill/finish facility in Hillsboro, Oregon, our E. coli production facility in Singapore, our second manufacturing facility in Vacaville, California, and our research support facility in Dixon, California; leasehold improvements for newly constructed buildings on our South San Francisco, California campus; and purchases of equipment and information systems. During 2007, capital expenditures were related to

ongoing construction of our second manufacturing facility in Vacaville, leasehold improvements for newly constructed buildings on our South San Francisco campus, construction of our fill/finish facility in Hillsboro, and purchases of equipment and information systems. In addition, we acquired Tanox during 2007, for $833 million, net,

which represents the purchase price of $925 million, plus $8 million in transaction costs, less approximately $100 million of Tanox's cash and cash equivalents that we acquired. Capital expenditures in 2006 included ongoing construction for the Vacaville facility; validation costs at our manufacturing facility in Oceanside, California; the purchase of a second facility in Oceanside; the purchase of equipment and information systems; and ongoing expenditures to support our corporate infrastructure needs.

Total cash and investments pledged to secure the COH surety bond were $788 million at December 31, 2007, and were reflected in the Consolidated Balance Sheet in "Restricted cash and investments." In connection with the California Supreme Court ruling on April 24, 2008, restrictions were lifted from the restricted cash and investments accounts, which consisted of available-for-sale investments, and the funds became available for use in our operations. See "Contingencies" in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for further information regarding the COH litigation and related surety bond.

We anticipate that the amount of our 2009 capital expenditures will be approximately $600 million.

Cash Used in Financing Activities

Cash used in financing activities includes activity under our stock repurchase program. our employee stock plans, our commercial paper program, and construction financing payments. We received $680 million in 2008, $452 million during 2007, and $385 million during 2006 related to stock option exercises and stock issuances under our employee stock purchase plan.

In November 2006, we entered into a series of agreements with Lonza Group Ltd, including a supply agreement to purchase products produced by Lonza at their Singapore manufacturing facility, which is currently under construction, and a loan agreement to advance Lonza $290 million for the construction of that facility. The construction of the facility reached mechanical completion in November 2008, and we advanced Lonza $200 million of construction financing, pursuant to the loan agreement.

In 2007, we issued $600 million in unsecured commercial paper notes payable for funding general corporate purposes. In September 2008, we stopped issuing commercial paper due to the state of the credit markets at that time and the resulting increase in the interest rates at which we sold commercial paper. We fully paid the remaining commercial paper notes payable by October 2008. In December 2008, in response to favorable changes in the credit markets, we recommenced this funding program and issued $500 million of commercial paper notes payable.

Under a stock repurchase program approved by our Board of Directors in December 2003 and most recently extended in April 2008, we are authorized to repurchase up to 150 million shares of our Common Stock for an aggregate amount of up to $10.0 billion through June 30, 2009. In this program, as in previous stock repurchase programs, purchases may be made in the open market or in privately negotiated transactions from time to time at management's discretion. We also may engage in transactions in other Genentech securities in conjunction with the repurchase program, including certain derivative securities, although as of December 31, 2008, we had not engaged in any such transactions. We use the repurchased stock to offset dilution caused by the issuance of shares in connection with our employee stock purchase plan. However, significant option exercises and stock purchases by employees could result in further dilution, and limitations in our ability to enter into new share repurchase arrangements could negatively affect our ability to offset dilution. Although there are currently no specific plans for the shares that may be purchased under the program, our goals for the program are: (1) to address provisions of our Affiliation Agreement with RHI related to maintaining RHI's minimum ownership percentage, (2) to make prudent investments of our cash resources, and (3) to allow for an effective mechanism to provide stock for our employee stock purchase plans. See "Relationship with Roche" above for more information on RHI's minimum ownership percentage.

We enter into Rule 10b5-1 trading plans to repurchase shares in the open market during periods when trading in our stock is restricted under our insider trading policy.

Under our current stock repurchase program, we repurchased nine million shares for $780 million in 2008. In addition, in November 2007, we entered into a prepaid share repurchase arrangement with an investment bank pursuant to which we delivered $300 million to the investment bank. The prepaid amount was reflected as a reduction of our stockholders' equity as of December 31, 2007. There was no effect on EPS for the year ended December 31, 2007 as a result of entering into this arrangement. Under this arrangement, the investment bank delivered approximately four million shares to us on March 31, 2008. Under the stock repurchase program we repurchased 13 million shares for $1.0 billion in 2007, and 12 million shares for $1.0 billion in 2006.

In May 2008, we entered into a prepaid share repurchase arrangement with an investment bank pursuant to which we delivered $500 million to the investment bank. The investment bank delivered approximately 5.5 million shares to us on September 30, 2008.

Our shares repurchased during the following months of 2008 were as follows (shares in millions):

	Total Number of Shares Purchased	Average Price Paid per Share
March 1–31	4.2	$ 72.00
April 1–30	0.9	74.76
May 1–31	1.5	68.77
June 1–30	1.2	73.68
September 1–30	5.5	90.24
October 1–31	0.3	80.80
Total	13.6	$ 79.62

As of December 31, 2008, 89 million shares have been purchased under our stock repurchase program for $6.5 billion, and a maximum of 61 million additional shares for amounts totaling up to $3.5 billion may be purchased under the program through June 30, 2009.

The par value method of accounting is used for common stock repurchases. The excess of the cost of shares acquired over the par value is allocated to additional paid-in capital with the amounts in excess of the estimated original sales price charged to retained earnings (accumulated deficit).

Off-Balance Sheet Arrangements

We have certain contractual arrangements that create potential risk for us and are not recognized in our Consolidated Balance Sheets. Discussed below are off-balance sheet arrangements that have or are reasonably likely to have a material current or future effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures, or capital resources.

We lease various real properties under operating leases that generally require us to pay taxes, insurance, maintenance, and minimum lease payments. Some of our leases have options to renew.

Commitments

In October 2007, we entered into a five-year, $1 billion revolving credit facility with various financial institutions. The credit facility is expected to be used for general corporate and working capital purposes, including providing support for our commercial paper program. Of the $1 billion commitment, $50 million was committed by an institution that is currently undergoing bankruptcy proceedings, and therefore we do not expect to rely on this portion

of the commitment. As of December 31, 2008, we did not have any borrowings under the credit facility.

Our Affiliation Agreement with RHI provides, among other things, that with respect to any issuance of our Common Stock in the future, we will repurchase a sufficient number of shares so that immediately after such issuance, the percentage of our Common Stock owned by RHI will be no lower than 2% below the Minimum Percentage (subject to certain conditions). See “RHI’s Ability to Maintain Percentage Ownership Interest in Our Stock” in “Related Party” transactions for further discussion of our obligation to maintain RHI’s Minimum Percentage.

In November 2006, we entered into a series of agreements with Lonza Group Ltd, including a supply agreement to purchase product produced by Lonza at their Singapore manufacturing facility, which is currently under construction. For accounting purposes, due to the nature of the supply agreement and our involvement with the construction of the buildings, we are considered the owner of the assets during the construction period, even though the funds to construct the building shell and some infrastructure costs are paid by Lonza. As such, during 2008 and 2007, we capitalized $107 million and $141 million, respectively, in construction-in-progress and have also recognized a corresponding amount as a construction financing obligation in "Long-term debt" in the accompanying Consolidated Balance Sheets. We also entered into a loan agreement with Lonza to advance $290 million to Lonza for the construction of this facility and $9 million for a related land lease option. In November 2008, the facility reached mechanical completion, and we advanced Lonza $200 million pursuant to the loan agreement. See Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for further discussion of the agreements.

See also Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Contractual Obligations

In the table below, we set forth our enforceable and legally binding obligations and future commitments, as well as obligations related to all contracts that we are likely to continue, regardless of the fact that they were cancelable as of December 31, 2008. Some of the figures that we include in this table are based on management's estimate and assumptions about these obligations, including their duration, the possibility of renewal, anticipated actions by third parties, and other factors. Because these estimates and assumptions are necessarily subjective, the obligations we will actually pay in future periods may vary from those reflected in the table.

	Payments Due by Period (in millions)				
Contractual Obligations	Total	2009	2010 and 2011	2012 and 2013	2014 and Beyond
Operating lease and lease-related obligations(1)	$ 257	$ 36	$ 70	$ 60	$ 91
HCP(2) (Financing lease)	491	36	76	81	298
Lonza(3) (Singapore facility agreement)	215	–	90	125	–
Purchase obligations(4)	1,057	702	279	76	–
Long-term debt(5)	2,000	–	500	–	1,500
Deferred tax liabilities(6)	46	46	–	–	–
Other long-term liabilities(7)	31	2	4	5	20
Interest expense on long-term debt(8)	1,022	85	151	148	638
Total	$ 5,119	$ 907	$ 1,170	$ 495	$ 2,547

(1) Operating lease obligations include Owner Association Fees on buildings that we own.

(2) See further discussion related to the HCP lease above in "Off-Balance Sheet Arrangements."

(3) Included in "2010 and 2011" is a manufacturing milestone payment. We also entered into a loan agreement, subject to certain mutually acceptable conditions of securitization, with Lonza to advance up to $290 million to Lonza for the construction of their Singapore facility, and $9 million for a related land lease option, of which $225 million was advanced as of

December 31, 2008. If we exercise our option to purchase the facility, any outstanding advances may be offset against the purchase price. If we do not exercise our purchase option, the advances will be offset against supply purchases. The supply purchases presented in the table above have been offset by the advances made to Lonza as of December 31, 2008. See further discussion of the agreements with Lonza above in "Off-Balance Sheet Arrangements" and in Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

(4) Purchase obligations include commitments related to capital expenditures, clinical development, manufacturing and research operations and other significant purchase commitments. Purchase obligations exclude capitalized labor and capitalized interest on construction projects. Included in this line are our purchase obligations under our contract manufacturing arrangements with Wyeth Pharmaceuticals, a division of Wyeth, for bulk supply of Herceptin, and with Novartis for the manufacture of Xolair and Lucentis. See also Note 9, "Leases, Commitments, and Contingencies," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

(5) See also Note 8, "Debt," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

(6) Amount represents the current portion of our tax obligations and related interest under FIN 48. See also Note 13, "Income Taxes," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

(7) Other long-term liabilities primarily represent our post-retirement benefit obligations.

(8) Interest expense includes the effects of an interest rate swap agreement. See also, Note 4 "Investment Securities and Financial Instruments," in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Excludes payment obligations associated with our commercial paper program.

In addition to the above, we have committed to make potential future milestone payments to third parties as well as fund certain development, manufacturing and commercialization efforts as part of in-licensing and joint product development programs. Milestone payments under these agreements generally become due and payable only upon achievement of certain developmental, regulatory, and/or commercial milestones. Because the achievement of these milestones is generally neither probable nor reasonably estimable, such contingencies have not been recorded on our Consolidated Balance Sheets or in the table above. Further, our obligation to fund development, manufacturing and commercialization efforts is contingent upon continued involvement in the programs and/or the lack of any adverse events that could cause the discontinuance of the programs. Under certain of these arrangements, management can decide at any time to discontinue the joint programs. Due to the risks associated with the development, manufacturing and commercialization processes, the payments under these arrangements are not reasonably estimable, and such payments have not been recorded on our Consolidated Balance Sheets or in the table above. See Note 9, “Leases, Commitments, and Contingencies,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K for further information on these matters.

Stock Options

Option Program Description

Our employee stock option program is a broad-based, long-term retention program that is intended to attract and retain talented employees and to align stockholder and employee interests. Our program primarily consists of our 2004 Equity Incentive Plan (the Plan), a broad-based plan under which stock options, restricted stock, stock appreciation rights, and performance shares and units may be granted to employees, directors, and other service providers. Substantially all of our employees participate in our stock option program. In the past, we granted options under our amended and restated 1999 Stock Plan, 1996 Stock Option/Stock Incentive Plan, our amended and restated 1994 Stock Option Plan, and our amended and restated 1990 Stock Option/Stock Incentive Plan. Although we no longer grant options under these plans, exercisable options granted under almost all of these plans are still outstanding.

On August 18, 2008, the Special Committee adopted two retention plans that were implemented in lieu of our 2008 annual stock option grant, which typically occurs in September. The plans cover substantially all of our employees, including our named executive officers. See “Relationship with Roche Holdings, Inc.” for more information about the Roche Proposal, and see “Liquidity and Capital Resources” for more information about the retention plans.

All stock option grants are made with the approval of the Compensation Committee of the Board of Directors or an authorized delegate. See “Compensation Discussion and Analysis” appearing in our 2009 Proxy Statement for further information concerning the policies and procedures of the Compensation Committee regarding the use of stock options.

General Option Information

Summary of Option Activity
(Shares in millions)

		Options Outstanding	
	Shares Available for Grant	Number of Shares	Weighted Average Exercise Price
December 31, 2006	70	88	$ 54.53

Grants	(18)	18	79.40
Exercises	–	(10)	32.76
Cancellations	4	(4)	76.45
December 31, 2007	56	92	60.94
Grants	(1)	1	79.23
Exercises	–	(13)	44.83
Cancellations	3	(3)	80.52
December 31, 2008	58	77	$ 63.06

In-the-Money and Out-of-the-Money Option Information
(Shares in millions)

	Exercisable		Unexercisable		Total	
As of December 31, 2008	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price	Shares	Wtd. Avg. Exercise Price
In-the-money	45	$ 49.01	18	$ 79.01	63	$ 57.59
Out-of-the-money(1)	11	86.28	3	86.67	14	86.37
Total options outstanding	56		21		77	

(1) Out-of-the-money options are those options with an exercise price equal to or greater than the fair market value of Genentech Common Stock, which was $82.91 at the close of business on December 31, 2008.

Distribution and Dilutive Effect of Options

Employee and Executive Officer Option Grants

	2008(1)	2007(1)	2006(1)
Grants, net of forfeitures, during the year as % of outstanding shares	(0.20) %	1.36%	1.43%
Grants to Executive Officers during the period as % of outstanding shares	–%	0.13%	0.14%
Grants to Executive Officers during the year as % of total options granted	–%	7.41%	8.60%

(1) Executive officers as of December 31 for the years presented.

Equity Compensation Plan Information

Our stockholders have approved all of our equity compensation plans under which options are outstanding.

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This report contains forward-looking statements regarding our Horizon 2010 strategy of bringing new molecules into clinical development, bringing major new products or indications onto the market, becoming the number one U.S. oncology company in sales, and achieving certain financial growth measures; the initiation of a clinical study for Avastin; the availability and timing of data for clinical studies for Avastin; Avastin regulatory filings; a Tarceva sNDA submission; share repurchases; the cost of the retention plans in response to the Roche proposal to acquire all of the outstanding shares of our Common Stock not owned by Roche; label extensions for Xolair; Raptiva inventory impairment; qualification and licensure of our Vacaville facility, licensure of our Hillsboro facility and Lonza's and our Singapore facilities, and completion of construction for our Dixon facility; liability with respect to COH; liability with respect to Lonza; the adequacy of our capital resources to meet long-term growth; the timing of the Special Committee's formal position with respect to the Roche Tender Offer; sales to collaborators; contractual obligations; tax obligations and our effective income tax rate; capital expenditures; lease payments; and the effect of recent accounting pronouncements on our financial statements.

These forward-looking statements involve risks and uncertainties, and the cautionary statements set forth below and those contained in “Risk Factors” in this Annual Report on Form 10-K identify important factors that could cause actual results to differ materially from those predicted in any such forward-looking statements. Such factors include, but are not limited to, difficulty in enrolling patients in clinical trials; the need for additional data, data analysis or clinical studies; BLA preparation and decision making; FDA actions or delays; failure to obtain or maintain, or changes to, FDA or other regulatory approval; difficulty in obtaining materials from suppliers; unexpected safety, efficacy or manufacturing issues for us or our contract/collaborator manufacturers; increased capital expenditures including greater than expected construction and validation costs; product withdrawals or suspensions; competition; efficacy data concerning any of our products which shows or is perceived to show similar or improved treatment benefit at a lower dose or shorter duration of therapy; pricing decisions by us or our competitors; our ability to protect our proprietary rights; the outcome of, and expenses associated with, litigation or legal settlements; increased R&D, MG&A, stock-based compensation, environmental and other expenses, inventory write-offs, and increased COS; variations in collaborator sales and expenses; fluctuations in contract revenues and royalties; our indebtedness and ability to pay our indebtedness; actions by Roche that are adverse to our interests; developments regarding the Roche Tender Offer; decreases in third party reimbursement rates; the ability of wholesalers to effectively distribute our products; greater than expected income tax rate; and changes in accounting or tax laws or the application or interpretation of such laws. We disclaim and do not undertake any obligation to update or revise any forward-looking statement in this Annual Report on Form 10-K.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk, including changes to interest rates, foreign currency exchange rates and equity investment prices. To reduce the volatility related to these exposures, we enter into various derivative hedging transactions pursuant to our investment and risk management policies and procedures. We do not enter into derivatives for speculative purposes. As part of our risk management procedures, we use analytical techniques, including sensitivity analysis and market values, and there are inherent risks that may only be partially offset by our hedging programs should there be unfavorable movements in interest rates, foreign currency exchange rates, or equity investment prices.

The estimated exposures discussed below are intended to measure the amount that we could lose from adverse market movements in interest rates, foreign currency exchange rates, and equity investment prices, given a specified confidence level, over a given period of time. Loss is defined in the value-at-risk (VAR) estimation as fair market value loss. Our VAR model utilizes historical simulation of daily market data over the past three years and calculates market data changes using a 21-trading-day holding period to estimate expected loss in fair value at a 95% confidence level. The VAR model is not intended to represent actual losses but is used as a risk estimation tool. The calculated VAR is intended to measure the amount that we could lose from adverse market movements in interest rates, foreign currency exchange rates, and equity investment prices, given a specified confidence level, over a given period of time. However, our VAR calculations are not designed to fully factor in all potential future volatility because the calculations are based on historical results that may not be predictive of future results.

Actual future gains and losses associated with our investment portfolio and derivative positions may differ materially from the VAR analyses performed due to the inherent limitations associated with predicting the timing and amount of changes to interest rates, foreign currency exchanges rates, and equity investment prices, as well as our actual exposures and positions.

Interest Rate Risk

Our interest-bearing assets, or interest-bearing portfolio, consisted of cash, cash equivalents, restricted cash and investments, short-term investments, marketable debt securities, long-term investments and interest-bearing forward contracts. The balance of our interest-bearing portfolio, including restricted and unrestricted cash and investments, was $9,258 million, or 42% of total assets, at December 31, 2008; and $6,437 million, or 34% of total assets, at December 31, 2007. Interest income related to this portfolio was $90 million in 2008 and $270 million in 2007. Our interest income is sensitive to changes in the general level of interest rates, credit ratings of our investments, and market liquidity for the different types of interest-bearing assets.

Our short-term borrowings include unsecured commercial paper notes payable of $500 million at December 31, 2008 and $600 million at December 31. 2007. These notes are not redeemable prior to maturity or subject to voluntary prepayment, and were issued on a discount basis. At December 31, 2008 and 2007, outstanding commercial paper notes carried an effective interest yield of 0.8% and 4.46%, respectively.

Our long-term debt is made up of the following debt instruments: $500 million principal amount of 4.40% Senior Notes due 2010, $1.0 billion principal amount of 4.75% Senior Notes due 2015, and $500 million principal amount of 5.25% Senior Notes due 2035. To hedge the fair value of our 2010 Notes against fluctuations in the benchmark U.S. interest rates, we entered into a series of interest rate swap agreements with respect to the 2010 Notes. See Note 8, “Debt,” and Note 4, “Investment Securities and Financial Instruments—Derivative Financial Instruments,” in the Notes to Consolidated Financial Statements in Part II, Item 8 of this Form 10-K.

Based on our overall interest rate exposure, which includes the net effect of our interest rate exposures on our interest-bearing assets, our Senior Note debt instruments, and our commercial paper, using a 21-trading-day holding period with a 95% confidence level, the potential loss in estimated fair value of our interest rate-sensitive instruments was $22 million at December 31, 2008 and $20 million at December 31, 2007. A significant portion of the potential loss in estimated fair value at both December 31, 2008 and 2007 was attributed to the longer duration of our Senior Notes.

Foreign Currency Exchange and Foreign Economic Conditions Risk

We receive royalty revenue from licensees selling products in countries throughout the world. As a result, our financial results could be significantly affected by factors such as changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which our licensed products are sold. Our exposure to foreign exchange rates is most significant relative to the Swiss Franc, though we are also exposed to changes in exchange rates elsewhere in Europe, Asia (primarily Japan), and Canada. When the dollar strengthens against the currencies in these countries, the dollar value of foreign-currency-denominated revenue decreases; when the dollar weakens, the dollar value of the foreign-currency-denominated revenue increases. Accordingly, changes in exchange rates, and in particular a strengthening of the dollar, may adversely affect our royalty revenue as expressed in dollars. Currently, our foreign-currency-denominated royalty revenues exceed our foreign-currency-denominated expenses. In addition, as part of our overall investment strategy, a portion of our investment portfolio is in non-U.S. dollar denominated investments. As a result, we are exposed to changes in the exchange rates of the currencies in which these non-U.S. dollar investments are denominated.

To mitigate our net foreign exchange exposure, our policy allows us to hedge certain of our anticipated royalty revenue by entering into forward contracts or options, including collars, with one- to five-year expiration dates and amounts of currency that are based on up to 90% of forecasted future revenue so that the potential adverse effect of movements in currency exchange rates on the non-dollar denominated revenue will be at least partly offset by an associated increase in the value of the option or forward. As of December 31, 2008, these options and forwards are due to expire in 2009 and 2010.

Based on our overall currency rate exposure, using a 21-trading-day holding period with a 95% confidence level, the potential loss in the estimated fair value of our foreign currency-sensitive instruments was $69 million at December 31, 2008 and $40 million at December 31, 2007. Because we use foreign currency instruments to hedge anticipated future cash flows, losses incurred on those instruments are generally offset by increases in the fair value of the underlying future cash flows that they were intended to hedge.

Equity Security Risks

As part of our strategic alliance efforts, we have invested and may, in certain circumstances, invest in publicly traded equity instruments of biotechnology companies. Our biotechnology equity investment portfolio totaled $287 million, or 1% of total assets, at December 31, 2008 and $416 million, or 2% of total assets, at December 31, 2007. The decrease during 2008 was mainly due to sales of securities and lower market valuations. Impairment charges on our biotechnology equity investments were $16 million in 2008 and $20 million in 2007. These investments are subject to fluctuations from market value changes in stock prices. To mitigate the risk of market value fluctuation, our policy allows us to hedge certain equity securities by entering into forward or option contracts. Depending on market conditions, we may determine that in future periods certain of our other unhedged equity security investments are impaired, which would result in additional write-downs of those equity security investments.

Based on our overall exposure to fluctuations from market value changes in marketable equity prices, using a 21-trading-day holding period with a 95% confidence level, the potential loss in estimated fair value of our equity securities portfolio was $17 million at December 31, 2008 and $27 million at December 31, 2007.

Also, as part of our strategic alliance efforts, we invest in privately held biotechnology companies, some of which are in the start-up stage. These investments are primarily carried at cost, which were $32 million at December 31, 2008 and $31 million at December 31, 2007, and are recorded in “Other long-term assets” in the Consolidated Balance Sheets. Our determination of investment values in private companies is based on the fundamentals of the businesses,

including, among other factors, the nature and success of their R&D efforts.

Counterparty Credit Risks

As part of our derivative transactions, we are exposed to certain counterparty risks. We would experience a financial loss if the counterparties to these transactions were to default and the derivative valuation is favorable to us. We attempt to mitigate these risks by adhering to a policy that dictates a minimum counterparty credit rating of “A-” by Standard & Poor’s and “A3” by Moody’s Investor Services. As of December 31, 2008, our maximum risk of loss in the event of default by counterparties to the derivative instruments noted above would have been less than $50 million.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Genentech, Inc.

We have audited the accompanying consolidated balance sheets of Genentech, Inc. as of December 31, 2008 and 2007, and the related consolidated statements of income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2008. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of Genentech, Inc.'s management. Our responsibility is to express an opinion on these financial statements and schedule 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 Genentech, Inc. at December 31, 2008 and 2007, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Genentech, Inc.'s internal control over financial reporting as of December 31, 2008, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 4, 2009 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Palo Alto, California
February 4, 2009,
except for the first paragraph of Note 3
and the thirteenth paragraph of Note 10,
as to which the date is
February 9, 2009

CONSOLIDATED STATEMENTS OF INCOME
(In millions, except per share amounts)

	Year Ended December 31,		
	2008	2007	2006
Revenue			
Product sales (including amounts from related parties: 2008-$880; 2007-$778; 2006-$364)	$ 10,531	$ 9,443	$ 7,640
Royalties (including amounts from related parties: 2008-$1,785; 2007-$1,301; 2006-$849)	2,539	1,984	1,354
Contract revenue (including amounts from related parties: 2008-$198; 2007-$165; 2006-$165)	348	297	290
Total operating revenue	13,418	11,724	9,284
Costs and expenses			
Cost of sales (including amounts for related parties: 2008-$481; 2007-$432; 2006-$272)	1,744	1,571	1,181
Research and development (including amounts from programs where related parties share costs: 2008-$379; 2007-$302; 2006-$251) (including amounts for which reimbursement was recorded as contract revenue: 2008-$227; 2007-$196; 2006-$185)	2,800	2,446	1,773
Marketing, general and administrative	2,405	2,256	2,014
Collaboration profit sharing (including related party amounts: 2008-$189; 2007-$185; 2006-$187)	1,228	1,080	1,005
Write-off of in-process research and development related to acquisition	–	77	–
Gain on acquisition	–	(121)	–
Recurring amortization charges related to redemption and acquisition	172	132	105
Special items: litigation-related	(260)	54	54
Total costs and expenses	8,089	7,495	6,132
Operating income	5,329	4,229	3,152
Other income (expense):			
Interest and other income, net	184	273	325
Interest expense	(82)	(76)	(74)
Total other income, net	102	197	251
Income before taxes	5,431	4,426	3,403
Income tax provision	2,004	1,657	1,290
Net income	$ 3,427	$ 2,769	$ 2,113
Earnings per share			
Basic	$ 3.25	$ 2.63	$ 2.01
Diluted	$ 3.21	$ 2.59	$ 1.97
Shares used to compute basic earnings per share	1,053	1,053	1,053
Shares used to compute diluted earnings per share	1,067	1,069	1,073

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended December 31,		
	2008	2007	2006
Cash flows from operating activities			
Net income	$ 3,427	$ 2,769	$ 2,113
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	592	492	407
Employee stock-based compensation	399	403	309
Excess tax benefit from stock-based compensation arrangements	(140)	(193)	(179)
Acquired in-process research and development	–	77	–
Gain on acquisition	–	(121)	–
Deferred income taxes	90	(234)	(112)
Deferred revenue	41	(68)	(3)
Litigation-related special items	(260)	51	51
Gain on sales of securities available-for-sale and other	(124)	(27)	(94)
Loss on sales and write-downs of securities available-for-sale and other	149	58	5
Loss on fixed asset dispositions	26	32	23
Changes in assets and liabilities:			
Receivables and other assets	(132)	38	(628)
Inventories	209	(310)	(408)
Investments in trading securities	82	(360)	(29)
Accounts payable, other accrued liabilities, and other long-term liabilities	72	623	683
Accrued litigation	(476)	–	–
Net cash provided by operating activities	3,955	3,230	2,138
Cash flows from investing activities			
Purchases of securities available-for-sale	(2,980)	(1,152)	(1,036)
Proceeds from sales of securities available-for-sale	1,770	651	256
Proceeds from maturities of securities available-for-sale	279	486	357
Capital expenditures	(751)	(977)	(1,214)
Change in other intangible and long-term assets	15	(40)	9
Acquisition and related costs, net	–	(833)	–
Transfer to restricted cash, net	–	–	(53)
Net cash used in investing activities	(1,667)	(1,865)	(1,681)
Cash flows from financing activities			
Stock issuances	680	452	385
Stock repurchases and prepaid share repurchase deposits	(780)	(1,345)	(996)
Excess tax benefit from stock-based compensation arrangements	140	193	179
Proceeds from (maturities of) commercial paper, net	(99)	599	–
Construction financing and other related payments	(210)	–	–
Net cash used in financing activities	(269)	(101)	(432)
Net increase in cash and cash equivalents	2,019	1,264	25
Cash and cash equivalents at beginning of year	2,514	1,250	1,225
Cash and cash equivalents at end of year	$ 4,533	$ 2,514	$ 1,250
Supplemental cash flow data			
Cash paid during the year for:			

Interest	$ 74	$ 60	$ 68
Income taxes	1,779	1,673	1,038
Non-cash investing and financing activities			
Capitalization of construction in progress related to financing lease transactions	117	203	128
Sale of subsidiary in exchange for note receivable	–	–	135
Transfer of restricted cash to short-term investments	788	–	–
Transfer of trading securities to available-for-sale	122	–	–

See Notes to Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEETS
(In millions, except par value)

	December 31, 2008	2007
Assets		
Current assets		
Cash and cash equivalents	$ 4,533	$ 2,514
Short-term investments	1,665	1,461
Restricted cash and investments	–	788
Accounts receivable—product sales (net of allowances: 2008-$157; 2007-$116; including amounts from related parties: 2008-$203; 2007-$2)	1,039	847
Accounts receivable—royalties (including amounts from related parties: 2008-$564; 2007-$463)	680	620
Accounts receivable—other (including amounts from related parties: 2008-$122; 2007-$233)	222	299
Inventories	1,299	1,493
Deferred tax assets	500	614
Prepaid expenses and other current assets	135	117
Total current assets	10,073	8,753
Long-term marketable debt and equity securities	3,347	2,090
Property, plant and equipment, net	5,404	4,986
Goodwill	1,590	1,577
Other intangible assets	1,008	1,168
Other long-term assets	365	366
Total assets	$ 21,787	$ 18,940
Liabilities and stockholders' equity		
Current liabilities		
Accounts payable (including amounts to related parties: 2008-$23; 2007-$2)	228	$ 420
Commercial paper	500	599
Deferred revenue (including amounts from related parties: 2008-$81; 2007-$63)	88	73
Accrued litigation	–	776
Other accrued liabilities (including amounts to related parties: 2008-$180; 2007-$230)	2,279	2,050
Total current liabilities	3,095	3,918
Long-term debt	2,329	2,402
Deferred revenue (including amounts from related parties: 2008-$380; 2007-$384)	444	418
Other long-term liabilities	248	297
Total liabilities	6,116	7,035
Commitments and contingencies (Note 9)		
Stockholders' equity		
Preferred stock, $0.02 par value; authorized: 100 shares; none issued	–	–
Common Stock, $0.02 par value; authorized: 3,000 shares; outstanding: 2008-1,053 shares; 2007-1,052 shares	21	21

Additional paid-in capital	12,044	10,695
Accumulated other comprehensive income	124	197
Retained earnings, since June 30, 1999	3,482	992
Total stockholders' equity	15,671	11,905
Total liabilities and stockholders' equity	$ 21,787	$ 18,940

See Notes to Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In millions)

	Common Stock Shares	Common Stock Amounts	Additional Paid-in Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Income	Total
Balance December 31, 2005	1,054	$ 21	$ 9,263	$ (2,067)	$ 253	$ 7,470
Comprehensive income						
Net income	–	–	–	2,113	–	2,113
Decrease in unrealized gain on securities available-for-sale, net of tax	–	–	–	–	(16)	(16)
Changes in fair value of cash flow hedges, net of tax	–	–	–	–	(27)	(27)
Change in post-retirement benefit obligation, net of tax	–	–	–	–	(6)	(6)
Comprehensive income						2,064
Issuance of stock upon exercise of options	9	–	288	–	–	288
Income tax benefits realized from employee stock option exercises	–	–	179	–	–	179
Issuance of stock under employee stock purchase plan	2	–	97	–	–	97
Stock-based compensation expense	–	–	376	–	–	376
Repurchase of Common Stock	(12)	–	(112)	(884)	–	(996)
Balance December 31, 2006	1,053	21	10,091	(838)	204	9,478
Comprehensive income						
Net income	–	–	–	2,769	–	2,769
Increase in unrealized gain on securities available-for-sale, net of tax	–	–	–	–	5	5
Changes in fair value of cash flow hedges, net of tax	–	–	–	–	(10)	(10)
Change in post-retirement benefit obligation, net of tax	–	–	–	–	(2)	(2)
Comprehensive income						2,762
Issuance of stock upon exercise of options	10	–	340	–	–	340
Income tax benefits realized from employee stock option exercises	–	–	177	–	–	177
Issuance of stock under employee stock purchase plan	2	–	112	–	–	112
Stock-based compensation expense	–	–	407	–	–	407

Cumulative effect of change in accounting principle	–	–	–	(26)	–	(26)
Repurchase of Common Stock	(13)	–	(132)	(913)	–	(1,045)
Prepaid repurchase of Common Stock	–	–	(300)	–	–	(300)
Balance December 31, 2007	1,052	21	10,695	992	197	11,905
Comprehensive income						
Net income	–	–	–	3,427	–	3,427
Decrease in unrealized gain on securities available-for-sale, net of tax	–	–	–	–	(79)	(79)
Changes in fair value of cash flow hedges, net of tax	–	–	–	–	5	5
Change in post-retirement benefit obligation, net of tax	–	–	–	–	1	1
Comprehensive income						3,354
Issuance of stock upon exercise of options	13	–	572	–	–	572
Income tax benefits realized from employee stock option exercises	–	–	124	–	–	124
Issuance of stock under employee stock purchase plan	2	–	108	–	–	108
Stock-based compensation expense	–	–	388	–	–	388
Repurchase of Common Stock and settlement of prepaid stock repurchase agreement	(14)	–	157	(937)	–	(780)
Balance December 31, 2008	1,053	$ 21	$ 12,044	$ 3,482	$ 124	$ 15,671

See Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In this Annual Report, “Genentech,” “we,” “us,” and “our” refer to Genentech, Inc. “Common Stock” refers to Genentec Common Stock, par value $0.02 per share, “Special Common Stock” refers to Genentech’s callable putable common stock, par value $0.02 per share, all of which was redeemed by Roche Holdings, Inc. (RHI) on June 30, 1999 (the Redemption).

Note 1. DESCRIPTION OF BUSINESS

Genentech is a leading biotechnology company that discovers, develops, manufactures and commercializes medicines for patients with significant unmet medical needs. We commercialize multiple biotechnology products and also receive royalties from companies that are licensed to market products based on our technology.

Redemption of Our Special Common Stock

On June 30, 1999, RHI exercised its option to cause us to redeem all of our Special Common Stock held by stockholders other than RHI. The Redemption was reflected as a purchase of a business, which under GAAP required push-down accounting to reflect in our financial statements the amounts paid for our stock in excess of our net book value. The aggregate purchase price for the acquisition of all of Genentech’s outstanding shares, including RHI’s estimated transaction costs of $10 million, was $6,605 million.

Note 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of Genentech and all of our wholly-owned subsidiaries. Material intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make judgments, assumptions, and estimates that affect the amounts reported in our consolidated financial statements and accompanying notes. Actual results could differ materially from those estimates.

Recent Accounting Pronouncements

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 141R, “Business Combinations” (FAS 141R), which replaces FAS No. 141 (FAS 141). The statement retains the purchase method of accounting for acquisitions, but requires a number of changes, including changes in the way assets and liabilities are recognized in purchase accounting. It also changes the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related costs as incurred. FAS No. 141R became effective for us on January 1, 2009. The effect of the adoption of FAS 141R will depend upon the nature of any future business combinations we undertake.

In December 2007, the FASB issued EITF 07-1, “Accounting for Collaborative Agreements” (EITF 07-1). EITF 07-1 provides guidance regarding financial statement presentation and disclosure of collaborative arrangements, which includes arrangements entered into regarding development and commercialization of products. It requires certain transactions between collaborators to be recorded in the income statement on either a gross or net basis when certain characteristics exist in the collaborative relationship. EITF 07-1 became effective for us on January 1, 2009. The adoption of EITF 07-1 will not have an effect on our financial condition or our net income. However, the adoption of EITF 07-1 may have an effect on the presentation of collaborative arrangements in our income statements and could result in the reporting of lower amounts of contract revenues, R&D expenses, and profit sharing expense.

In February 2008, the FASB issued Statement of Financial Position (FSP) No. 157-2, which delays the effective date of FAS 157 for non-financial assets and non-financial liabilities, except for items that are recognized or disclosed at fair value on a recurring basis (items that are remeasured at least annually). The FSP deferred the effective date of FAS 157 for non-financial assets and non-financial liabilities until our fiscal year beginning on January 1, 2009. We do not expect the adoption of FAS 157 for non-financial assets and non-financial liabilities to have a material effect on our consolidated financial statements.

In March 2008, the FASB issued FAS No. 161, “Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133” (FAS 161). FAS 161 requires us to provide greater transparency about how and why we use derivative instruments, how the instruments and related hedged items are accounted for under FAS No. 133, “Accounting for Derivative Instruments and Hedging Activities” (FAS 133), and how the instruments and related hedged items affect our financial position, results of operations, and cash flows. FAS 161 became effective for us on January 1, 2009. We do not expect the adoption of FAS 161 to have an effect on our financial condition or results of operations, but we will be required to expand our disclosure regarding our derivative instruments.

Revenue Recognition

We recognize revenue from the sale of our products, royalties earned, and contract arrangements. Advance payments received in excess of amounts earned are classified as deferred revenue until earned.

Product Sales

We recognize revenue from product sales when there is persuasive evidence that an arrangement exists, title passes, the price is fixed and determinable, and collectibility is reasonably assured. Allowances are established for estimated rebates, healthcare provider contractual chargebacks, prompt-pay sales discounts, product returns, and wholesaler and distributor inventory management allowances. In our domestic commercial collaboration agreements, we have primary responsibility for U.S. product sales commercialization efforts, including selling and marketing, customer service, order entry, distribution, shipping and billing. We record net product sales and related production and selling costs in our income statement line items on a gross basis, since we have the manufacturing risk and/or inventory risk, and credit risk, and meet the criteria as a principal under EITF 99-19.

Royalties

We recognize revenue from royalties based on licensees’ sales of our products or products using our technologies. Royalties are recognized as earned in accordance with the contract terms when royalties from licensees can be reasonably estimated and collectibility is reasonably assured. If the collectibility of a royalty amount is not reasonably assured, royalties are recognized as revenue when the cash is received. For approximately half of our royalty revenue, estimates are made using historical and forecasted sales trends and used as a basis to record amounts in advance of amounts collected.

Contract Revenue

Contract revenue generally includes up-front and continuing licensing fees, manufacturing fees, milestone payments and net reimbursements from collaborators on development, post-marketing and commercial costs. Nonrefundable up-front fees, including product opt-ins, for which no further performance obligations exist, are recognized as revenue on the earlier of when payments are received or collection is reasonably assured. Fees associated with substantive milestones, which are contingent upon future events for which there is reasonable uncertainty as to their achievement at the time the agreement was entered into, are recognized as revenue when these milestones, as defined in the

contract, are achieved.

Certain of our revenue arrangements contain multiple deliverables. For those contract arrangements with multiple deliverables that were entered into prior to the effective date of July 1, 2003 for EITF 00-21, "Revenue Arrangements with Multiple Deliverables" (EITF 00-21), our accounting policy on contract revenue is as follows:

Ÿ Nonrefundable up-front licensing fees, including product opt-ins, and certain guaranteed, time-based payments that require our continuing involvement in the form of development, manufacturing or other commercialization efforts by us are recognized as revenue:

Ÿ ratably over the development period if development risk is significant, or

Ÿ ratably over the manufacturing period or estimated product useful life if development risk has been substantially eliminated.

For those contract arrangements with multiple deliverables that were entered into subsequent to the effective date of July 1, 2003 for EITF 00-21, our accounting policy is as follows:

Ÿ We evaluate whether there is stand-alone value to the customer for the delivered elements and objective evidence of fair value to allocate revenue to each element in multiple element agreements. When the delivered element does not have stand-alone value or there is insufficient evidence of fair value for the undelivered element(s), we recognize the consideration for the combined unit of accounting in the same manner as the revenue is recognized for the final deliverable, which is generally ratably over the longest period of involvement.

Collaborations resulting in a net reimbursement of research, development, post-marketing, and/or commercial costs are recognized as revenue as the related costs are incurred. The corresponding research, development and post-marketing expenses are included in R&D expenses and the corresponding commercial costs are included in MG&A expenses in the Consolidated Statements of Income.

Product Sales Allowances

Revenue from product sales are recorded net of allowances for estimated rebates, healthcare provider contractual chargebacks, prompt-pay sales discounts, product returns, and wholesaler and distributor inventory management allowances, all of which are established at the time of sale. These allowances are based on estimates of the amounts earned or to be claimed on the related sales. These estimates take into consideration our historical experience, current contractual and statutory requirements, specific known market events and trends such as competitive pricing and new product introductions, and forecasted customer buying patterns and inventory levels, including the shelf life of our products. Rebates, healthcare provider contractual chargebacks, inventory management allowances, prompt-pay sales discounts and product returns are product-specific, which can be affected by the mix of products sold in any given period. All of our product sales allowances are based on estimates. If actual future results vary, we may need to adjust these estimates, which could have an effect on earnings in the period of the adjustment. Our product sales allowances and accruals are as follows:

Ÿ Rebate allowances and accruals comprise both direct and indirect rebates. Direct rebates are contractual price adjustments payable to wholesalers and specialty pharmacies that purchase products directly from us. Indirect rebates are contractual price adjustments payable to healthcare providers and organizations, such as payers, clinics, hospitals, pharmacies, and group purchasing organizations that do not purchase products directly from us. Both types of allowances are based on definitive contractual agreements or legal requirements (such as Medicaid) related to the dispensing of the product by a pharmacy, clinic, or hospital to a benefit plan participant. Rebate accruals are recorded in the same period that the related revenue is recognized, resulting in a reduction to product sales revenue

and the recognition of a contra asset (if due to a wholesaler or specialty pharmacy) or a liability (if due to a third party, such as a healthcare provider) as appropriate, which are included in accounts receivable allowances or other accrued liabilities, respectively. Rebates are estimated using historical and other data, including patient usage, customer buying patterns, applicable contractual rebate rates, and contract performance by the benefit providers. Rebate estimates are evaluated quarterly and may require adjustments to better align our estimates with actual results. As part of this evaluation, we review changes to federal legislation, changes to rebate contracts, changes in the level of discounts, and changes in product sales trends. Although rebates are accrued at the time of sale, rebates are typically paid out, on average, up to six months after the sale.

Ÿ Healthcare provider contractual chargebacks are the result of contractual commitments by us to provide products to healthcare providers at specified prices or discounts. These contracted healthcare providers include (i) hospitals that service a disproportionately high share of economically indigent and Medicaid patients for which they receive little or no reimbursement (i.e., Disproportionate Share Hospitals), (ii) government-owned hospitals that receive discounts, and (iii) hospitals that have contract pricing for certain products, usually through a group purchasing agreement. Chargebacks occur when a contracted healthcare provider purchases our products through an intermediary wholesaler at fixed contract prices that are lower than the list prices we charge the wholesalers. The wholesaler, in turn, charges us back for the difference between the price initially paid by the wholesaler and the contract price paid to the wholesaler by the healthcare providers. Chargebacks are accrued at the time of sale and are estimated based on historical trends, which closely approximate actual results as we generally issue credits within a few weeks of the time of sale.

Ÿ Prompt-pay sales discounts are credits granted to wholesalers for remitting payment on their purchases within contractually defined cash repayment incentive periods. The contractually defined cash repayment periods are generally 30 days; however, for newly launched products, we have offered and we may offer in the future, extended payment terms to wholesalers. In connection with the launch of Lucentis, we have offered, and continue to offer, an extended payment terms program to certain wholesalers. Based upon our experience that it is rare that a wholesaler does not comply with the contractual terms to earn the prompt-pay sales discount, we accrue 100 percent of the prompt-pay sales discounts at the time of original sale.

Ÿ Wholesaler and distributor inventory management allowances are credits granted to wholesalers and distributors for compliance with various contractually defined inventory management programs. These programs provide monetary incentives in the form of a credit for wholesalers and distributors to maintain consistent inventory levels at approximately two to three weeks of sales depending on the product. These wholesaler inventory management credits are calculated based on quarterly product purchases multiplied by a factor to determine the maximum possible credit for a product for the preceding quarter. Adjustments to reduce the maximum credit are made if the wholesaler does not meet and/or comply with the contractually defined metrics. These metrics include data timeliness, completeness and accuracy and deviations outside of the contracted inventory days on hand for each product. The maximum credits are accrued at the time of sale, and are typically granted to wholesaler accounts within 90 days after the sale.

Ÿ Product return allowances are established in accordance with our returns policy, which allows buyers to return our products within two months prior to and six months following product expiration. Most of our products are sold to our wholesalers with at least six months of dating prior to expiration. As part of our estimation process, we calculate historical return data on a production lot basis. Historical rates of return are determined by product and are adjusted for known or expected changes in the marketplace specific to each product. In addition, we review expiration dates to determine the remaining shelf life of each product not yet returned. Although product return allowances are accrued at the time of sale, the majority of returns take place up to two years after the sale.

Allowances against receivable balances primarily relate to product returns, wholesaler-related direct rebates, prompt-pay sales discounts, and wholesaler inventory management allowances, and are recorded in the same period that the related revenue is recognized, resulting in a reduction in product sales revenue and the reporting of product sales receivable net of allowances. Accruals related to indirect rebates and contractual chargebacks for healthcare providers are recognized in the same period that the related revenue is recognized, resulting in a reduction in product sales revenue, and are recorded as other accrued liabilities.

Commercial Collaboration Accounting

We have domestic commercial collaboration profit sharing agreements with Biogen Idec on Rituxan, with Novartis Pharma AG on Xolair, and with OSI Pharmaceuticals on Tarceva. In these agreements, we have primary responsibility for U.S. commercialization, including sales and/or marketing, customer support, order entry, distribution, shipping, and billing. In addition to being primarily responsible for providing the product or service to

the customer, we have general inventory risk prior to the customer placing an order or upon customer return, and we are exposed to customer credit risk. We record net product sales and related production and selling costs for our domestic collaborations in our Consolidated Statements of Income on a gross basis since we are the principal in the sales transaction as defined under EITF 99-19. The collaboration profit sharing expense line in our Consolidated Statements of Income includes the profit sharing results with Biogen Idec on Rituxan, with Novartis Pharma AG on Xolair, and with OSI Pharmaceuticals on Tarceva.

We have a European commercial collaboration profit sharing agreement with Novartis Pharma AG on Xolair. We do not record the net product sales and related production and selling costs for our European collaboration in our Consolidated Statements of Income on a gross basis since we do not meet the criteria as a principal under EITF 99-19, and instead record our net share of the European collaboration profits as contract revenue (or collaboration losses as collaboration profit sharing expense). See also Note 10, “Relationship with Roche Holdings, Inc. and Related Party Transactions,” regarding Novartis-related collaboration costs and profit sharing expenses.

Research and Development Expenses

Research and development (R&D) expenses include salaries, benefits, and other headcount related costs; clinical trial and related clinical manufacturing costs; contract and other outside service fees; employee stock-based compensation expense; and facilities and overhead costs. R&D expenses consist of independent R&D costs and costs associated with collaborative R&D and in-licensing arrangements. In addition, we acquire R&D services from other companies and fund research institutions under agreements that we can generally terminate at will. R&D expenses also include post-marketing activities such as Phase IV and investigator-sponsored trials and product registries. R&D costs, including up-front fees and milestones paid to collaborators, are expensed as incurred, if the underlying technology and/or intellectual property rights acquired are determined not to have an alternative future use. The costs of the acquisition of technology are capitalized if they have alternative future uses in other R&D projects or otherwise. R&D collaborations resulting in a net payment of development and post-marketing costs to our collaborators are recognized as R&D expense as the related costs are incurred.

Royalty Expenses

Royalty expenses and milestones directly related to product sales are classified in COS. Other royalty expenses, related to royalty revenue, are classified in MG&A expenses and totaled $379 million in 2008, $312 million in 2007, and $221 million in 2006.

Advertising Expenses

We expense the costs of advertising, which also include promotional expenses, as incurred. Advertising expenses were $371 million in 2008, $400 million in 2007, and $439 million in 2006.

Research and Development Arrangements

To gain access to potential new products and technologies and to utilize other companies to help develop our potential new products, we establish strategic alliances with various companies. These strategic alliances often include the acquisition of marketable and nonmarketable equity investments or debt of companies developing technologies that complement or fall outside of our research focus and include companies having the potential to generate new products through technology licensing and/or investments. Potential future payments may be due to certain collaborators achieving certain benchmarks as defined in the collaborative agreements. We also entered into product-specific collaborations to acquire development and marketing rights for products. See Note 9, “Leases, Commitments, and Contingencies,” and Note 10, “Relationship with Roche Holdings, Inc. and Related Party Transactions,” below for a

discussion of our more significant collaborations.

Cash and Cash Equivalents

We consider all highly liquid available-for-sale debt securities purchased with an original maturity of three months or less to be cash equivalents.

Inventories

Inventories are stated at the lower of cost or market value. Cost is determined using a weighted-average approach, assuming full absorption of direct and indirect manufacturing costs, based on normal product capacity utilization assumptions. Excess or idle capacity costs, resulting from utilization below a plant's normal capacity, are recognized as COS in the period in which they are incurred. If inventory costs exceed expected market value due to obsolescence or insufficient forecasted demand, reserves are recorded for the difference between the cost and the estimated market value. These reserves are determined based on significant estimates. Inventories may include currently marketed products manufactured under a new process or at facilities awaiting regulatory licensure. These inventories are capitalized if, in our judgment, at the time of manufacture near-term regulatory licensure is reasonably assured. In addition, inventories include employee stock-based compensation expenses capitalized under FAS 123R and capitalized costs related to the retention plans approved in August 2008.

Investments in Marketable and Nonmarketable Securities

We hold investments in short-term and long-term marketable securities, consisting primarily of corporate bonds, commercial paper, government and agency securities, municipal bonds and bonds denominated in foreign currencies but hedged to U.S. dollars. As part of our strategic alliance efforts, we may also invest in equity securities, dividend-bearing convertible preferred stock, and interest-bearing debt of other biotechnology companies. We record these investments under the cost method of accounting, as we hold less than a 20% ownership position in all of these collaborator companies.

We classify marketable equity and debt securities into one of two categories: available-for-sale or trading. Trading securities are bought, held, and sold with the objective of generating returns. We have established maximum amounts of our total investment portfolio that can be included in our trading portfolio, the majority of which is managed by investment management firms that operate within investment policy guidelines that we provide. Trading securities are classified as short-term investments and are carried at estimated fair market value. Unrealized holding gains and losses on trading securities are included in "Interest and other income, net." Debt securities and marketable equity securities not classified as trading are considered available-for-sale. These securities are carried at estimated fair value (see Note 4, "Investment Securities and Financial Instruments," below) with unrealized gains and losses included in accumulated other comprehensive income in stockholders' equity. Unrealized losses are charged against "Interest and other income, net" when a decline in fair value is determined to be other-than-temporary. We review several factors to determine whether a loss is other-than-temporary. These factors include but are not limited to: (i) the extent to which the fair value is less than cost and the cause for the fair value decline, (ii) the financial condition and near-term prospects of the issuer, (iii) the length of time a security is in an unrealized loss position and (iv) our ability to hold the security for a period of time sufficient to allow for any anticipated recovery in fair value. Available-for-sale equity securities and available-for-sale debt securities with remaining maturities of greater than one year are classified as long-term.

If the impairment is considered to be other-than-temporary, the security is written down to its estimated fair value. Other-than-temporary declines in estimated fair value of all marketable securities are charged to "Interest and other income, net." The cost of all securities sold is based on the specific identification method. We recognized charges of $83 million in 2008, $50 million in 2007, and $4 million in 2006 related to other-than-temporary declines in the estimated fair values of certain of our marketable equity and debt securities.

Nonmarketable equity securities are carried at cost, less any write-downs for impairment. We periodically monitor the liquidity and financing activities and R&D progress of the respective issuers to determine if impairment write-downs to our nonmarketable equity securities are necessary.

Derivative Instruments

We use derivatives to manage our market exposure to fluctuations in foreign currencies, U.S. interest rates and marketable equity investments. We record all derivatives on the balance sheet at estimated fair value. For derivative instruments that are designated and qualify as a fair value hedge (i.e., hedging the exposure to changes in the

estimated fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), the gain or loss on the derivative instrument, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, is recognized in current earnings during the period of the change in estimated fair values. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The gain or loss on the derivative instruments in excess of the cumulative change in the present value of future cash flows of the hedged transaction, if any, is recognized in current earnings during the period of change. We do not use derivative instruments for speculative purposes. See Note 4, “Investment Securities and Financial Instruments—Derivative Financial Instruments,” below for further information on our accounting for derivatives.

Property, Plant and Equipment

The costs of buildings and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, but not more than:

	Useful Lives
Buildings	25 years
Certain manufacturing equipment	15 years
Other equipment	3 to 8 years
Leasehold improvements	Length of applicable lease

Depreciation expense on biologics manufacturing facilities constructed or purchased begins once production activities have commenced at the facility, which is generally at the point at which qualification lots are being successfully produced. The point at which depreciation is commenced best represents the point at which the asset is ready for its intended use, and generally precedes FDA licensure of the facility.

FDA Validation Costs

FDA validation costs are capitalized as part of the effort required to acquire and construct long-lived assets, including readying them for their intended use, and are amortized over the estimated useful life of the asset or the term of the lease, whichever is shorter, and charged to COS. These costs are included in “Other long-term assets” in the accompanying Consolidated Balance Sheets.

Goodwill and Other Intangible Assets

Goodwill represents the difference between the purchase price and the estimated fair value of the net assets acquired when accounted for by the purchase method of accounting and arises from RHI’s purchases of our Special Common Stock and push-down accounting (refer to “Redemption of Our Special Common Stock” in Note 1 above) as well as from our acquisition of Tanox in 2007. In accordance with FAS 142, “Goodwill and Intangible Assets” (FAS 142), we do not amortize goodwill. Also in accordance with FAS 142, we perform an annual impairment test of goodwill at the company level, which is the sole reporting unit, and have found no impairment. We will continue to evaluate our goodwill for impairment annually and whenever events and changes in circumstances suggest that the carrying amount may not be recoverable.

We amortize intangible assets with definite lives on a straight-line basis over their estimated useful lives, ranging from five to 15 years, and review for impairment on a quarterly basis and when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

Restricted Cash and Investments

We entered into an arrangement with third-party insurance companies to post a bond in connection with the COH trial judgment. As part of this arrangement, we were required to pledge cash and investments to secure this bond. As of December 31, 2007, we held restricted cash and investments of $788 million, related to the surety bond, and these

amounts are reflected in the Consolidated Balance Sheet in "Restricted cash and investments." As a result of the April 24, 2008 California Supreme Court decision, we paid $476 million to COH in the second quarter of 2008, reflecting the amount of compensatory damages awarded plus interest thereon from the date of the original decision, June 10, 2002. During the third quarter of 2008, the court completed certain administrative procedures to dismiss the case. As a result, the restrictions were lifted from the restricted cash and investments accounts, which consisted of available-for-sale investments, and the funds became available for use in our operations. See Note 9, "Leases, Commitments, and Contingencies," for further discussion of the COH litigation.

Impairment of Long-Lived Assets

Long-lived assets and certain identifiable intangible assets to be held and used are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the assets, the assets are written down to their estimated fair values. Long-lived assets and certain identifiable intangible assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell.

Sabbatical Leave Benefits

On January 1, 2007, we adopted EITF Issue No. 06-2, "Accounting for Sabbatical Leave and Other Similar Benefits Pursuant to FASB Statement No. 43, Accounting for Compensated Absences" (EITF 06-2). Prior to the adoption of EITF 06-2, we recorded a liability for a sabbatical leave when the employee vested in the benefit, which was only at the end of a six-year service period. Under EITF 06-2, we accrue an estimated liability for a sabbatical leave over the requisite six-year service period, as the employee's services are rendered. Upon our adoption of EITF 06-2, we recorded an adjustment to retained earnings of $26 million, net of tax, as a cumulative effect of a change in accounting principle.

Accounting for Employee Stock-Based Compensation

We account for share-based payment under FAS 123R, which requires the recognition of compensation expense, using a fair-value based method, for costs related to all share-based payments, including stock options and stock issued under our employee stock purchase plan (ESPP). FAS 123R requires companies to estimate the fair value of share-based payment awards on the date of grant using an option-pricing model. We have adopted the simplified method to calculate the beginning balance of the additional paid-in-capital (APIC) pool of the excess tax benefit, and to determine the subsequent effect on the APIC pool and Consolidated Statements of Cash Flows of the tax effects of employee stock-based compensation awards. See Note 3, "Retention Plans and Employee Stock-Based Compensation," for further discussion of employee stock-based compensation.

401(k) Plan and Other Postretirement Benefits

Our 401(k) Plan (the 401(k) Plan) covers substantially all of our employees. We match a portion of employee contributions, up to a maximum of 5% of each employee's eligible compensation. The match is funded concurrently with a participant's semi-monthly contribution to the 401(k) Plan. Additionally, we contributed annually to every employee's account 2% of his or her eligible compensation, regardless of whether the employee actively participates in the 401(k) Plan. We recorded expense of $91 million in 2008, $85 million in 2007, and $68 million in 2006 for our contributions under the Plan.

In addition, we provide certain postretirement benefits, primarily healthcare related, to employees who meet certain eligibility criteria. In accordance with FAS No. 158, “Employers’ Accounting for Defined Benefit Pension and Other Postretirement Plans–an amendment of FASB Statements No. 87, 88, 106, and 132(R)” (FAS 158), we recognize the funded status of our postretirement benefit plan in the statement of financial position. As of December 31, 2008 and 2007, our postretirement benefit plan was not funded. The accumulated postretirement benefit obligation as of December 31, 2008 and 2007 was $30 million and $27 million, respectively, which was primarily included in “Other long-term liabilities” in the Consolidated Balance Sheets.

Stock Repurchases

The par value method of accounting is used for our common stock repurchases. The excess of the cost of shares acquired over the par value is allocated to additional paid-in capital with the amounts in excess of the estimated original sales price charged to retained earnings.

Income Taxes

Our income tax provision is computed using the liability method in accordance with FAS No. 109, “Accounting for Income Taxes”. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Significant estimates are required in determining our provisions for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations. We believe that our estimates are reasonable and that our reserves for income tax-related uncertainties are adequate. Various internal and external factors may have favorable or unfavorable effects on our future effective income tax rate. These factors include, but are not limited to, changes in tax laws, regulations, and/or rates; the results of any tax examinations; changing interpretations of existing tax laws or regulations; changes in estimates of prior years’ items; past and future levels of R&D spending; acquisitions; changes in our corporate structure; and changes in overall levels of income before taxes—all of which may result in periodic revisions to our effective income tax rate.

Effective with the consummation of the public offering of our Common Stock by RHI on October 26, 1999, we ceased to be a member of the consolidated federal income tax group (and certain consolidated or combined state and local income tax groups) of which RHI is the common parent. Accordingly, our tax sharing agreement with RHI now pertains only to the state and local tax returns in which we are consolidated or combined with RHI. We will continue to calculate our tax liability or refund with RHI for these state and local jurisdictions as if we were a stand-alone entity.

On January 1, 2007, we adopted the provisions of FIN 48. Implementation of FIN 48 did not result in a cumulative adjustment to retained earnings. The total amount of unrecognized tax benefits as of the date of adoption was $147 million. Of this total, $112 million represents the amount of unrecognized tax benefits that, if recognized, would favorably affect our effective income tax rate in any future period. See Note 13, “Income Taxes,” for further discussion of FIN 48.

Earnings Per Share

Basic earnings per share (EPS) are computed based on the weighted-average number of shares of our Common Stock outstanding. Diluted EPS is computed based on the weighted-average number of shares of our Common Stock and other dilutive securities.

The following is a reconciliation of the numerators and denominators of the basic and diluted EPS computations (in millions):

	2008	2007	2006
Numerator:			
Net income	$ 3,427	$ 2,769	$ 2,113
Denominator:			
Weighted-average shares outstanding used to compute basic EPS	1,053	1,053	1,053
Effect of dilutive stock options	14	16	20

Weighted-average shares outstanding and dilutive securities used to compute diluted EPS	1,067	1,069	1,073

Outstanding employee stock options to purchase approximately 47 million shares of our Common Stock for 2008 were excluded from the computation of diluted EPS because the effect would have been anti-dilutive. See Note 3, “Retention Plans and Employee Stock-Based Compensation,” for information on option exercise prices and expiration dates.

Comprehensive Income

Comprehensive income comprises net income and other comprehensive income (OCI). OCI includes certain changes in stockholders’ equity that are excluded from net income. Specifically, we include in OCI changes in the estimated fair value of derivatives designated as effective cash flow hedges, unrealized gains and losses on our available-for-sale securities, and gains or losses and prior service costs or credits that arise during the period but are not recognized as components of net periodic benefit cost. Comprehensive income for the years ended December 31, 2008, 2007, and 2006 has been reflected in the Consolidated Statements of Stockholders’ Equity.

The components of accumulated other comprehensive income, net of taxes, at December 31, 2008 and 2007 were as follows (in millions):

	2008	2007
Net unrealized gains on securities available-for-sale	$ 140	$ 219
Net unrealized losses on cash flow hedges	(9)	(14)
Change in post-retirement benefit obligation	(7)	(8)
Accumulated other comprehensive income	$ 124	$ 197

The activity in OCI was as follows (in millions):

	2008	2007	2006
Decrease in unrealized gains on securities available-for-sale (net of tax: 2008-$(59); 2007-$(7); 2006-$(11))	$ (83)	$ (10)	$ (13)
Reclassification adjustment for net losses (gains) on securities available-for-sale included in net income (net of tax: 2008-$3; 2007-$10; 2006-$(2))	4	15	(3)
Decrease in unrealized gains on cash flow hedges (net of tax: 2008-$(17); 2007-$(8); 2006-$(12))	(26)	(12)	(18)
Reclassification adjustment for net losses (gains) on cash flow hedges included in net income (net of tax: 2008-$20; 2007-$2; 2006-$(6))	31	2	(9)
Change in post-retirement benefit obligation (net of tax: 2008-$0; 2007-$(1); 2006-$(4))	1	(2)	(6)
Other comprehensive loss	$ (73)	$ (7)	$ (49)

Note 3. RETENTION PLANS AND EMPLOYEE STOCK-BASED COMPENSATION

Retention Plan Costs

On July 21, 2008, we announced that we received an unsolicited proposal from Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche at a price of $89 in cash per share (the Roche Proposal). On February 9, 2009, Roche commenced the Roche Tender Offer which replaced the Roche Proposal that was announced on July 21, 2008. See also Note 10, “Relationship with Roche Holdings, Inc. and Related Party Transactions,” for more

information on the Roche Proposal and the Roche Tender Offer. On August 18, 2008, we announced that the Special Committee approved the implementation of two retention plans that together cover substantially all employees of the company. The plans are estimated to cost approximately $375 million, payable in cash, and were implemented in lieu of our 2008 annual stock option grant. The timing of the payments related to these plans will depend on the outcome of the Roche Tender Offer or any other tender offer or other proposal by Roche to acquire all of the outstanding shares of our Common Stock not owned by Roche. If a merger of Genentech

with Roche or an affiliate of Roche has not occurred on or before June 30, 2009, we will pay the retention bonus at that time in accordance with the terms of the plans. We are currently recognizing the retention plan costs in our financial statements ratably over the period from August 18, 2008 to June 30, 2009. If a merger of Genentech with Roche or an affiliate of Roche has occurred on or before June 30, 2009, the timing of the payments and the recognition of the expense will depend on the terms of the merger.

Retention plan costs were as follows (in millions, except per share data):

	2008
Research and development	$ 66
Marketing, general and administrative	69
Total retention plan costs	$ 135

In 2008, an additional $27 million of retention plan costs were capitalized into inventory, which will be recognized as COS as products that were manufactured after the initiation of the retention plans are estimated to be sold.

Employee Stock Plans

Our ESPP was adopted in 1991 and amended thereafter. The ESPP allows eligible employees to purchase Common Stock at 85% of the lower of the fair market value of the Common Stock on the grant date or the fair market value on the purchase date. The offering period under the ESPP is currently 15 months, and the purchase price is established during each new offering period. Purchases are limited to 15% of each employee's eligible compensation and subject to certain IRS restrictions. In general, all of our regular full-time employees are eligible to participate in the ESPP. Of the 62,400,000 shares of Common Stock reserved for issuance under the ESPP, 50,501,542 shares have been issued as of December 31, 2008.

We currently grant options under the Genentech, Inc. 2004 Equity Incentive Plan, which allows for the granting of non-qualified stock options, incentive stock options and stock appreciation rights, restricted stock, performance units or performance shares to our employees, directors and consultants. Incentive stock options may only be granted to employees under this plan. Generally, stock options granted to employees have a maximum term of 10 years, and vest over a four year period from the date of grant; 25% vest at the end of one year, and 75% vest monthly over the remaining three years. We may grant options with different vesting terms from time to time. Unless an employee's termination of service is due to retirement, disability, or death, upon termination of service, any unexercised vested options will be forfeited at the end of three months or the expiration of the option, whichever is earlier.

Stock-Based Compensation Expense under FAS 123R

Employee stock-based compensation expense was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. FAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Employee stock-based compensation expense recognized under FAS 123R was as follows (in millions, except per share data):

	2008	2007	2006
Cost of sales	$ 82	$ 71	$ –
Research and development	152	153	140
Marketing, general and administrative	165	179	169
Total employee stock-based compensation expense	399	403	309

Tax benefit related to employee stock-based compensation expense	(137)	(143)	(127)
Net effect on net income	$ 262	$ 260	$ 182

Substantially all of the products sold during 2006 were manufactured in previous periods when we did not include employee stock-based compensation expense in our production costs.

The following pro forma net income and EPS were determined as if we had accounted for employee stock-based compensation expense for our employee stock plans under the fair value method prescribed by FAS 123 prior to 2006 and had capitalized certain costs into inventory manufactured in those prior periods, with the resulting effect on COS for 2006 when previously manufactured products were sold. (In millions, except per share data):

		2006
Net income as reported	$	2,113
Deduct: Total employee stock-based compensation expense includable in cost of sales, net of related tax effects		(34)
Pro forma net income	$	2,079
Earnings per share:		
Basic—as reported	$	2.01
Basic—pro forma	$	1.97
Diluted—as reported	$	1.97
Diluted—pro forma	$	1.94

As of December 31, 2008, total compensation cost related to unvested stock options not yet recognized was $499 million, which is expected to be allocated to expense and production costs over a weighted-average period of 26 months.

Valuation Assumptions

The employee stock-based compensation expense recognized under FAS 123R and presented in the pro forma disclosure required under FAS 123 was determined using the Black-Scholes option valuation model. Option valuation models require the input of subjective assumptions and these assumptions can vary over time. The weighted-average assumptions used are as follows:

	2008	2007	2006
Risk-free interest rate	2.8%	4.3%	4.6%
Dividend yield	0.0%	0.0%	0.0%
Expected volatility	24.1%	25.1%	27.2%
Expected term (years)	5.0	5.0	4.6

Due to the redemption of our Special Common Stock in June 1999 by RHI, there is limited historical information available to support our estimate of certain assumptions required to value our employee stock options as an option grant cycle lasts ten years. In developing our estimate of expected term, we have assumed that our recent historical stock option exercise experience is a relevant indicator of future exercise patterns. We base our determination of expected volatility predominantly on the implied volatility of our traded options with consideration of our historical volatilities and the volatilities of comparable companies.

Stock Option Activity

The following is a summary of option activity (shares in millions):

		Options Outstanding	
	Shares Available for Grant	Number of Shares	Weighted-Average Exercise Price
December 31, 2005	84	83	$ 46.64
Grants	(17)	17	79.85
Exercises	–	(9)	30.42
Cancellations	3	(3)	62.09
December 31, 2006	70	88	54.53
Grants	(18)	18	79.40
Exercises	–	(10)	32.76
Cancellations	4	(4)	76.45
December 31, 2007	56	92	60.94
Grants	(1)	1	79.23
Exercises	–	(13)	44.83
Cancellations	3	(3)	80.52
December 31, 2008	58	77	$ 63.06

The intrinsic value of options exercised during 2008, 2007, and 2006 was $514 million, $501 million, and $500 million, respectively. The estimated fair value of shares vested during 2008, 2007, and 2006, was $388 million, $407 million, and $376 million, respectively. The weighted-average estimated fair value of stock options granted during 2008, 2007, and 2006 was $21.19, $24.40, and $24.95 per option, respectively, based on the assumptions in the Black-Scholes valuation model discussed above.

The following table summarizes outstanding and exercisable options at December 31, 2008 (in millions, except exercise price data):

	Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number of Shares Outstanding	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Number of Shares Exercisable	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price
$6.27 - $8.89	0.2	6.39	$ 6.81	0.2	6.39	$ 6.81
$10.00 - $14.35	6.2	2.85	$ 13.68	6.2	2.85	$ 13.68
$15.04 - $22.39	4.5	2.35	$ 20.89	4.5	2.35	$ 20.89
$22.88 - $33.00	0.1	2.52	$ 26.08	0.1	2.52	$ 26.08
$35.63 - $53.23	20.3	4.76	$ 47.11	20.3	4.76	$ 47.11
$53.95 - $75.90	2.0	7.85	$ 68.03	0.9	6.56	$ 63.31

$75.99 - $82.79	29.4	8.21	$ 79.48	12.6	8.06	$	79.49
$83.02 - $98.80	14.7	6.82	$ 86.38	11.2	6.77	$	86.28
	77.4			56.0			

At December 31, 2008, the aggregate intrinsic value of the outstanding options was $1,588 million, and the aggregate intrinsic value of the exercisable options was $1,518 million.

Stock Repurchase Program

Under a stock repurchase program approved by our Board of Directors in December 2003 and most recently extended in April 2008, we are authorized to repurchase up to 150 million shares of our Common Stock for an aggregate amount of up to $10.0 billion through June 30, 2009. During 2008, we repurchased approximately nine

million shares at an aggregate cost of $780 million. In addition, approximately four million shares were delivered to us on March 31, 2008 in connection with a $300 million prepaid share repurchase arrangement that we entered into with an investment bank in November 2007. Since the program's inception, we have repurchased approximately 89 million shares at a total price of $6.5 billion. We intend to use the repurchased stock to offset dilution caused by the issuance of shares in connection with our employee stock plans and also to maintain RHI's minimum percentage ownership interest in our stock. See Note 10, "Relationship with Roche Holdings, Inc. and Related Party Transactions," for further discussion about RHI's minimum percentage ownership interest in our stock. See also Note 12, "Capital Stock," for further discussion of our stock repurchase program.

Note 4. INVESTMENT SECURITIES AND FINANCIAL INSTRUMENTS

Investment Securities

Securities classified as trading and available-for-sale at December 31, 2008 and 2007 are summarized below (in millions). Estimated fair value is based on quoted market prices for the same or similar investments.

December 31, 2008	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Total trading securities	$ 889	$ 13	$ (105)	$ 797
Securities available-for-sale:				
Equity securities	$ 31	$ 257	$ (1)	$ 287
Preferred stock	30	–	(7)	23
Debt securities maturing:				
within 1 year	3,118	1	(5)	3,114
between 1-5 years	2,437	32	(26)	2,443
between 5-10 years	632	20	(35)	617
Total securities available-for-sale	$ 6,248	$ 310	$ (74)	$ 6,484

December 31, 2007	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Total trading securities	$ 984	$ 30	$ (13)	$ 1,001
Securities available-for-sale:				
Equity securities	$ 33	$ 389	$ (6)	$ 416
Preferred stock	162	1	(24)	139
Debt securities maturing:				
within 1 year	1,171	–	(1)	1,170
between 1-5 years	1,886	15	(11)	1,890
between 5-10 years	521	12	(3)	530
Total securities available-for-sale	$ 3,773	$ 417	$ (45)	$ 4,145

The gain or loss on derivative instruments designated as fair value hedges, as well as the offsetting loss or gain on the corresponding hedged marketable equity investment, is recognized currently in earnings. As a result, the cost basis of our equity securities in the table above includes adjustments related to gains and losses on fair value hedges.

Unrealized loss positions for which other-than-temporary impairments have not been recognized at December 31, 2008 and 2007 are summarized below (in millions):

	Less Than 12 Months		12 Months or Greater		Total	
December 31, 2008	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Equity securities	$ 4	$ (1)	$ –	$ –	$ 4	$ (1)
Preferred stock	1	(2)	14	(5)	15	(7)
Debt securities	1,164	(39)	422	(27)	1,586	(66)
Total	$ 1,169	$ (42)	$ 436	$ (32)	$ 1,605	$ (74)

	Less Than 12 Months		12 Months or Greater		Total	
December 31, 2007	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Equity securities	$ 20	$ (6)	$ –	$ –	$ 20	$ (6)
Preferred stock	86	(18)	24	(6)	110	(24)
Debt securities	1,004	(12)	182	(3)	1,186	(15)
Total	$ 1,110	$ (36)	$ 206	$ (9)	$ 1,316	$ (45)

Unrealized losses in the preferred stock and debt securities portfolios were related to various securities, including corporate bonds, U.S. government agency bonds, municipal bonds and asset-backed securities, and investment-grade preferred securities. For these securities, the unrealized losses are primarily due to the increase in overall interest rates including fixed income credit spreads. Because we have the ability and intent to hold these investments until a forecasted recovery of fair value, which may be maturity or call date, we do not consider these investments to be other-than-temporarily impaired as of December 31, 2008. See Note 2, “Summary of Significant Accounting Policies—Investments in Marketable and Nonmarketable Securities,” for further discussion of the criteria used to determine impairment of our equity and fixed income securities.

The carrying amount, which approximates fair value, of all cash, cash equivalents and investment securities held at December 31, 2008 and 2007 (see sections “Cash and Cash Equivalents” and “Investments in Marketable and Nonmarketable Securities” in Note 2, “Summary of Significant Accounting Policies”) is summarized below (in millions):

Security	2008	2007
Cash	$ 2,264	$ 1,706
Cash equivalents	2,269	808
Total cash and cash equivalents	$ 4,533	$ 2,514
Trading securities	$ 797	$ 1,001
Securities available-for-sale maturing within one year	845	321
Preferred stock	23	139
Total short-term investments	$ 1,665	$ 1,461
Securities available-for-sale maturing after one year	$ 3,060	$ 1,674
Equity securities	287	416
Total long-term marketable debt and equity securities	$ 3,347	$ 2,090
Cash	$ –	$ 1
Securities available-for-sale maturing within one year	–	41

Securities available-for-sale maturing between 1-10 years		–	746
Total restricted cash and investments	$	–	$ 788

In 2008, proceeds from the sales and maturities of available-for-sale securities totaled $2.0 billion. Gross realized gains totaled $118 million and gross realized losses totaled $63 million. In 2007, proceeds from the sales and maturities of available-for-sale securities totaled $1.1 billion, of which $300 million was reinvested in our trading securities. Gross realized gains totaled $26 million and gross realized losses totaled $8 million. In 2006, proceeds from the sales and maturities of available-for-sale securities totaled $613 million and gross realized gains totaled $61 million.

Net change in unrealized holding (losses) gains on trading securities included in net income totaled $(109) million in 2008, $15 million in 2007, and $5 million in 2006.

The marketable debt securities that we hold are issued by a diversified selection of corporate and financial institutions with strong credit ratings. Our investment policy limits the amount of credit exposure with any one institution. Other than asset-backed and mortgage-backed securities, these debt securities are generally not collateralized. In 2008, we recorded a $67 million impairment charge on certain U.S. government agency and financial institution securities. In 2007, we recorded a $30 million impairment charge to reduce the carrying value of a fixed income investment. In 2006, there were no charges for credit impairment on marketable debt securities.

Our nonmarketable investment securities were based on cost less write-downs for impairments, which approximates fair value. Our nonmarketable investment securities were $32 million at December 31, 2008 and $31 million at December 31, 2007, and are classified as “Other long-term assets” on our Consolidated Balance Sheets.

Derivative Financial Instruments

Foreign Currency Instruments