GENENTECH INC
Form 10-K
February 23, 2007

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, 2006
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)

A Delaware Corporation	**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. þ

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

Large accelerated filer þ Accelerated filer o Non-accelerated filer o

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

The aggregate market value of Common Stock held by non-affiliates as of June 30, 2006 was $38,078,024,827.(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 9, 2007: 1,053,185,944

Documents incorporated by reference:

Portions of the Definitive Proxy Statement with respect to the 2006 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 587,254,604 shares of Common Stock held by directors and executive officers of Genentech and Roche Holdings, Inc.

GENENTECH, INC.

2006 Form 10-K Annual Report

Table of Contents

In this report, "Genentech," "we," "us" and "our" refer to Genentech, Inc. "Common Stock" refers to Genentech's Comm 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. (or "Roche") 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); Herceptin® (trastuzumab) anti-HER2 antibody;

Lucentis® (ranibizumab, rhuFab V2) 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; Nutropin Depot® (somatropin (rDNA origin) for injectable suspension) encapsulated sustained-release growth hormone; Omnitarg™ (pertuzumab) HER dimerization inhibitor; 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 trademark of OSI Pharmaceuticals, Inc.; and Xolair® (omalizumab) anti-IgE antibody is a 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 biotherapeutics for significant unmet medical needs. A number of the currently approved biotechnology products originated from or are based on Genentech science. Genentech manufactures and commercializes multiple biotechnology products, and receives 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 in the United States (or "U.S.") the biotechnology products listed below:

Avastin (bevacizumab) is an anti-VEGF 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.

Rituxan (rituximab) is an anti-CD20 antibody which 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, including retreatment and bulky disease;
- The first-line treatment of patients with diffuse large B-cell, CD20-positive, non-Hodgkin's lymphoma in combination with CHOP (cyclophosphamide, doxorubicin, vincristine and prednisone) or other anthracycline-based chemotherapy;
- The first-line treatment of previously untreated patients with follicular, CD20-positive, B-cell non-Hodgkin's lymphoma in combination with CVP (cyclophosphamide, vincristine and prednisone) chemotherapy regimens;
- The treatment of patients with low-grade, CD20-positive, B-cell non-Hodgkin's lymphoma in patients with stable disease or who achieve a partial or complete response following first-line treatment with CVP chemotherapy; and
- Use in combination with methotrexate for reducing signs and symptoms in adult patients with moderately-to-severely active rheumatoid arthritis (or "RA") who have had an inadequate response to one or more tumor necrosis factor antagonist therapies.

Herceptin (trastuzumab) is a humanized anti-HER2 antibody approved for use as an adjuvant treatment of node-positive breast cancer as part of a treatment regimen containing doxorubicin, cyclophosphamide, and paclitaxel for patients who have tumors that overexpress the human epidermal growth factor receptor 2 (or "HER2") protein. It is approved for use as a first-line therapy in combination with paclitaxel and as a single agent in second- and third-line therapy for patients with HER2-positive metastatic breast cancer.

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

1

Xolair (omalizumab) is a humanized anti-IgE antibody, which we commercialize with Novartis Pharma AG (or "Novartis"). Xolair is approved for adults and adolescents (12 years of age and above) 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 (or "EGFR") signaling pathway. Tarceva is approved for the treatment of patients with locally advanced or metastatic non-small cell lung cancer (or "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, recombinant) is a tissue plasminogen activator (or "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 (heart attack).

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 (rhDNase) 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.

See "Total Product Sales" under Results of Operations in Part II, Item 7 of this Form 10-K for a discussion of the sales of each of our products in the last three years, including those that accounted for 10% or more of our consolidated revenues.

Licensed Products

Royalty Revenue

We receive royalty revenue under license agreements with companies that sell and/or manufacture products based on technology developed by us or intellectual property to which we have rights. These licensed products are sometimes sold under different trademarks or trade names. Significant licensed products, including all related party licenses, representing approximately 92% of our royalty revenues in 2006, are presented in the following table:

Product	Trade Name	Licensee	Licensed Territory
Trastuzumab	Herceptin	F. Hoffmann-La Roche	Worldwide excluding U.S.
Rituximab	Rituxan/MabThera®	F. Hoffmann-La Roche	Worldwide excluding U.S. and Japan
Bevacizumab	Avastin	F. Hoffmann-La Roche	Worldwide excluding U.S.
Dornase alfa, recombinant	Pulmozyme	F. Hoffmann-La Roche	Worldwide excluding U.S.
Alteplase and Tenecteplase	Activase and TNKase	F. Hoffmann-La Roche	Canada
Somatropin	Nutropin	F. Hoffmann-La Roche	Canada
Etanercept	ENBREL®	Immunex Corporation (whose rights were acquired by Amgen Inc.)	Worldwide
D2E7/adalimumab	Humira®	Abbott Laboratories	Worldwide
Infliximab	Remicade®	Celltech Pharmaceuticals plc (which transferred rights to Centocor, Inc. / Johnson & Johnson)	Worldwide
Cetuximab	ERBITUX®	ImClone Systems, Inc.	Worldwide
Antihemophilic factor, recombinant	Kogenate®/Helixate®	Bayer Corporation	Worldwide

See Item 3, “Legal Proceedings” below for information regarding certain patent litigation matters.

Other Revenues

We have granted a license to Zenyaku Kogyo Co., Ltd. (or “Zenyaku”), a Japanese pharmaceutical company, for the manufacture, use and sale of rituximab in Japan. Zenyaku co-promotes rituximab in Japan with Chugai Pharmaceutical Co., Ltd., a Japanese subsidiary of F. Hoffmann-La Roche, under the trademark Rituxan. The revenue earned from our sales of rituximab to Zenyaku is included in product sales.

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, current stages of development, and the estimated completion of the current phase of development. For additional information on our development pipeline, please visit our website at http://www.gene.com.

Product	Description	Estimated Completion of Current Phase[1]
Awaiting U.S. Food and Drug Administration (or "FDA") Action		
Herceptin	A supplemental Biologics Licensure Application (or "sBLA") was submitted to the FDA on December 21, 2006 for the use of Herceptin for the treatment of patients with early-stage HER2-positive breast cancer based on the HERA study to enable a broader label. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007-2008
Preparing for Filing		
Avastin	We are preparing to resubmit an sBLA to the FDA for the use of Avastin in combination with paclitaxel chemotherapy for the treatment of patients who have not previously received chemotherapy for their locally recurrent or metastatic breast cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
Avastin	We are in discussions with the FDA regarding the submission requirements for a potential sBLA for the use of Avastin in combination with interferon alpha-2a for the treatment of patients with previously untreated advanced renal cell carcinoma. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007-2008
Herceptin	We are preparing to submit an sBLA to the FDA for the use of Herceptin for the treatment of patients with early-stage HER2-positive breast cancer based on the BCIRG 006 study to enable a broader label. This product is being developed in	2007

	collaboration with F. Hoffmann-La Roche.	
Rituxan Immunology	We and our collaborator Biogen Idec are preparing to submit an sBLA to the FDA seeking expansion of the rheumatoid arthritis (anti-tumor necrosis factor inadequate responders) indication to include radiographic data demonstrating inhibition of joint damage in Rituxan treated patients. This product is being developed in collaboration with F. Hoffmann-La Roche and Biogen Idec.	2007

Phase III

2nd Generation anti-CD20	2nd Generation anti-CD20 is being evaluated in rheumatoid arthritis. This product is being developed in collaboration with F. Hoffmann-La Roche and Biogen Idec[2].	2009-2010
Avastin	Avastin is being evaluated in adjuvant colon cancer, adjuvant rectal cancer, first- and second-line metastatic breast cancer in combination with several chemotherapy regimens, first-line non-squamous NSCLC, first-line ovarian cancer, and hormone refractory prostate cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007-2012
Avastin +/- Tarceva	Avastin and Tarceva are being evaluated as combination therapy in first-line NSCLC in combination with several chemotherapy regimens. This product is being developed in collaboration with F. Hoffmann-La Roche and OSI.	2009
Rituxan Hematology/Oncology	Rituxan is being evaluated in first-line follicular non-Hodgkin's lymphoma with several chemotherapy regimens and in relapsed chronic lymphocytic leukemia. This product is being developed in collaboration with F. Hoffmann-La Roche and Biogen Idec.	2010
Rituxan Immunology	Rituxan is being evaluated in rheumatoid arthritis (DMARD inadequate responders) in collaboration with F. Hoffmann-La Roche and Biogen Idec. Rituxan is also being evaluated in primary progressive multiple sclerosis, systemic lupus erythematosus, lupus nephritis, and ANCA-associated vasculitis in collaboration with Biogen Idec.	2007-2009
Tarceva	Tarceva is being evaluated in adjuvant NSCLC with several chemotherapy regimens and first-line NSCLC. This product is being developed in collaboration with F. Hoffmann-La Roche and OSI.	2013
Tarceva +/- Avastin	Tarceva and Avastin are being evaluated as combination therapy in first-line metastatic pancreatic cancer and second-line NSCLC. This product is being developed in collaboration with F. Hoffmann-La Roche and OSI.	2008

TNKase	TNKase is being evaluated in the treatment of dysfunctional hemodialysis and central venous access catheters.	2008
Xolair	Xolair is being evaluated in pediatric asthma. This product is being developed in collaboration with Novartis and Tanox, Inc. (or “Tanox”).	2008

Preparing for Phase III

2nd Generation anti-CD20	We are preparing Phase III clinical trials in lupus nephritis and systemic lupus erythematosus. This product is being developed in collaboration with F. Hoffmann-La Roche and Biogen Idec[2].	2007
ALTU-238	Altus is preparing a Phase III clinical trial in adult growth hormone deficiency. We have entered into an agreement to develop this product in collaboration with Altus, and this transaction is subject to closing conditions.	[3]
Avastin	We are preparing for Phase III clinical trials in adjuvant breast cancer, first-line metastatic breast cancer in combination with antihormonal therapy, adjuvant NSCLC, gastrointestinal stromal tumors, and second-line ovarian cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
Herceptin +/- Avastin	We are preparing for a Phase III clinical trial of Herceptin and Avastin as combination therapy in first-line HER2-positive metastatic breast cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
Lucentis	We are preparing for Phase III clinical trials in diabetic macular edema and retinal vein occlusion. This product is being developed in collaboration with Novartis Ophthalmics.	2007

Phase II

Anti-CD40	Anti-CD40 is being evaluated in non-Hodgkin's lymphoma. We are developing this product in collaboration with Seattle Genetics Inc.	2008-2009
Avastin	Avastin is being evaluated in adjuvant HER2-negative breast cancer, relapsed glioblastoma multiforme, and non-squamous NSCLC with previously treated central nervous system metastases. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
HAE1	HAE1 is being evaluated in moderate-to-severe allergic asthma.	2008-2009

Omnitarg	Our Phase II clinical trial evaluating Omnitarg in combination with chemotherapy in platinum-resistant ovarian cancer showed encouraging results. Roche is conducting a clinical trial evaluating Omnitarg in combination with chemotherapy in platinum-sensitive ovarian cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
Topical VEGF	Topical VEGF is being evaluated for the treatment of diabetic foot ulcers.	2007

Preparing for Phase II

2nd Generation anti-CD20	We are preparing for a Phase II clinical trial in relapsing remitting multiple sclerosis. This product is being developed in collaboration with F. Hoffmann-La Roche and Biogen Idec(2).	2007-2008
ALTU-238	Altus is preparing for a Phase II clinical trial in pediatric growth hormone deficiency. We have entered into an agreement to develop this product in collaboration with Altus, and this transaction is subject to closing conditions.	(3)
Avastin	We are preparing to initiate a Phase II clinical trial in extensive small cell lung cancer. This product is being developed in collaboration with F. Hoffmann-La Roche.	2007
Phase I and Preparing for Phase I	We have multiple new molecular entities in Phase I or preparing for Phase I.	

(1) For those projects preparing for a Phase, the estimated date of completion refers to the date the project is expected to enter the Phase for which it is preparing.
(2) Our collaborator Biogen Idec disagrees with certain of our development decisions under our 2003 collaboration agreement with them. We continue to pursue a resolution of our differences with Biogen Idec, and the disputed issues have been submitted to arbitration. See Part I, Item 3, “Legal Proceedings,” of this Form 10-K for further information.
(3) Our collaborator is conducting the trial(s) and we are unable to provide the estimated date of completion for the current phase.

Related Party Arrangements

See “Relationship with Roche” and “Related Party Transactions” sections below in Part II, Item 7 of this Form 10-K for information on our collaboration arrangements with Roche, F. Hoffmann-La 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. We utilize common pharmaceutical company marketing techniques, including sales representatives calling on individual physicians and distributors, advertisements, professional symposia, direct mail, public relations and other methods.

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. We have the Genentech Endowment for Cystic Fibrosis to assist cystic fibrosis patients in the U.S. with obtaining Pulmozyme. We also provide customer service programs relating to our products. We maintain a physician-related product waste replacement program for Rituxan, Avastin, Herceptin,

Activase, TNKase and Lucentis, that, subject to specific conditions, provides physicians the right to return these products to us for replacement. We also maintain expired product programs for all our products that, subject to certain specific conditions, provide customers the right to return expired products to us for replacement or credit at a price based on a 12-month rolling average. To further support patient access to therapies for various diseases we donate to various independent, public charities that offer financial assistance, such as co-pay assistance, to eligible patients. We maintain the right to renew, modify or discontinue any of the patient programs described above.

In October 2006, we announced our plan to launch the Avastin Patient Assistance Program in the first quarter of 2007, which is 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 during the remainder of the 12-month period. 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 will be available for eligible patients who enroll regardless of whether they are insured.

As discussed in Note 12, “Segment, Significant Customer and Geographic Information,” in the Notes to Consolidated Financial Statements of Part II, Item 8 of this Form 10-K, our combined sales to three major wholesalers provided approximately 85% in 2006, 82% in 2005, and 79% in 2004, of our total net U.S. product sales. Also discussed in the note are material net foreign revenues by country in 2006, 2005 and 2004.

Manufacturing and Raw Materials

Manufacturing biotherapeutics is difficult and complex, and requires facilities specifically designed and validated for this purpose. It can take longer than five years to design, construct, validate, and license a new biotechnology manufacturing facility. Production problems in any of our operations or our contractors’ manufacturing plants could result in failure to produce adequate product supplies or could result in product defects which could require us to delay shipment of products, recall products previously shipped or be unable to supply products at all. In addition, we may need to record period charges associated with manufacturing or inventory failures or other production-related costs or incur costs to secure additional sources of capacity. Furthermore, there are inherent uncertainties associated with forecasting future demand, especially for newly introduced products of ours or of those for whom we produce products, and as a consequence we may have inadequate capacity to meet our own actual demands and/or the actual demands of those for whom we produce product.

Raw materials and supplies required for the production of our principal products are available, in some instances from one supplier and in other instances, from multiple suppliers. In those cases where raw materials are only available through one supplier, such 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 to attempt, to the extent feasible, to minimize raw material supply risks to the Company, including maintenance of greater levels of raw materials inventory and coordination with our collaborators to implement raw materials sourcing strategies.

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

Proprietary Technology — Patents and Trade Secrets

We seek patents on inventions originating from our ongoing research and development (or “R&D”) activities. We have either been issued patents or have patent applications pending that relate 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 relating 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 upon 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. Significant legal issues remain to be resolved as to the extent and scope of available patent protection for biotechnology products and processes in the U.S. and other important markets outside of the U.S. We expect that litigation will likely be necessary to determine the validity and scope of certain of our proprietary rights. We are currently involved in a number of legal proceedings relating to the scope of protection and validity of 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 validity and scope of certain of our patent or other proprietary rights. We cannot assure that the patents we obtain or the unpatented proprietary technology we hold will 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, Herceptin, Lucentis, Nutropin, Nutropin AQ, Nutropin AQ Pen, Omnitarg, Pulmozyme, Raptiva, Rituxan (licensed from Biogen Idec), TNKase, Xolair (licensed from Novartis) and Tarceva (licensed from OSI), in the aggregate are considered to be of material importance. All are covered by registrations or pending applications for registration in the U.S. Patent and Trademark 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 income for patent licenses, know-how and other related rights amounted to $1,354 million in 2006, $935 million in 2005, and $641 million in 2004. Royalty expenses were $568 million in 2006, $462 million in 2005, and $355 million in 2004.

Competition

We face competition from pharmaceutical companies and biotechnology companies. The introduction of new competitive products or follow-on biologics or new information about existing products or pricing decisions by us or our competitors may result in lost market share for us, reduced utilization of our products, and/or lower prices, 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 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 specified disease in order to provide enough data to evaluate the preliminary efficacy, optimal dosages and expanded evidence of safety. In Phase III, large scale, multicenter 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 chemical pharmaceutical product are then submitted to the FDA in the form of a New Drug Application (or “NDA”), or for a biological pharmaceutical product in the form of a Biologics License Application (or “BLA”), for approval to commence commercial sales. In responding to an NDA or a BLA, the FDA may grant marketing approval, request additional information or deny the application if it 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 the stages of development and to obtain FDA approval for commercial sale. See also “The successful development of biotherapeutics is highly uncertain and requires significant expenditures

and time" under "Risk Factors."

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 (or "GMP"). Before approval of a BLA, the FDA will usually perform a preapproval inspection of the facility to

determine its compliance with GMP and other rules and regulations. Manufacturers must continue to expend time, money and effort in the area of production and quality control to ensure full compliance with GMP. After the establishment is licensed for the manufacture of any product, manufacturers are subject to periodic inspections by the FDA.

The requirements that we and our collaborators must satisfy to obtain regulatory approval by governmental agencies in other countries prior to commercialization of our products in such countries can be as rigorous, costly and uncertain.

We are also subject to various laws and regulations relating 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.

The levels of revenues and profitability of biopharmaceutical companies may be affected by the continuing efforts of government and third-party payers to contain or reduce the costs of health care through various means. For example, in certain foreign markets, pricing or profitability of therapeutic and other 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 therapeutic and other 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. For example, the Medicare Prescription Drug Improvement and Modernization Act, enacted in December 2003 (or “Medicare Act”), revised the Medicare reimbursement rate for many drugs, including our oncology products, which resulted in a decrease in the revised reimbursement rate of several of our products and which was possibly offset to some extent by increased physician payment rates for drug administration services related to certain of our oncology products. To date, we have not seen any detectable effects of the new rules on our product sales, and we anticipate minimal effects on our revenues in 2007. See also “Decreases in third party reimbursement rates may affect our product sales, results of operations and financial condition” under “Risk Factors.”

We are also subject to various federal and state laws pertaining to health care fraud and abuse, including anti-kickback laws and false claims laws. For risks associated with health care 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.”

Research and Development

A significant portion of our operating expenses is related to R&D. Generally, R&D expenses consist of independent R&D costs and costs associated with collaborative R&D and in-licensing arrangements. R&D expenses were $1,773 million in 2006, $1,262 million in 2005, and $948 million in 2004. 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 the Phase III trials as they tend to be the longest and largest studies conducted during the drug development process. Product completion dates and completion costs vary significantly by product and are difficult to predict.

Human Resources

As of December 31, 2006, we had 10,533 employees.

Environment

We have made, and will continue to make, expenditures for environmental compliance and protection. Expenditures for compliance with environmental laws 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 http://www.gene.com or can be obtained free of charge by contacting our Investor Relations Department at (650) 225-1599 or by sending an e-mail message to investor.relations@gene.com:

- 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 reasonably practicable after such material is electronically filed with the Securities and Exchange Commission;

- our policies related to corporate governance, including Genentech's Principles of Corporate Governance, Good Operating Principles (Genentech's code of ethics applying to Genentech's directors, officers and employees) as well as Genentech's Code of Ethics applying to our CEO, CFO and senior financial officials; and

- 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 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 revenues, expenses, net income and earnings per share.

The successful development of biotherapeutics is highly uncertain and requires significant expenditures and time

Successful development of biotherapeutics 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:

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

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

- Failure to receive the necessary 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 Biologic Licensing Application (or "BLA") preparation, discussions with the U.S. Food and Drug Administration (or "FDA"), FDA requests for additional preclinical or clinical data, analyses or changes to study design, or unexpected safety, efficacy or manufacturing issues.

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

11

- Manufacturing costs, pricing or reimbursement issues, or other factors that make the product uneconomical.

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

- The contractual rights of our collaborators or others that 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 are not successful, we will not recover our substantial investments in the product.

Factors affecting our research and development (or "R&D") productivity and the amount of our R&D expenses include, but are not limited to:

- The number of and the 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.

- 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 candidate products that are ready to move into development or that product candidates will be available for in-licensing on terms acceptable to us and permitted under the anti-trust laws.

- Decisions by F. Hoffmann-La Roche (or "Hoffmann-La 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.

- 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 upfront fee for the purchase of in-process R&D, which we may record as an R&D expense.

- Participation in a number of collaborative research arrangements. On 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.

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

- Future levels of revenue.

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

We are subject to stringent regulation 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. A biotherapeutic cannot be marketed in the United States (or "U.S.") until it has been approved by the FDA, and then can only be marketed for the indications

approved by the FDA. 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

regulation, including, for example, 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:

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

- Loss of, or changes to, previously obtained approvals, including those resulting from post-approval safety or efficacy issues.

- Failure to comply with existing or future regulatory requirements.

- Changes to manufacturing processes, manufacturing process standards or Good Manufacturing Practices (or "GMP") following approval or changing interpretations of these factors.

In addition, the current regulatory framework could change or additional regulations could arise at any stage during our product development or marketing, which 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.

We face competition

We face competition from pharmaceutical companies and biotechnology companies.

The introduction of new competitive products or follow-on biologics, new information about existing products or pricing decisions by us or our competitors may result in lost market share for us, reduced utilization of our products, reduced product sales, and/or lower prices, even for products protected by patents.

Avastin: Avastin competes with Erbitux® (Imclone/Bristol-Myers Squibb), which is an EGFR-inhibitor approved for the treatment of irinotecan refractory or intolerant metastatic colorectal cancer (or "CRC") patients, Nexavar® (sorafenib Bayer Corporation/Onyx Pharmaceuticals, Inc.) for the treatment of patients with advanced renal cell carcinoma (or "RCC") or kidney cancer (an unapproved use of Avastin), Sutent® (sunitinib malate, Pfizer, Inc.) for use in advanced RCC (an unapproved use of Avastin), Gleevec® (imatinib mesylate, Novartis) for use in refractory/intolerant gastrointestinal stromal tumor (an unapproved use of Avastin), and Vectibix™ (panitumumab, Amgen), for the treatment of EGFR-expressing, metastatic colorectal carcinoma with disease progression on or following fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy regimens. Avastin could face competition from products in development that currently do not have regulatory approval. Amgen has stated that it will initiate head-to-head clinical trials comparing AMG 706 and Avastin. There are also head-to-head clinical trials that have recently begun comparing both Sutent and AZD2171 (AstraZeneca) to Avastin. Additionally, there are more than 65 molecules that target VEGF inhibition, and over 130 companies that are developing molecules that, if approved, may compete with Avastin.

Rituxan: Rituxan's primary competitor is Bexxar® (GlaxoSmithKline (or "GSK")) which is radioimmunotherapy indicated for the treatment of patients with relapsed or refractory low-grade, follicular, or transformed B-cell non-Hodgkin's lymphoma (or "NHL"). Other potential competitors include Campath® in 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). Ofatumumab (Humax CD20™), an anti-CD20

antibody being co-developed by Genmab and GSK is in late-stage development for refractory CLL and NHL. In addition to the products detailed above, we are aware of other anti-CD20 molecules in development that, if successful in clinical trials, may compete with Rituxan.

Rituxan's current biologic competitors in rheumatoid arthritis (or "RA") include Enbrel® (Amgen/Wyeth), Humira® (Abbott), Remicade® (Johnson & Johnson), Orencia® (Bristol-Myers Squibb), and Kineret® (Amgen). These products are approved for use in a broader RA patient population than the approved population for Rituxan.

Herceptin: Herceptin could face competition in the future from experimental drugs and products in development that do not currently have regulatory approval for use outside of clinical trials, including lapatinib ditosylate (Tykerb®), a tyrosine kinase inhibitor being developed by GSK. On April 3, 2006, GSK announced that it stopped enrollment in its Phase III clinical trial to evaluate lapatinib ditosylate because of positive results in treating HER2-positive metastatic breast cancer in women whose disease had progressed following a Herceptin-containing regimen and other cancer therapies. Results from this trial showed that lapatinib ditosylate in combination with capecitabine increased time to disease progression compared to capecitabine alone. GSK filed for regulatory approval of lapatinib ditosylate in the third quarter of 2006 and was granted priority review with approval expected in the first quarter of 2007.

Lucentis: