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

FORM 10-K

(Mark One)

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
- or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____
Commission File No. 0-19731

GILEAD SCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	94-3047598
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
333 Lakeside Drive, Foster City, California	94404
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, including area code: 650-574-3000	

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common Stock, \$0.001 par value per share	The Nasdaq Global Select Market

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: NONE

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

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 No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) 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.

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

Large accelerated filer <input checked="" type="checkbox"/>	Accelerated filer <input type="checkbox"/>	Non-Accelerated filer <input type="checkbox"/>	Smaller reporting company <input type="checkbox"/>
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(Do not check if a smaller reporting company)

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant based upon the closing price of its Common Stock on the Nasdaq Global Select Market on June 30, 2016 was \$103,455,508,531.*

The number of shares outstanding of the registrant's Common Stock on February 16, 2017 was 1,307,066,900.

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant's proxy statement, which will be filed with the Commission pursuant to Regulation 14A in connection with the registrant's 2017 Annual Meeting of Stockholders, to be held on May 10, 2017, are incorporated by reference into Part III of this Report.

* Based on a closing price of \$83.42 per share on June 30, 2016. Excludes 90,648,083 shares of the registrant's Common Stock held by executive officers, directors and any stockholders whose ownership exceeds 5% of registrant's common stock outstanding at June 30, 2016. Exclusion of such shares should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant or that such person is controlled by or under common control with the registrant.

GILEAD SCIENCES, INC.
2016 Form 10-K Annual Report
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We own or have rights to various trademarks, copyrights and trade names used in our business, including the following: GILEAD®, GILEAD SCIENCES®, AMBISOME®, CAYSTON®, COMPLERA®, DESCOVY®, EMTRIVA®, EPCLUSA®, EVIPLERA®, GENVOYA®, HARVONI®, HEPSERA®, LETAIRIS®, ODEFSEY®, RANEXA®, SOVALDI®, STRIBILD®, TRUVADA®, TYBOST®, VEMLIDY®, VIREAD®, VITEKTA®, VOLIBRIS® and ZYDELIG®. ATRIPLA® is a registered trademark of Bristol-Myers Squibb & Gilead Sciences, LLC. LEXISCAN® is a registered trademark of Astellas U.S. LLC. MACUGEN® is a registered trademark of Eyetech, Inc. SUSTIVA® is a registered trademark of Bristol-Myers Squibb Pharma Company. TAMIFLU® is a registered trademark of Hoffmann-La Roche Inc. This report also includes other trademarks, service marks and trade names of other companies.

This Annual Report on Form 10-K, including the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements regarding future events and our future results that are subject to the safe harbors created under the Securities Act of 1933, as amended (the Securities Act), and the Securities Exchange Act of 1934, as amended (the Exchange Act). Words such as "expect," "anticipate," "target," "goal," "project," "hope," "intend," "plan," "believe," "seek," "estimate," "continue," "may," "could," "should," "might," variations of such words and similar expressions are intended to identify such forward-looking statements. In addition, any statements other than statements of historical fact are forward-looking statements, including statements regarding overall trends, operating cost and revenue trends, liquidity and capital needs and other statements of expectations, beliefs, future plans and strategies, anticipated events or trends and similar expressions. We have based these forward-looking statements on our current expectations about future events. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. Our actual results may differ materially from those suggested by these forward-looking statements for various reasons, including those identified in Part I, Item 1A of this Form 10-K under the heading "Risk Factors." Given these risks and uncertainties, you are cautioned not to place undue reliance on forward-looking statements. The forward-looking statements included in this report are made only as of the date hereof. Except as required under federal securities laws and the rules and regulations of the Securities and Exchange Commission (SEC), we do not undertake, and specifically decline, any obligation to update any of these statements or to publicly announce the results of any revisions to any forward-looking statements after the distribution of this report, whether as a result of new information, future events, changes in assumptions or otherwise.

PART I

ITEM 1. BUSINESS

Overview

Gilead Sciences, Inc. (Gilead, we or us), incorporated in Delaware on June 22, 1987, is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet medical need. With each new discovery and investigational drug candidate, we strive to transform and simplify care for people with life-threatening illnesses around the world. We have operations in more than 30 countries worldwide, with headquarters in Foster City, California. Gilead's primary areas of focus include human immunodeficiency virus (HIV), liver diseases such as chronic hepatitis C virus (HCV) infection and chronic hepatitis B virus (HBV) infection, hematology/oncology, cardiovascular and inflammation/respiratory diseases. We seek to add to our existing portfolio of products through our internal discovery and clinical development programs and through product acquisition and in-licensing strategies.

2016 Highlights

Over the past year, we continued to bring best-in-class drugs to market that advance the standard of care by offering enhanced modes of delivery, more convenient treatment regimens, improved resistance profiles, reduced side effects and greater efficacy. In the area of HIV, U.S. Food and Drug Administration (FDA) and the European Commission approved two tenofovir alafenamide (TAF)-based regimens: Odefsey® (emtricitabine 200 mg/rilpivirine 25 mg/tenofovir alafenamide 25 mg) for the treatment of HIV-1 infection in certain patients and Descovy® (emtricitabine 200 mg/tenofovir alafenamide 25 mg), a fixed-dose combination for the treatment of HIV-1 infection. In the liver diseases area, we received FDA and European Commission approval of Epclusa® (sofosbuvir 400 mg/velpatasvir 100 mg), the first all-oral, pan-genotypic, single-tablet regimen for the treatment of adults with genotype 1-6 chronic HCV infection. Epclusa is also the first single-tablet regimen approved for the treatment of patients with HCV genotype 2 and 3, without the need for ribavirin. We also received FDA approval of Vemlidy® (tenofovir alafenamide 25 mg), a once-daily treatment for adults with HBV infection with compensated liver disease. In the inflammation/respiratory area, we advanced filgotinib, a JAK1 inhibitor we are developing with Galapagos NV (Galapagos) to Phase 3 clinical trials for the potential treatment of rheumatoid arthritis, Crohn's disease and ulcerative colitis. At the end of 2016, our research and development pipeline included 167 active clinical studies, of which 61 were Phase 3 clinical trials.

In addition to advancing treatment options across therapeutic areas, we also enabled access to our medications for people who need them around the world. We continued to expand access to our medicines in low- and middle-income countries by pursuing multiple strategies, including entering into collaborations with governments, generic manufacturers, regional business partners, policy makers, healthcare providers, patient groups and public health entities. Today, 10 million people are receiving Gilead HIV medicines in low- and middle-income countries. In 2016, we also entered into a partnership with the World Health Organization (WHO) to provide \$20 million in funding and drug donations over five years to expand access to diagnostic services and treatment for visceral leishmaniasis, the world's second-deadliest parasitic infectious disease that affects up to 300,000 people annually in resource-limited countries.

HIV

Our goal is to ensure that all HIV patients can choose a single-tablet regimen that is right for them. Single-tablet regimens allow patients to adhere to a fully suppressive course of therapy more easily and consistently, which is critical for the successful management of the disease. HIV patients are living longer, thus facing additional health challenges to those experienced by newly diagnosed patients. We are motivated to continue improving on existing treatment options. The need for efficacy together with improved long-term safety has driven our development programs and the design of the studies we have completed and those that are planned.

Our TAF single-tablet regimens seek to address the diverse needs of HIV patients worldwide. TAF is a novel targeted prodrug of tenofovir that has demonstrated high antiviral efficacy similar to and at a dose less than one-tenth that of Viread® (tenofovir disoproxil fumarate, TDF), as well as improvement in surrogate laboratory markers of renal and bone safety as compared to TDF in clinical trials in combination with other antiretroviral agents. With the launch of our two TAF-based single-tablet regimens, Genvoya® (elvitegravir 150mg/cobicistat 150 mg/emtricitabine 200 mg/tenofovir alafenamide 10 mg) and Odefsey, we now have five single-tablet regimens available for the treatment of HIV. Odefsey is currently the smallest pill of any single-tablet regimen for the treatment of HIV. Descovy, a fixed-dose combination for the treatment of HIV, also represents an important evolution in HIV care, as it is the first new HIV treatment backbone approved by FDA in more than a decade.

In addition, we are evaluating bictegravir/emtricitabine/TAF in Phase 3 studies for the treatment of HIV. We anticipate completing these studies in the third quarter of 2017.

Liver Diseases

Our goal is to advance the treatment options and standard of care for the HCV market. With the approval of Sovaldi® (sofosbuvir 400 mg), compared to the prior standard of care of up to 48 weeks, the duration of treatment was shortened to as few as 12 weeks and the need for peg-interferon injections in certain viral genotype populations was reduced or eliminated completely. Harvoni® (ledipasvir 90 mg/sofosbuvir 400 mg) is the first once-daily single-tablet regimen for the treatment of HCV genotype 1-infected patients, the most prevalent genotype in the United States. In 2016, we received approval of Epclusa, the first all-oral, pan-genotypic, single-tablet regimen for the treatment of adults with genotype 1-6 chronic HCV infection. Epclusa is also the first single-tablet regimen approved for the treatment of patients with HCV genotype 2 and 3, without the need for ribavirin. In the fourth quarter of 2016, we submitted a new drug application to FDA for the approval of an investigational, once-daily, single-tablet regimen containing sofosbuvir 400 mg, velpatasvir 100 mg and voxilaprevir 100 mg (SOF/VEL/VOX), for the treatment of HCV. The product, if approved, would offer an effective cure for patients who have failed prior therapy with other highly effective regimens.

In 2016, we received FDA approval of Vemlidy, a once-daily treatment for adults with HBV infection with compensated liver disease.

We are also evaluating selonsertib, an investigational small-molecule inhibitor of apoptosis signal-regulating kinase 1, or ASK-1, for the treatment of nonalcoholic steatohepatitis (NASH) in Phase 3 clinical trials. Based on the Phase 2 results, we intend to evaluate selonsertib in patients with NASH and moderate to severe fibrosis. We have two other compounds with different mechanisms currently in two Phase 2 studies in patients with NASH and fibrosis - GS-9674, an FXR agonist, and GS-0976, an acetyl-CoA carboxylase (ACC) inhibitor. Pending demonstration of single agent efficacy and safety in these Phase 2 studies, we plan to initiate combination studies with the three agents in 2017.

Hematology/Oncology

In the hematology/oncology area, we continued to progress our product candidates through clinical trials. Idelalisib, a PI3K delta inhibitor, is in Phase 3 clinical trials for the treatment of patients with relapsed refractory chronic lymphocytic leukemia (CLL). We are also evaluating GS-5745, an investigational anti-MMP9 antibody, in a Phase 3 study for the treatment of gastric cancer.

Inflammation/Respiratory

In 2016, we closed on a license and collaboration agreement with Galapagos, a clinical-stage biotechnology company based in Belgium, for the development and commercialization of filgotinib, a JAK1 inhibitor being evaluated in Phase 3 trials for three inflammatory disease indications - rheumatoid arthritis, Crohn's disease and ulcerative colitis. In 2017, we also expect to initiate Phase 2 clinical trials evaluating filgotinib in combination with GS-9876, a Syk inhibitor, and GS-4059, a BTK inhibitor, for the potential treatment of rheumatoid arthritis.

Our Products

HIV

- **Descovy** is an oral formulation indicated in combination with other antiretroviral agents for the treatment of HIV-1 infection in adults and pediatric patients 12 years of age or older. Descovy is a fixed-dose combination of our antiretroviral medications, Emtriva® (emtricitabine) and TAF. Descovy was approved by FDA and the European Commission in April 2016.
- **Odefsey** is an oral formulation dosed once a day for the treatment of HIV-1 infection in certain patients. Odefsey is a fixed-dose combination of our antiretroviral medications, Emtriva and TAF, and rilpivirine marketed by Janssen Sciences Ireland UC (Janssen), one of the Janssen Pharmaceutical Companies of Johnson & Johnson. Odefsey represents the smallest pill of any single-tablet regimen for the treatment of HIV. Odefsey was approved by FDA in March 2016 and the European Commission in June 2016.
- **Genvoya** is an oral formulation dosed once a day for the treatment of HIV-1 infection in adults. Genvoya is a single-tablet regimen for the treatment of HIV and is a fixed-dose combination of our antiretroviral medicines, Vitekta® (elvitegravir), Tybost® (cobicistat), Emtriva and TAF.
- **Stribild**® (elvitegravir/cobicistat/emtricitabine/TDF) is an oral formulation dosed once a day for the treatment of HIV-1 infection in treatment-naive adults. Stribild is a single-tablet regimen for the treatment of HIV and is a fixed-dose combination of our antiretroviral medications, Vitekta, Tybost, Viread and Emtriva.

- **Complera®/Eviplera®** (emtricitabine/rilpivirine/TDF) is an oral formulation dosed once a day for the treatment of HIV-1 infection in adults. The product, marketed in the United States as Complera and in Europe as Eviplera, is a single-tablet regimen for the treatment of HIV and is a fixed-dose combination of our antiretroviral medications, Viread and Emtriva, and Janssen's rilpivirine.
- **Atripla®** (efavirenz/emtricitabine/TDF) is an oral formulation dosed once a day for the treatment of HIV infection in adults. Atripla is a single-tablet regimen for HIV intended as a stand-alone therapy or in combination with other antiretrovirals. It is a fixed-dose combination of our antiretroviral medications, Viread and Emtriva, and Bristol-Myers Squibb Company's (BMS's) efavirenz.
- **Truvada®** (emtricitabine/TDF) is an oral formulation dosed once a day as part of combination therapy to treat HIV infection in adults. It is a fixed-dose combination of our antiretroviral medications, Viread and Emtriva. FDA also approved Truvada, in combination with safer sex practices, to reduce the risk of sexually acquired HIV-1 infection in adults at high risk; a strategy called pre-exposure prophylaxis (PrEP).
- **Viread** is an oral formulation of a nucleotide analog reverse transcriptase inhibitor, dosed once a day as part of combination therapy to treat HIV infection in patients two years of age and older. The European Commission also approved the use of Viread in combination with other antiretroviral agents for the treatment of HIV-1-infected adolescent patients aged two to less than 18 years with nucleoside reverse transcriptase inhibitor resistance or toxicities precluding the use of first-line pediatric agents. Viread is also approved for the treatment of HBV.
- **Emtriva** is an oral formulation of a nucleoside analog reverse transcriptase inhibitor, dosed once a day as part of combination therapy to treat HIV infection in adults. In the United States and Europe, Emtriva is also available as an oral solution approved as part of combination therapy to treat HIV infection in children.
- **Tybost** is a pharmacokinetic enhancer dosed once a day that boosts blood levels of certain HIV medicines. Tybost is indicated as a boosting agent for the HIV protease inhibitors atazanavir and darunavir as part of antiretroviral combination therapy in adults with HIV-1 infection.
- **Vitekta** is an oral formulation of an integrase inhibitor, dosed once a day as part of combination therapy to treat HIV infection in adults without known mutations associated with resistance to elvitegravir, the active ingredient of Vitekta. Vitekta is indicated for use as part of HIV treatment regimens that include a ritonavir-boosted protease inhibitor.

Liver Diseases

- **Vemlidy** is an oral formulation of a once-daily treatment of TAF for adults with HBV infection with compensated liver disease. Vemlidy was approved by FDA in November 2016 and the European Commission in January 2017.
- **Epclusa** is an oral formulation of sofosbuvir and velpatasvir and the first pan-genotypic, single-tablet regimen for the treatment of adults with genotype 1-6 chronic infection. Epclusa is also the first single-tablet regimen approved for the treatment of patients with HCV genotype 2 and 3, without the need for ribavirin. Epclusa for 12 weeks was approved in patients without cirrhosis or with compensated cirrhosis (Child-Pugh A), and in combination with ribavirin for patients with decompensated cirrhosis (Child-Pugh B or C). Epclusa was approved by FDA in June 2016 and the European Commission in July 2016.
- **Harvoni** is an oral formulation of ledipasvir and sofosbuvir dosed once a day for the treatment of genotypes 1, 4, 5 and 6, HCV/HIV-1 co-infection, HCV genotype 1 and 4 liver transplant recipients, and genotype 1-infected patients with decompensated cirrhosis. In Europe, Harvoni is also indicated for certain patients with HCV genotype 4 infection, HCV genotype 3 infection with cirrhosis and/or prior treatment failure and those with HCV/HIV-1 co-infection.
- **Sovaldi** is an oral formulation of sofosbuvir dosed once a day for the treatment of HCV as a component of a combination antiviral treatment regimen. Sovaldi's efficacy has been established in patients with HCV genotypes 1, 2, 3 or 4 infection (in the United States and Europe) and genotypes 5 and 6 infection (in Europe), including those with hepatocellular carcinoma meeting Milan criteria (awaiting liver transplantation) and those with HCV/HIV-1 co-infection.
- **Viread** is an oral formulation of a nucleotide analog reverse transcriptase inhibitor, dosed once a day for the treatment of HBV in adults with compensated and decompensated liver disease. We licensed to GlaxoSmithKline Inc. (GSK) the rights to commercialize Viread for the treatment of HBV in China, Japan and Saudi Arabia. In 2012, the European Commission approved the use of Viread for the treatment of HBV infection in adolescent patients aged 12 to less than 18 years with compensated liver disease and evidence of immune active disease. Viread is also approved for the treatment of HIV infection.
- **Hepsera®** (adefovir dipivoxil) is an oral formulation of a nucleotide analog polymerase inhibitor, dosed once a day to treat HBV in patients 12 years of age and older. We licensed to GSK the rights to commercialize Hepsera for the treatment of HBV in Asia Pacific, Latin America and certain other territories.

Hematology/Oncology

- **Zydelig**[®] (idelalisib) is a first-in-class PI3K delta inhibitor for the treatment of certain blood cancers. In the United States, Zydelig is approved in combination with rituximab for patients with relapsed CLL for whom rituximab alone would be considered appropriate therapy and as monotherapy for patients with relapsed follicular B-cell non-Hodgkin lymphoma (FL) and small lymphocytic lymphoma (SLL) who have received at least two prior systemic therapies. In the European Union, Zydelig is approved for the treatment of CLL and FL.

Cardiovascular

- **Letairis**[®] (ambrisentan) is an oral formulation of an endothelin receptor antagonist (ERA) indicated for the treatment of pulmonary arterial hypertension (PAH) (WHO Group 1) in patients with WHO Class II or III symptoms to improve exercise capacity and delay clinical worsening. We sublicensed to GSK the rights to ambrisentan, marketed by GSK as Volibris[®] (ambrisentan), for PAH in territories outside of the United States.
- **Ranexa**[®] (ranolazine) is an extended-release tablet for the treatment of chronic angina. We have licensed to Menarini International Operations Luxembourg SA the rights to Ranexa in territories outside of the United States.
- **Lexiscan**[®] (regadenoson) injection is indicated for use as a pharmacologic stress agent in radionuclide myocardial perfusion imaging (MPI), a test that detects and characterizes coronary artery disease, in patients unable to undergo adequate exercise stress. Astellas US LLC (Astellas) has exclusive rights to manufacture and sell regadenoson under the name Lexiscan in the United States. Rapidscan Pharma Solutions, Inc. (RPS) holds the exclusive right to manufacture and sell regadenoson under the name Rapiscan[®] in Europe and certain territories outside the United States. We receive royalties from Astellas and RPS for sales in these territories.

Inflammation/Respiratory

- **Cayston**[®] (aztreonam for inhalation solution) is an inhaled antibiotic for the treatment of respiratory systems in cystic fibrosis patients seven years of age and older with *Pseudomonas aeruginosa* (*P. aeruginosa*).
- **Tamiflu**[®] (oseltamivir phosphate) is an oral antiviral available in capsule form for the treatment and prevention of influenza A and B. Tamiflu is approved for the treatment of influenza in children and adults in more than 60 countries, including the United States, Japan and the European Union. Tamiflu is also approved for the prevention of influenza in children and adults in the United States, Japan and the European Union. We developed Tamiflu with F. Hoffmann-La Roche Ltd (together with Hoffmann-La Roche Inc., Roche). Roche has the exclusive right to manufacture and sell Tamiflu worldwide, subject to its obligation to pay us royalties based on a percentage of the net sales of Tamiflu.

Other

- **AmBisome**[®] (amphotericin B liposome for injection) is a proprietary liposomal formulation of amphotericin B, an antifungal agent to treat serious invasive fungal infections caused by various fungal species in adults. Our corporate partner, Astellas Pharma US, Inc., promotes and sells AmBisome in the United States and Canada, and we promote and sell AmBisome in Europe, Australia and New Zealand.
- **Macugen**[®] (pegaptanib sodium injection) is an intravitreal injection of an anti-angiogenic oligonucleotide for the treatment of neovascular age-related macular degeneration. Macugen was developed by Eyetech Inc. (Eyetech) using technology licensed from us and is now promoted in the United States by Valeant Pharmaceuticals, Inc. (Valeant), which acquired Eyetech in 2012. Valeant holds the exclusive rights to manufacture and sell Macugen in the United States, and Pfizer Inc. (Pfizer) holds the exclusive right to manufacture and sell Macugen in the rest of the world. We receive royalties from Valeant and Pfizer based on worldwide sales of Macugen.

Antiviral product sales, which include sales of our HIV and other antiviral products and our HCV products, were \$27.7 billion, \$30.2 billion and \$22.8 billion in 2016, 2015 and 2014, respectively, and represented 91% of our total revenues in 2016, 93% of our total revenues in 2015 and 92% of our total revenues in 2014. Sales of our other products were \$2.2 billion, \$1.9 billion and \$1.7 billion in 2016, 2015 and 2014, respectively, and represented 7% of our total revenues in 2016, 6% of our total revenues in 2015 and 7% of our total revenues in 2014. See Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 and Note 16, Segment Information of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information related to sales by product.

Commercialization and Distribution

We have U.S. and international commercial sales operations, with marketing subsidiaries in over 30 countries. Our products are marketed through our commercial teams and/or in conjunction with third-party distributors and corporate partners. Our commercial teams promote our products through direct field contact with physicians, hospitals, clinics and other healthcare providers. We generally grant our third-party distributors the exclusive right to promote our product in a territory for a specified period of time. Most of our agreements with these distributors provide for collaborative efforts between the distributor and Gilead in obtaining and maintaining regulatory approval for the product in the specified territory.

We sell and distribute Epclusa, Harvoni, Sovaldi, Vemlidy, Descovy, Odefsey, Truvada, Atripla, Stribild, Complera, Viread, Genvoya, Emtriva, Tybost, Vitekta, Ranexa, AmBisome, Zydelig and Hepsera in the United States exclusively through the wholesale channel. Our product sales to three large wholesalers, McKesson Corporation, AmerisourceBergen Corporation and Cardinal Health, Inc. each accounted for more than 10% of total revenues for each of the years ended December 31, 2016, 2015 and 2014. On a combined basis, in 2016, these wholesalers accounted for approximately 88% of our product sales in the United States and approximately 56% of our total worldwide revenues. Letairis and Cayston are distributed exclusively by specialty pharmacies. These specialty pharmacies dispense medications for complex or chronic conditions that require a high level of patient education and ongoing counseling. We sell and distribute Epclusa, Harvoni, Sovaldi, Vemlidy, Descovy, Odefsey, Truvada, Atripla, Stribild, Eviplera, Viread, Emtriva, Tybost, Vitekta, Genvoya, Ranexa, AmBisome, Zydelig and Hepsera in Europe and countries outside the United States where the product is approved, either through our commercial teams, third-party distributors or corporate partners.

U.S. Patient Access

We make it a priority to increase access to our medicines for people who can benefit from them, regardless of their ability to pay. In the United States, our U.S. patient support and assistance programs help patients and their families understand their access options. We assist patients with understanding insurance coverage, financial assistance options and eligibility for free treatment. We make our therapies accessible for uninsured individuals and those who need financial assistance. We also support programs for those unable to afford the co-payments associated with health insurance programs. Half of all patients taking our HIV medicines in the United States already receive them through federal and state programs at substantially discounted prices. We also have a long history of working with state AIDS Drug Assistance Programs (ADAPs) to provide lower pricing for our HIV medicines. The price freeze we instituted for ADAPs in 2008 was extended in 2013 through the end of 2017, providing important support to these critical programs as they evolve in the changing U.S. healthcare environment.

Developing World Access

Under our Gilead Access Program, established in 2003, certain of our products for HIV/AIDS, viral hepatitis and visceral leishmaniasis are available at substantially reduced prices in the developing world. Today, 10 million people are receiving Gilead HIV medicines in low- and middle-income countries. We have entered into a number of collaborations related to access to our products in the developing world, which include:

- **Licenses with Generic Manufacturers.** We have entered into non-exclusive license agreements with Indian generic manufacturers, granting them rights to produce and distribute generic versions of certain of our HIV, HCV and HBV products to low-income countries around the world, which include India and many countries in our Gilead Access Program.
- **Medicines Patent Pool (the MPP).** We entered into an agreement with the MPP, an organization that was established by the United Nations to increase global access to high-quality, low-cost antiretroviral therapy through the sharing of patents. We granted the MPP a non-exclusive license to identify generic pharmaceutical manufacturers in India who specialize in high-quality production of generic medicines and granted sublicenses to those Indian manufacturers to manufacture and distribute generic versions of our antiretrovirals in the developing world. Sublicensees through the MPP will be free to develop combination products and pediatric formulations of our HIV medicines.
- **Special Partnerships.** We work with national governments and local organizations to increase access to our HIV and HCV medicines and strengthen healthcare systems. For example, we have established an agreement with the National AIDS Program of Myanmar to donate a generic version of our Atripla to 2,000 people living with HIV in the country, as well as provide HIV educational activities and financial support to strengthen the country's health system. In Tanzania, we launched an HIV "test-and-treat" demonstration project with the Holy See's Good Samaritan Foundation. The program's goal is to enable screening of 120,000 patients for HIV and provide HIV therapy to 20,000 HIV-positive individuals over five years. In Egypt, we have agreed to provide Sovaldi and Harvoni to the Egyptian Ministry of Health at a significantly reduced price. In addition, in partnership with the Ministry of Health, we invest in local HCV medical education and prevention efforts, as well as screening and patient awareness initiatives. In Georgia, we established an agreement with the Ministry of Labor, Health and Social Affairs of Georgia to help eliminate HCV in the country. The

project aims to reduce the number of Georgians infected with HCV and lower the rate of new infections through universal screening, treatment, prevention and surveillance.

Competition

Our marketed products target a number of areas, including HIV, liver diseases, cardiovascular, hematology/oncology, inflammation/respiratory and other diseases. There are many commercially available products for the treatment of these diseases. We face significant competition from large global pharmaceutical and biotechnology companies, specialized pharmaceutical firms and generic drug manufacturers. Our products compete with other available products based primarily on efficacy, safety, tolerability, acceptance by doctors, ease of patient compliance, ease of use, price, insurance and other reimbursement coverage, distribution and marketing. As our products mature, private insurers and government payers often reduce the amount they will reimburse patients, which increases pressure on us to reduce prices. Further, as new branded or generic products are introduced into major markets, our ability to maintain pricing and market share may be affected.

Our HIV Products

The HIV landscape is becoming more competitive and complex as treatment trends continue to evolve. A growing number of HIV drugs are currently sold or are in advanced stages of clinical development. Competition from current and expected competitors may erode the revenues we receive from sales of our HIV products. Our HIV products compete primarily with products from ViiV Healthcare (ViiV), which markets fixed-dose combination products that compete with Descovy, Odefsey, Genvoya, Stribild, Complera/Eviplera, Atripla and Truvada. For example, two products marketed by ViiV, Tivicay (dolutegravir), an integrase inhibitor, and Triumeq (dolutegravir/abacavir/lamivudine), a single-tablet antiretroviral regimen, have adversely impacted sales of our HIV products. In addition, ViiV's lamivudine competes with emtricitabine, the active pharmaceutical ingredient of Emtriva and a component of Descovy, Odefsey, Genvoya, Stribild, Complera/Eviplera, Atripla and Truvada. For Tybost, we compete with ritonavir, marketed by AbbVie Inc. (AbbVie). Most of our HIV products contain TAF, TDF and/or emtricitabine, which belong to the nucleoside class of antiviral therapeutics. If the treatment paradigm for HIV changes, our market share would likely decline.

We also face competition from generic HIV products. Generic versions of lamivudine and Combivir (lamivudine and zidovudine) are available in the United States and certain other countries. Generic versions of Sustiva (efavirenz), a component of our Atripla, are now available in Canada and Europe and we anticipate competition from generic efavirenz in the United States in December 2017. We have observed some pricing pressure related to the Sustiva component of our Atripla sales. In addition, TDF, one of the active pharmaceutical ingredients in Stribild, Complera/Eviplera, Atripla and Truvada, and the main active pharmaceutical ingredient in Viread, is expected to face generic competition in the United States, the European Union and other countries in 2017. Because emtricitabine, the other active pharmaceutical ingredient of Truvada, faced generic competition in the European Union in 2016, Truvada is also expected to face generic competition in the European Union and other countries outside of the United States in 2017.

Our Liver Diseases Products

We continue to face increased competition in the HCV market. Our HCV products, Eplclusa, Harvoni and Sovaldi, compete with Viekira Pak (ombitasvir, paritaprevir and ritonavir tablets co-packaged with dasabuvir tablets) and Viekira XR (dasabuvir, ombitasvir, paritaprevir and ritonavir) marketed by AbbVie, Zepatier (elbasvir and grazoprevir) marketed by Merck & Co. Inc. (Merck), Daklinza (daclastavir) marketed by BMS and Olysio (simeprevir) marketed by Janssen Therapeutics. We also expect new HCV products to be launched by competitors. Competition from current and expected competitors may negatively impact our ability to maintain pricing and our HCV market share. We expect pricing pressure in the HCV market to continue.

Our HBV products, Vemlidy, Viread and Hepsera, face competition from existing and expected therapies for treating patients with HBV. Our HBV products face competition from Baraclude (entecavir), an oral nucleoside analog marketed by BMS, as well as generic entecavir. Our HBV products also compete with Tyzeka/Sebivo (telbivudine), an oral nucleoside analog marketed by Novartis Pharmaceuticals Corporation (Novartis).

Our Cardiovascular Products

Letairis competes with Tracleer (bosentan) and Opsumit (macitentan) marketed by Actelion Pharmaceuticals US, Inc. and also with Adcirca (tadalafil) marketed by United Therapeutics Corporation and Pfizer.

Ranexa competes predominantly with generic compounds from three distinct classes of drugs for the treatment of chronic angina in the United States, including generic and/or branded beta-blockers, calcium channel blockers and long-acting nitrates. In addition, surgical treatments and interventions such as coronary artery bypass grafting and percutaneous coronary intervention can be another option for angina patients, which may be perceived by healthcare practitioners as preferred methods to treat the cardiovascular disease that underlies and causes angina.

There are numerous marketed generic and/or branded pharmacologic stress agents that compete with Lexiscan.

Our Hematology/Oncology Products

Zydelig competes with Imbruvica (ibrutinib) marketed by Pharmacyclics, Inc., Gazyva (obinutuzumab) marketed by Genentech (a member of the Roche Group) and Treanda (bendamustine hydrochloride) marketed by Cephalon, Inc.

Our Inflammation/Respiratory Products

Cayston competes primarily with Tobi (tobramycin inhalation solution), an inhaled medication marketed by Novartis for the treatment of cystic fibrosis patients whose lungs contain *P. aeruginosa*, a bacterial infection.

Tamiflu competes with Relenza (zanamivir), an influenza neuraminidase inhibitor marketed by GSK, and products sold by generic competitors.

Our Other Products

AmBisome competes with Vfend (voriconazole) marketed by Pfizer and caspofungin, a product developed by Merck that is marketed as Cancidas in the United States and as Caspofungin elsewhere. AmBisome also competes with other lipid-based amphotericin B products, including Abelcet (amphotericin B lipid complex injection), sold by Enzo Pharmaceuticals, Inc. in the United States, Canada and Japan and by Zeneus Pharma Ltd. in Europe; Amphotec (amphotericin B cholesteryl sulfate complex for injection), sold by Three Rivers Pharmaceuticals, LLC worldwide; and Anfogen (amphotericin B liposomal), sold by Genpharma, S.A. in Argentina. BMS and numerous generic manufacturers sell conventional amphotericin B, which also competes with AmBisome. In addition, we are aware of at least three lipid formulations that claim similarity to AmBisome becoming available outside of the United States. These formulations may reduce market demand for AmBisome. Furthermore, the manufacture of lipid formulations of amphotericin B is very complex, and if any of these formulations are found to be unsafe, sales of AmBisome may be negatively impacted by association.

In addition, a number of companies are pursuing the development of technologies which are competitive with our existing products or research programs. These competing companies include specialized pharmaceutical firms and large pharmaceutical companies acting either independently or together with other pharmaceutical companies. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection and may establish collaborative arrangements for competitive products and programs. If any of these competitors gain market share on our products, it could adversely affect our results of operations and stock price.

Collaborative Relationships

As part of our business strategy, we establish collaborations with other companies, universities and medical research institutions to assist in the clinical development and/or commercialization of certain of our products and product candidates and to provide support for our research programs. We also evaluate opportunities for acquiring products or rights to products and technologies that are complementary to our business from other companies, universities and medical research institutions. For more information regarding certain of these relationships, including their ongoing financial and accounting impact on our business, see Note 10, Collaborative Arrangements of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

Commercial Collaborations

Although we currently have a number of collaborations with corporate partners for the manufacture, sale, distribution and/or marketing of our products in various territories worldwide, the following commercial collaborations are those that are most significant to us from a financial statement perspective and where significant ongoing collaboration activity exists.

- **BMS**

North America

In 2004, we entered into a collaboration arrangement with BMS to develop and commercialize a single-tablet regimen containing our Truvada and BMS's Sustiva (efavirenz) in the United States. This combination was approved for use in the United States in 2006 and is sold under the brand name Atripla. We and BMS structured this collaboration as a joint venture that operates as a limited liability company named Bristol-Myers Squibb & Gilead Sciences, LLC, which we consolidate. We and BMS granted royalty-free sublicenses to the joint venture for the use of our respective company owned technologies and, in return, were granted a license by the joint venture to use any intellectual property that results from the collaboration. In 2006, we and BMS amended the joint venture's collaboration agreement to allow the joint venture to sell Atripla in Canada. The economic interests of the joint venture held by us and BMS (including share of revenues and out-of-pocket expenses) are based on the portion of the net selling price of Atripla attributable to efavirenz and Truvada. Since the net selling price for Truvada may change over time relative to the net selling price of efavirenz, both our and BMS's respective economic interests in the joint venture may vary annually.

We and BMS shared marketing and sales efforts. Starting in the second quarter of 2011, except for a limited number of activities that are jointly managed, the parties no longer coordinate detailing and promotional activities in the United States, and the parties have reduced their joint promotional efforts since we launched Complera in August 2011 and Stribild in August 2012. The parties continue to collaborate on activities such as manufacturing, regulatory, compliance and pharmacovigilance. The daily operations of the joint venture are governed by several joint committees formed by both BMS and Gilead. We are responsible for accounting, financial reporting, tax reporting, manufacturing and product distribution for the joint venture. Both parties provide their respective bulk active pharmaceutical ingredients to the joint venture at their approximate market value. The agreement will continue until terminated by the mutual agreement of the parties. In addition, either party may terminate the other party's participation in the collaboration within 30 days after the launch of at least one generic version of such other party's single agent products (or the double agent products). The terminating party then has the right to continue to sell Atripla and become the continuing party, but will be obligated to pay the terminated party certain royalties for a three-year period following the effective date of the termination. The loss of exclusivity in the United States for Sustiva is expected in December 2017.

As of December 31, 2016 and 2015, the joint venture held efavirenz active pharmaceutical ingredient which it purchased from BMS at BMS's estimated net selling price of efavirenz in the U.S. market. These amounts were primarily included in Inventories on our Consolidated Balance Sheets as of December 31, 2016 and 2015.

Europe

In 2007, Gilead Sciences Ireland UC, our wholly-owned subsidiary, and BMS entered into a collaboration agreement under which we and BMS commercialize and distribute Atripla in the European Union, Iceland, Liechtenstein, Norway and Switzerland (collectively, the European Territory). The parties formed a limited liability company which we consolidate, to manufacture Atripla for distribution in the European Territory using efavirenz that it purchases from BMS at BMS's estimated net selling price of efavirenz in the European Territory. We are responsible for manufacturing, product distribution, inventory management and warehousing. Through our local subsidiaries, we have primary responsibility for order fulfillment, collection of receivables, customer relations and handling of sales returns in all the territories where we and BMS promote Atripla. In general, the parties share revenues and out-of-pocket expenses in proportion to the net selling prices of the components of Atripla, Truvada and efavirenz.

Starting in 2012, except for a limited number of activities that are jointly managed, the parties no longer coordinate detailing and promotional activities in the European Territory. We are responsible for accounting, financial reporting and tax reporting for the collaboration. As of December 31, 2016 and December 31, 2015, efavirenz purchased from BMS at BMS's estimated net selling price of efavirenz in the European Territory is primarily included in Inventories on our Consolidated Balance Sheets.

The parties also formed a limited liability company to hold the marketing authorization for Atripla in the European Territory. We have primary responsibility for regulatory activities. In the major market countries, both parties have agreed to independently continue to use commercially reasonable efforts to promote Atripla.

The agreement will terminate upon the expiration of the last-to-expire patent which affords market exclusivity to Atripla or one of its components in the European Territory. In addition, since December 31, 2013, either party may terminate the agreement for any reason and such termination will be effective two calendar quarters after notice of termination. The non-terminating party has the right to continue to sell Atripla and become the continuing party, but will be obligated to pay the terminating party certain royalties for a three-year period following the effective date of the termination. In the event the continuing party decides not to sell Atripla, the effective date of the termination will be the date Atripla is withdrawn in each country or the date on which a third party assumes distribution of Atripla, whichever is earlier.

- **Janssen**

In 2009, we entered into a collaboration agreement with Janssen to develop and commercialize a fixed-dose combination of our Truvada and Janssen's rilpivirine. The agreement was amended in 2011, 2013 and 2014. The combination was approved in the United States and European Union in 2011 and is sold under the brand name Complera in the United States and Eviplera in the European Union. The 2014 amendment expanded the collaboration to include another single-tablet regimen containing Janssen's rilpivirine and our emtricitabine and tenofovir alafenamide (Odefsey). Under the agreement, Janssen granted us an exclusive license to Complera/Eviplera and Odefsey worldwide but has the right to distribute both combination products in 18 countries including Mexico, Russia and Japan. Neither party is restricted from combining its drugs with any other drug products except those which are similar to the components of Complera/Eviplera and Odefsey.

We are responsible for manufacturing Complera/Eviplera and Odefsey and have the lead role in registration, distribution and commercialization of both products except in the countries where Janssen distributes. Janssen has exercised a right to co-detail the combination product in some of the countries where Gilead is the selling party. The selling party sets the price of the products and the parties share revenues based on the ratio of the net selling prices of the parties' component(s), subject to certain restrictions and adjustments. We retain a specified percentage of Janssen's share of revenues, up to 30% in major markets.

Either party may terminate the collaboration agreement with respect to a product and a country if the product is withdrawn from the market in such country or with respect to a product in all countries if the other party materially breaches the agreement with respect to a product. The agreement and the parties' obligation to share revenues will expire on a product-by-product and country-by-country basis as Janssen patents providing exclusivity for the product expire or, if later, on the tenth anniversary of the commercial launch for such product. We may terminate the agreement without cause with respect to the countries where we sell the products in which case Janssen has the right to become the selling party for such country if the product has launched but has been on the market for fewer than 10 years.

- **Japan Tobacco**

In 2005, Japan Tobacco Inc. (Japan Tobacco) granted us exclusive rights to develop and commercialize elvitegravir, a novel HIV integrase inhibitor, in all countries of the world, excluding Japan, where Japan Tobacco retained such rights. Under the agreement, we are responsible for seeking regulatory approval in our territories and are required to use diligent efforts to commercialize elvitegravir for the treatment of HIV infection. We bear all costs and expenses associated with such commercialization efforts.

We received approval of Stribild (an elvitegravir-containing product) from FDA in August 2012 and from the European Commission in May 2013. We received approval of Genvoya (an elvitegravir-containing product) from FDA and the European Commission in November 2015.

The agreement and our obligation to pay royalties to Japan Tobacco will terminate on a product-by-product basis as patents providing exclusivity for the product expire or, if later, on the tenth anniversary of commercial launch for such product. We may terminate the agreement for any reason in which case the license granted by Japan Tobacco to us would terminate. Either party may terminate the agreement in response to a material breach by the other party.

Research Collaborations

We have a number of collaborations with partners for the research and development (R&D) of certain compounds and drug candidates. None of our research collaborations are significant to us from a financial statement perspective.

Research and Development

Our R&D philosophy and strategy is to develop best-in-class drugs that improve safety or efficacy for unmet medical needs. We intend to continue committing significant resources to internal R&D opportunities and external business development activity.

Our product development efforts cover a wide range of medical conditions, including HIV/AIDS, liver diseases such as HCV and HBV, hematology/oncology, cardiovascular and inflammation/respiratory diseases. We have research scientists in Foster City, Fremont, San Dimas and Oceanside, California; Seattle, Washington; and Alberta, Canada engaged in the discovery and development of new molecules and technologies that we hope will lead to the approval of new medicines addressing unmet needs.

The development of our product candidates is subject to various risks and uncertainties. These risks and uncertainties include our ability to enroll patients in clinical trials, the possibility of unfavorable results of our clinical trials, the need to modify or delay our clinical trials or to perform additional trials and the risk of failing to obtain regulatory approvals. As a result, our product candidates may never be successfully commercialized. Drug development is inherently risky and many product candidates fail during the drug development process.

Below is a summary of our key product candidates and their corresponding current stages of development.

Product Candidates for the Treatment of HIV

Product Candidates	Description
Products in Phase 3	
Bictegravir/F/TAF	A single-tablet regimen of bictegravir, a non-boosted integrase inhibitor, and F/TAF is being evaluated for the treatment of HIV infection.
Descovy	Descovy is being evaluated for PrEP.
Product in Phase 1	
GS-9620	GS-9620, a TLR-7 agonist, is being evaluated for the treatment of HIV infection.

Product Candidates for the Treatment of Liver Diseases

Product Candidates	Description
Market Applications Pending	
Single-tablet regimen of sofosbuvir, velpatasvir and voxilaprevir	A single-tablet regimen of sofosbuvir, velpatasvir and voxilaprevir, a pan-genotypic NS3 protease inhibitor, is being evaluated for the treatment of HCV.
Product in Phase 3	
Selonsertib	Selonsertib, an ASK-1 inhibitor, is being evaluated for the treatment of NASH.
Products in Phase 2	
GS-9620	GS-9620, a TLR-7 agonist, is being evaluated for the treatment of HBV.
Selonsertib	Selonsertib, an ASK-1 inhibitor, is being evaluated for the treatment of alcoholic hepatitis.
GS-9674	GS-9674, a FXR agonist, is being evaluated for the treatment of NASH, primary biliary cirrhosis and primary sclerosing cholangitis.
GS-0976	GS-0976, an ACC inhibitor, is being evaluated for the treatment of NASH.

Product Candidates for the Treatment of Hematology/Oncology

Product Candidates	Description
Products in Phase 3	
Idelalisib	Idelalisib, a PI3K delta inhibitor, is being evaluated for the treatment of relapsed refractory CLL.
GS-5745	GS-5745, a MMP9 mAb inhibitor, is being evaluated for the treatment of gastric cancer.
Products in Phase 2	
Entospletinib	Entospletinib, a Syk inhibitor, is being evaluated for the treatment of hematological malignancies and acute myeloid leukemia.
GS-4059	GS-4059, a BTK inhibitor, is being evaluated for the treatment of B-cell malignancies.
Products in Phase 1	
GS-5745	GS-5745, a MMP9 mAb inhibitor, is being evaluated for the treatment of solid tumors.
GS-5829	GS-5829, a BET inhibitor, is being evaluated for the treatment of solid tumors.

Product Candidates for the Treatment of Inflammation/Respiratory Diseases

Product Candidates	Description
Product in Phase 3	
Filgotinib	Filgotinib, a JAK1 inhibitor, is being evaluated for the treatment of rheumatoid arthritis, Crohn's disease and ulcerative colitis.
Products in Phase 2	
Filgotinib	Filgotinib, a JAK1 inhibitor, is being evaluated for the treatment of various inflammatory diseases.
Entospletinib	Entospletinib, a Syk inhibitor, is being evaluated for the treatment of chronic graft versus host disease.
Presatovir	Presatovir, a fusion inhibitor, is being evaluated for the treatment of respiratory syncytial virus.
GS-5745	GS-5745, a MMP9 mAb inhibitor, is being evaluated for the treatment of cystic fibrosis and rheumatoid arthritis.
GS-9876	GS-9876, a Syk inhibitor, is being evaluated for the treatment of rheumatoid arthritis.

Other Product Candidates

Product Candidates	Description
Product in Phase 2	
GS-5734	GS-5734, a Nuc inhibitor, is being evaluated for the treatment of Ebola virus infection.

In total, our R&D expenses were \$5.1 billion for 2016, \$3.0 billion for 2015 and \$2.9 billion for 2014. R&D expenses increased 69% in 2016 compared to 2015, primarily due to the overall progression of clinical studies, including ongoing milestone payments, our purchase of an FDA priority review voucher, up-front collaboration expenses related to our license and collaboration agreement with Galapagos and our purchase of Nimbus Apollo, Inc. (Nimbus). We also recorded in-process R&D impairment charges related to momelotinib and simtuzumab in 2016.

In addition to our internal discovery and clinical development programs, we seek to add to our portfolio of products through product acquisitions, licenses and collaborations.

In January 2016, we closed on a license and collaboration agreement with Galapagos, a clinical-stage biotechnology company based in Belgium, for the development and commercialization of filgotinib, a JAK1-selective inhibitor being investigated for inflammatory disease indications. Filgotinib is in Phase 3 clinical trials for the potential treatment of rheumatoid arthritis, Crohn's disease and ulcerative colitis.

In May 2016, we acquired Nimbus, a privately held company, and its ACC inhibitor program, which is being evaluated for the potential treatment of NASH, hepatocellular carcinoma and other diseases.

Patents and Proprietary Rights

U.S. and European Patent Expiration

We have a number of U.S. and foreign patents, patent applications and rights to patents related to our compounds, products and technology, but we cannot be certain that issued patents will be enforceable or provide adequate protection or that pending patent applications will result in issued patents.

The following table shows the estimated expiration dates (including Patent Term Extension, Supplementary Protection Certificates and/or Pediatric exclusivity where granted) in the United States and Europe for the primary (typically compound) patents for our Phase 3 product candidates. Patents do not cover the ranolazine compound, the active ingredient of Ranexa. Instead, when it was discovered that only a sustained-release formulation of ranolazine would achieve therapeutic plasma levels, patents were obtained on those formulations and the characteristic plasma levels they achieve. For our product candidates that are single-tablet regimens, the estimated patent expiration date provided corresponds to the latest expiring compound patent for one of the active ingredients in the single-tablet regimen.

Phase 3 Product Candidates	Patent Expiration	
	U.S.	E.U.
<i>Product Candidate for the Treatment of HIV</i>		
Single-tablet regimen of bictegrovir and F/TAF	2033	2033
<i>Product Candidates for the Treatment of Liver Diseases</i>		
Single-tablet regimen of sofosbuvir, velpatasvir and voxilaprevir for the treatment of HCV	2033	2033
Selonsertib for the treatment of NASH	2033	2033
<i>Product Candidates for the Treatment of Hematology/Oncology</i>		
Idelalisib for the treatment of relapsed refractory CLL	2025	2025
GS-5745 for the treatment of gastric cancer	2031	(2031)
<i>Product Candidates for the Treatment of Inflammation Diseases</i>		
Filgotinib for the treatment of rheumatoid arthritis	2030	(2030)
Filgotinib for the treatment of Crohn's disease	2030	(2030)
Filgotinib for the treatment of ulcerative colitis	2030	(2030)

Dates in parentheses reflect the estimated expiration date of patents which may issue from currently pending applications. The estimated expiration dates do not include any potential additional exclusivity (e.g., patent term extension, supplementary protection certificates or pediatric exclusivity) that has not yet been granted.

The following table shows the actual or estimated expiration dates (including Patent Term Extension, Supplementary Protection Certificates and/or Pediatric exclusivity where granted) in the United States and Europe for the primary (typically compound) patents for our marketed products. For our products that are fixed-dose combinations or single-tablet regimens (e.g., Truvada, Atripla, Complera/Eviplera, Stribild, Genvoya, Odefsey and Descovy), the estimated patent expiration dates provided correspond to the latest expiring compound patent for one of the active ingredients in the single-tablet regimen.

Products	Patent Expiration	
	U.S.	E.U.
Hepsera	2014	2016
AmBisome	2016	2008
Macugen	2017	2017
Tamiflu	2017	2016
Letairis	2018 *	2020
Viread	2018 **	2017
Ranexa	2019 ***	2023
Atripla	2021	2017
Cayston	2021	2021
Emtriva	2021	2016
Truvada	2021	2017
Lexiscan	2022	2025
Complera/Eviplera	2022	2022
Vitekta	2023	2028
Zydelig	2025	(2025)
Sovaldi	2029	2028
Stribild	2029	2028
Genvoya	2029	2028
Tybost	2029	2027
Harvoni	2030	2030
Descovy	2022	2021
Odefsey	2025	2022
Epclusa	2032	2032
Vemlidy	2022	2021

Dates in parentheses reflect the estimated expiration date of patents which may issue from currently pending applications. The estimated expiration dates do not include any potential additional exclusivity (e.g., patent term extension, supplementary protection certificates or pediatric exclusivity) that has not yet been granted.

* In 2017, Gilead and Watson Laboratories, Inc. (Watson) reached an agreement to settle the patent litigation related to Letairis.

** In 2013, Gilead and Teva Pharmaceuticals (Teva) reached an agreement in principle to settle the ongoing patent litigation concerning the four patents that protect tenofovir disoproxil fumarate in our Viread, Truvada and Atripla products. Under the agreement, Teva will be allowed to launch a generic version of Viread on December 15, 2017.

*** In 2013, Gilead and Lupin Limited (Lupin) reached an agreement to settle the patent litigation prior to issuance of the court's decision. Under the agreement, Lupin will be allowed to launch a generic version of Ranexa on February 27, 2019.

Patent Protection and Certain Challenges

Patents and other proprietary rights are very important to our business. If we have a properly drafted and enforceable patent, it can be more difficult for our competitors to use our technology to create competitive products and more difficult for our competitors to obtain a patent that prevents us from using technology we create. As part of our business strategy, we actively seek patent protection both in the United States and internationally and file additional patent applications, when appropriate, to cover improvements in our compounds, products and technology.

Patents covering certain of the active pharmaceutical ingredients (API) of Truvada, Atripla, Stribild, Complera/Eviplera, Genvoya, Odefsey, Descovy, Vitekta, Emtriva, Letairis, and Hepsera are held by third parties. We acquired exclusive rights to these patents in the agreements we have with these parties. Patents do not cover the ranolazine compound, the active ingredient

of Ranexa. Instead, when it was discovered that only a sustained-release formulation of ranolazine would achieve therapeutic plasma levels, patents were obtained on those formulations and the characteristic plasma levels they achieve. Patents do not cover the active ingredients in AmBisome.

We may obtain patents for certain products many years before marketing approval is obtained for those products. Because patents have a limited life, which may begin to run prior to the commercial sale of the related product, the commercial value of the patent may be limited. However, we may be able to apply for patent term extensions or supplementary protection certificates in some countries. For example, extensions for the patents or supplementary protection certificates on many of our products have been granted in the United States and in a number of European countries, compensating in part for delays in obtaining marketing approval. Similar patent term extensions may be available for other products that we are developing, but we cannot be certain we will obtain them in some countries.

It is also important that we do not infringe the valid patents of third parties. If we infringe the valid patents of third parties, we may be prevented from commercializing products or may be required to obtain licenses from these third parties. We may not be able to obtain alternative technologies or any required license on reasonable terms or at all. If we fail to obtain these licenses or alternative technologies, we may be unable to develop or commercialize some or all of our products. For example, we are aware of a body of patents that may relate to our operation of Letairis Education and Access Program (LEAP), our restricted distribution program designed to support Letairis and we are aware of patents and patent applications owned by other parties that may claim to cover the use of sofosbuvir and the use of the combination of sofosbuvir and ledipasvir.

Because patent applications are confidential for a period of time until a patent is issued, we may not know if our competitors have filed patent applications for technology covered by our pending applications or if we were the first to invent or first to file an application directed toward the technology that is the subject of our patent applications. Competitors may have filed patent applications or received patents and may obtain additional patents and proprietary rights that block or compete with our products. In addition, if competitors file patent applications covering our technology, we may have to participate in interference/derivation proceedings or litigation to determine the right to a patent. Litigation and interference/derivation proceedings are unpredictable and expensive, such that, even if we are ultimately successful, our results of operations may be adversely affected by such events.

Patents relating to pharmaceutical, biopharmaceutical and biotechnology products, compounds and processes such as those that cover our existing compounds, products and processes and those that we will likely file in the future, do not always provide complete or adequate protection. Future litigation or other proceedings regarding the enforcement or validity of our existing patents or any future patents could result in the invalidation of our patents or substantially reduce their protection. From time to time, certain individuals or entities may challenge our patents.

Our pending patent applications and the patent applications filed by our collaborative partners may not result in the issuance of any patents or may result in patents that do not provide adequate protection. As a result, we may not be able to prevent third parties from developing compounds or products that are closely related to those which we have developed or are developing. In addition, certain countries in South America, Africa and Asia, including Brazil and China, do not provide effective enforcement of our patents, and third-party manufacturers may be able to sell generic versions of our products in those countries.

Litigation Related to Sofosbuvir

In January 2012, we acquired Pharmasset, Inc. (Pharmasset). Through the acquisition, we acquired sofosbuvir, a nucleotide analog that acts to inhibit the replication of the HCV. In December 2013, we received U.S. FDA approval of sofosbuvir, now known commercially as Sovaldi. In October 2014, we also received approval of the fixed-dose combination of ledipasvir and sofosbuvir, now known commercially as Harvoni. In June 2016, we received approval of the fixed-dose combination of sofosbuvir and velpatasvir, now known commercially as Epclusa. We have received a number of contractual and intellectual property claims regarding sofosbuvir. While we have carefully considered these claims both prior to and following the acquisition and believe they are without merit, we cannot predict the ultimate outcome of such claims or range of loss.

We own patents and patent applications that claim sofosbuvir (Sovaldi) as a chemical entity and its metabolites and the fixed-dose combinations of ledipasvir and sofosbuvir (Harvoni) and sofosbuvir and velpatasvir (Epclusa). Third parties may have, or may obtain rights to, patents that allegedly could be used to prevent or attempt to prevent us from commercializing Epclusa, Harvoni or Sovaldi. For example, we are aware of patents and patent applications owned by other parties that have been or may in the future be alleged by such parties to cover the use of Epclusa, Harvoni and Sovaldi. We cannot predict the ultimate outcome of intellectual property claims related to Epclusa, Harvoni or Sovaldi. We have spent, and will continue to spend, significant resources defending against these claims.

If third parties successfully obtain valid and enforceable patents, and successfully prove infringement of those patents by Epclusa, Harvoni and/or Sovaldi, we could be prevented from selling these products unless we were able to obtain a license under such patents. Such a license may not be available on commercially reasonable terms or at all.

Interference Proceedings and Litigation with Idenix Pharmaceuticals, Inc. (Idenix), Universita Degli Studi di Cagliari (UDSG), Centre National de la Recherche Scientifique and L'Universite Montpellier II

In February 2012, we received notice that the U.S. Patent and Trademark Office (USPTO) had declared Interference No. 105,871 (First Idenix Interference) between our U.S. Patent No. 7,429,572 (the '572 patent) and Idenix's pending U.S. Patent Application No. 12/131,868 to determine who was the first to invent certain nucleoside compounds. In January 2014, the USPTO Patent Trial and Appeal Board (PTAB) determined that Pharmasset and not Idenix was the first to invent the compounds. Idenix has appealed the PTAB's decisions to the U.S. District Court for the District of Delaware, which has stayed that appeal pending the outcome of the appeal of the interference involving Idenix's U.S. Patent No. 7,608,600 (the '600 patent) as described below.

In December 2013, after receiving our request to do so, the USPTO declared Interference No. 105,981 (Second Idenix Interference) between our pending U.S. Patent Application No. 11/854,218 and Idenix's '600 patent. The '600 patent includes claims directed to methods of treating HCV with nucleoside compounds. In March 2015, the PTAB determined that Pharmasset and not Idenix was the first to invent the claimed methods of treating HCV. Idenix appealed this decision in both the U.S. District Court for the District of Delaware and the U.S. Court of Appeal for the Federal Circuit (CAFC). The CAFC heard oral arguments in September 2016, and we are awaiting its decision. We filed a motion to dismiss the appeal in Delaware, and the court has stayed the appeal relating to the Second Idenix Interference.

We believe that the Idenix claims involved in the First and Second Idenix Interferences, and similar U.S. and foreign patents claiming the same compounds, metabolites and uses thereof, are invalid. As a result, we filed an Impeachment Action in the Federal Court of Canada to invalidate Idenix Canadian Patent No. 2,490,191 (the '191 patent), which is the Canadian patent that corresponds to the '600 patent. Idenix asserted that the commercialization of Sovaldi in Canada will infringe its '191 patent and that our Canadian Patent No. 2,527,657, corresponding to our '572 patent, is invalid. In November 2015, the Canadian court held that Idenix's patent is invalid and that our patent is valid. Idenix appealed the decision to the Canadian Federal Court of Appeal in November 2015. The appeal hearing was held in January 2017 and we are awaiting the decision.

We filed a similar legal action in Norway in the Oslo District Court seeking to invalidate Idenix's Norwegian patent corresponding to the '600 patent. In September 2013, Idenix filed an invalidation action in the Norwegian proceedings against our Norwegian Patent No. 333700, which corresponds to the '572 patent. In March 2014, the Norwegian court found all claims in the Idenix Norwegian patent to be invalid and upheld the validity of all claims in our patent. Idenix appealed the decision to the Norwegian Court of Appeal. In April 2016, the Court of Appeal issued its decision invalidating the Idenix patent and upholding our patent. Idenix has not filed a further appeal.

In January 2013, we filed a legal action in the Federal Court of Australia seeking to invalidate Idenix's Australian patent corresponding to the '600 patent. In April 2013, Idenix asserted that the commercialization of Sovaldi in Australia infringes its Australian patent corresponding to the '600 patent. In March 2016, the Australian court revoked Idenix's Australian patent. Idenix has appealed this decision. The appeal hearing was held in November 2016 and we are awaiting the decision.

In March 2014, the European Patent Office (EPO) granted Idenix European Patent No. 1 523 489 (the '489 patent), which corresponds to the '600 patent. The same day that the '489 patent was granted, we filed an opposition with the EPO seeking to revoke the '489 patent. An opposition hearing was held in February 2016, and the EPO ruled in our favor and revoked the '489 patent. Idenix has appealed. In March 2014, Idenix also initiated infringement proceedings against us in the United Kingdom (UK), Germany and France alleging that the commercialization of Sovaldi would infringe the UK, German and French counterparts of the '489 patent. A trial was held in the UK in October 2014. In December 2014, the High Court of Justice of England and Wales (UK Court) invalidated all challenged claims of the '489 patent on multiple grounds. Idenix appealed. In November 2016, the appeals court affirmed the UK Court's decision invalidating Idenix's patent. In March 2015, the German court in Düsseldorf determined that the Idenix patent was highly likely to be invalid and stayed the infringement proceedings pending the outcome of the opposition hearing held by the EPO in February 2016. Idenix has not appealed this decision of the German court staying the proceedings. Upon Idenix's request, the French proceedings have been stayed. Idenix has not been awarded patents corresponding to the '600 patent in Japan or China.

In December 2013, Idenix, Universita Degli Studi di Cagliari (UDSG), Centre National de la Recherche Scientifique and L'Université Montpellier II sued us in U.S. District Court for the District of Delaware alleging that the commercialization of sofosbuvir will infringe the '600 patent and that an interference exists between the '600 patent and our U.S. Patent No. 8,415,322. Also in December 2013, Idenix and UDSG sued us in the U.S. District Court for the District of Massachusetts alleging that the commercialization of sofosbuvir will infringe U.S. Patent Nos. 6,914,054 (the '054 patent) and 7,608,597 (the '597 patent). In June 2014, the court transferred the Massachusetts litigation to the U.S. District Court for the District of Delaware. Idenix was acquired by Merck & Co. Inc. (Merck) in August 2014.

Prior to trial in December 2016, Idenix committed to give us a covenant not to sue with respect to any claims arising out of the '054 patent related to sofosbuvir and withdrew that patent from the trial. In addition, Idenix declined to litigate the '600 patent infringement action at trial in light of the appeal currently pending at the CAFC. In January 2017, the District Court stayed Idenix's infringement claim on the '600 patent pending the outcome of the appeal of the interference decision on that patent, described

above. A jury trial was held in December 2016 on the remaining '597 patent. In December 2016, the jury found that we willfully infringed the asserted claims of the '597 patent and awarded Idenix \$2.54 billion in past damages. The parties will file post-trial motions and briefings during the first quarter of 2017, and we expect the judge to rule in the third or fourth quarter of 2017. Once the judge has issued these rulings, the case will move to the CAFC.

Although we cannot predict with certainty the ultimate outcome of this litigation, we believe the jury verdict to be in error, and that errors were also made by the court with respect to certain rulings made before and during trial. We are confident in the merits of our case and will vigorously pursue this position in post-trial motions and on appeal. We expect that our arguments in the forthcoming post-trial motions and on appeal will focus on one or more of the arguments we made to the judge and jury, those being (i) when properly construed, Gilead does not infringe the claims of the '597 patent, (ii) the patent is invalid for failure to properly describe the claimed invention and (iii) the patent is invalid because it does not enable one of skill in the art to practice the claimed invention.

For further information, please see Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

If the jury's verdict is upheld on appeal, the amount we could be required to pay could be material. The timing and magnitude of the amount of any such payment could have a material adverse impact on our results of operations.

Litigation with Merck

In August 2013, Merck contacted us requesting that we pay royalties on the sales of sofosbuvir and obtain a license to U.S. Patent No. 7,105,499 (the '499 patent) and U.S. Patent No. 8,481,712 (the '712 patent), which it co-owns with Ionis Pharmaceuticals, Inc. The '499 and '712 patents cover compounds which do not include, but may relate to, sofosbuvir. We filed a lawsuit in August 2013 in the U.S. District Court for the Northern District of California seeking a declaratory judgment that the Merck patents are invalid and not infringed. During patent prosecution, Merck amended its patent application in an attempt to cover compounds related to sofosbuvir. Initially, in March 2016, a jury determined that we had not established that Merck's patents are invalid for lack of written description or lack of enablement and awarded Merck \$200 million in damages. However, in June 2016, the court ruled in Gilead's favor on our defense of unclean hands and determined that Merck may not recover any damages from us for the '499 and '712 patents. The judge has determined that Merck is required to pay our attorney's fees due to the exceptional nature of this case. The amount of fees owed to us by Merck is yet to be determined by the court.

Merck has filed a notice of appeal to the Court of Appeals for the Federal Circuit regarding the court's decision on our defense of unclean hands. We appealed the issue relating to the invalidity of Merck's patent. If the decision on our defense of unclean hands is reversed on appeal and Merck's patent is upheld, we may be required to pay damages and a royalty on sales of sofosbuvir-containing products following the appeal. In that event, the judge has indicated that she will determine the amount of the royalty, if necessary, at the conclusion of any appeal in this case.

Litigation with the University of Minnesota

The University of Minnesota (the University) has obtained Patent No. 8,815,830 (the '830 patent), which purports to broadly cover nucleosides with antiviral and anticancer activity. In August 2016, the University filed a lawsuit against us in the U.S. District Court for the District of Minnesota, alleging that the commercialization of sofosbuvir-containing products infringes the '830 patent. We believe that the '830 patent is invalid and will not be infringed by the continued commercialization of sofosbuvir.

European Patent Claims

In February 2015, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering sofosbuvir that expires in 2028. In October 2016, the EPO upheld the validity of certain claims of our sofosbuvir patent. We anticipate that the challengers will appeal this decision in favor of our patent. The appeal process may take several years.

In January 2016, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering TAF that expires in 2021.

In March 2016, three parties filed oppositions in the EPO requesting revocation of our granted European patent covering cobicistat that expires in 2027. While we are confident in the strength of our patents, we cannot predict the ultimate outcome of these oppositions.

If we are unsuccessful in defending these oppositions, some or all of our patent claims may be narrowed or revoked and the patent protection for sofosbuvir, TAF and cobicistat in Europe could be substantially shortened or eliminated entirely. If our patents are revoked, and no other European patents are granted covering these compounds, our exclusivity may be based entirely on regulatory exclusivity granted by the European Medicines Agency (EMA). Sovaldi has been granted regulatory exclusivity that will prevent generic sofosbuvir from entering the European Union for 10 years following approval of Sovaldi, or January 2024. If we lose exclusivity for Sovaldi prior to 2028, our expected revenues and results of operations could be negatively impacted for the years including and succeeding the year in which such exclusivity is lost, which may cause our stock price to decline.

Litigation with Generic Manufacturers

As part of the approval process for some of our products, FDA granted us a New Chemical Entity (NCE) exclusivity period during which other manufacturers' applications for approval of generic versions of our product will not be approved. Generic manufacturers may challenge the patents protecting products that have been granted NCE exclusivity one year prior to the end of the NCE exclusivity period. Generic manufacturers have sought and may continue to seek FDA approval for a similar or identical drug through an abbreviated new drug application (ANDA), the application form typically used by manufacturers seeking approval of a generic drug. The sale of generic versions of our products earlier than their patent expiration would have a significant negative effect on our revenues and results of operations. To seek approval for a generic version of a product having NCE status, a generic company may submit its ANDA to FDA four years after the branded product's approval. For sofosbuvir, this date falls in December 2017. Consequently, it is possible that one or more generics may file an ANDA for Sovaldi in December 2017.

Current legal proceedings of significance with generic manufacturers include:

HIV Products

In November 2011, December 2011 and August 2012, we received notices that Teva submitted an abbreviated new drug submission (ANDS) to the Canadian Minister of Health requesting permission to manufacture and market generic versions of Truvada, Atripla and Viread. In the notices, Teva alleges that the patents associated with Truvada, Atripla and Viread are invalid, unenforceable and/or will not be infringed by Teva's manufacture, use or sale of generic versions of those products. We filed lawsuits against Teva in the Federal Court of Canada seeking an order of prohibition against approval of these applications.

In December 2013, the court issued an order prohibiting the Canadian Minister of Health from approving Teva's generic versions of our Viread, Truvada and Atripla products until expiry of our patents in July 2017. Teva has appealed that decision. The court's decision did not rule on the validity of the patents and accordingly the only issue on appeal is whether the Canadian Minister of Health should be prohibited from approving Teva's products. In November 2016, we and Teva entered into a settlement agreement to resolve the ongoing contested proceedings concerning Teva's ANDS for generic versions of Truvada, Atripla, and Viread as well as Gilead's patents associated with Truvada, Atripla, and Viread.

In June 2014, we received notice that Apotex Inc. (Apotex) submitted an ANDS to the Canadian Minister of Health requesting permission to manufacture and market a generic version of Truvada and a separate ANDS requesting permission to manufacture and market a generic version of Viread. In the notice, Apotex alleges that three of the patents associated with Truvada and two of the patents associated with Viread are invalid, unenforceable and/or will not be infringed by Apotex's manufacture, use or sale of a generic version of Truvada or Viread. In August 2014, we filed lawsuits against Apotex in the Federal Court of Canada seeking orders of prohibition against approval of these ANDS. A hearing in those cases was held in April 2016. In July 2016, the court issued an order prohibiting the Canadian Minister of Health from approving Apotex's generic version of our Viread product until the expiry of our patents in July 2017. The court declined to prohibit approval of Apotex's generic version of our Truvada product. The court's decision did not rule on the validity of the patents. The launch of Apotex's generic version of our Truvada product would be at risk of infringement of our patents, including patents that we were unable to assert in the present lawsuit, and liability for our damages. Apotex has appealed the court's decision.

In February 2016, we received notice that Mylan Pharmaceuticals, Inc. (Mylan) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Tybost (cobicistat). In the notice, Mylan alleges that the patent covering cobicistat is invalid as obvious and that Mylan's generic product cannot infringe an invalid claim. In March 2016, we filed lawsuits against Mylan in the U.S. District Court for the District of Delaware and U.S. District Court for the Northern District of West Virginia. In January 2017, we received a letter from Mylan notifying us that it had submitted a duplicate ANDA to FDA for this same product. We are currently evaluating Mylan's letter. The trial in Delaware is scheduled for January 2018. The patent in suit that covers Tybost is also listed in the Orange Book for Stribild and Genvoya.

Letairis

In February 2015, we received notice that Watson Laboratories, Inc. (Watson) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, Watson alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by Watson's manufacture, use or sale of a generic

version of Letairis. In April 2015, we filed a lawsuit against Watson in the U.S. District Court for the District of New Jersey for infringement of our patents. In January 2017, we reached an agreement with Watson to settle the litigation.

In June 2015, we received notice that SigmaPharm Laboratories, LLC (SigmaPharm) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, SigmaPharm alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by SigmaPharm's manufacture, use or sale of a generic version of Letairis. In June 2015, we filed a lawsuit against SigmaPharm in the U.S. District Court for the District of New Jersey for infringement of our patents. The date for trial against SigmaPharm is not yet set but estimated to occur in the second quarter of 2017.

We cannot predict the ultimate outcome of these actions, and we may spend significant resources enforcing and defending these patents. If we are unsuccessful in these lawsuits, some or all of our claims in the patents may be narrowed or invalidated and the patent protection for our products could be substantially shortened. Further, if all of the patents covering one or more products are invalidated, FDA or the Canadian Minister of Health could approve the requests to manufacture a generic version of such products in the United States or Canada, respectively, prior to the expiration date of those patents. The sale of generic versions of these products earlier than their patent expiration could have a significant negative effect on our revenues and results of operations.

TAF Litigation

In January 2016, AIDS Healthcare Foundation, Inc. (AHF) filed a complaint with the U.S. District Court for the Northern District of California against Gilead, Japan Tobacco, Inc. and Japan Tobacco International, U.S.A. (together, JT), and Emory University (Emory). In April 2016, AHF amended its complaint to add Janssen and Johnson & Johnson Inc. (J&J) as defendants. AHF claims that U.S. Patent Nos. 7,390,791; 7,800,788; 8,754,065; 8,148,374; and 8,633,219 are invalid. In addition, AHF claims that Gilead, independently and together with JT, Akros, Janssen and J&J, is violating federal and state antitrust and unfair competition laws in the market for sales of TAF by offering TAF as part of a fixed-dose combination product with elvitegravir, cobicistat and emtricitabine (Genvoya), a fixed-dose combination product with elvitegravir and rilpivirine (Odefsey) and in a fixed-dosed combination product with elvitegravir (Descovy). AHF sought a declaratory judgment of invalidity against each of the patents as well as monetary damages. In May 2016, we, JT, Janssen, and J&J filed motions to dismiss all of AHF's claims, which AHF opposed. In June 2016, a hearing was held on the motions to dismiss. In July 2016, the judge granted our and the other defendants' motions and dismissed all of AHF's claims. AHF has appealed the court's decision dismissing the challenge to the validity of our TAF patents.

Department of Justice Investigations

In June 2011, we received a subpoena from the U.S. Attorney's Office for the Northern District of California requesting documents related to the manufacture, and related quality and distribution practices, of Complera, Atripla, Truvada, Viread, Emtriva, Hepsera and Letairis. We cooperated with the government's inquiry. In April 2014, the United States Department of Justice informed us that, following an investigation, it declined to intervene in a False Claims Act lawsuit filed by two former employees. In April 2014, the former employees served a First Amended Complaint. In January 2015, the federal district court issued an order granting in its entirety, without prejudice, our motion to dismiss the First Amended Complaint. In February 2015, the plaintiffs filed a Second Amended Complaint and in June 2015, the federal district court issued an order granting our motion to dismiss the Second Amended Complaint. In July 2015, the plaintiffs filed a notice of appeal in the U.S. Court of Appeals for Ninth Circuit.

In February 2016, we received a subpoena from the U.S. Attorney's Office for the District of Massachusetts requesting documents related to our support of 501(c)(3) organizations that provide financial assistance to patients, and for our HCV products, documents concerning our provision of financial assistance to patients. Other companies have disclosed similar inquiries. We are cooperating with this inquiry.

Other Matters

We are a party to various legal actions that arose in the ordinary course of our business. We do not believe that these other legal actions will have a material adverse impact on our consolidated business, financial position or results of operations.

Trade Secrets

We also rely on unpatented trade secrets and improvements, unpatented internal know-how and technological innovation. For example, a great deal of our liposomal manufacturing expertise, which is a key component of our liposomal technology, is not covered by patents but is instead protected as a trade secret. We protect these rights mainly through confidentiality agreements with our corporate partners, employees, consultants and vendors. These agreements provide that all confidential information developed or made known to an individual during the course of their relationship with us will be kept confidential and will not be used or disclosed to third parties except in specified circumstances. In the case of employees, the agreements provide that all inventions made by an individual while employed by us will be our exclusive property. We cannot be certain that these parties will

comply with these confidentiality agreements, that we have adequate remedies for any breach or that our trade secrets will not otherwise become known or be independently discovered by our competitors. Under some of our R&D agreements, inventions become jointly owned by us and our corporate partner and in other cases become the exclusive property of one party. In certain circumstances, it can be difficult to determine who owns a particular invention and disputes could arise regarding those inventions. If our trade secrets or confidential information become known or independently discovered by competitors or if we enter into disputes over ownership of inventions, our business and results of operations could be adversely affected.

Manufacturing and Raw Materials

Our manufacturing strategy is to contract with third parties to manufacture the majority of our API and solid dose products. We also rely on our corporate partners to manufacture certain of our products. Additionally, we own or lease manufacturing facilities in Foster City, San Dimas and Oceanside, California; Edmonton, Alberta, Canada and Cork, Ireland, where we manufacture certain products and API for clinical and/or commercial uses.

Manufacturing of our Products

We contract with third parties to manufacture certain API for clinical and commercial purposes, including Epclusa, Harvoni, Sovaldi, Truvada, Atripla, Stribild, Complera/Eviplera, Viread, Genvoya, Odefsey, Descovy, Vemlidy, Emtriva, Tybost, Vitekta, Ranexa, AmBisome, Zydelig and Cayston. We generally use multiple third-party contract manufacturers to manufacture the API in our products. We are the exclusive manufacturer of ambrisentan, the API of Letairis, although another supplier is qualified to make the API of Letairis.

We also rely on third-party contract manufacturers to manufacture our oral liquid, tablet and capsule products. For example, we use multiple third-party contract manufacturers to manufacture our oral liquid, Harvoni, Sovaldi, Truvada, Atripla, Stribild, Complera/Eviplera, Viread, Genvoya, Odefsey, Descovy, Vemlidy, Tybost, Vitekta, Letairis, Ranexa, Zydelig and Hepsera. Emtriva encapsulation is also completed by a third-party contract manufacturer as is the liquid filling of Emtriva Oral Solution. In addition, we rely on third-party contract manufacturers to manufacture our aseptic products such as AmBisome and Cayston.

We also have manufacturing agreements with many of our corporate partners. Roche, by itself and through third parties, is responsible for manufacturing Tamiflu. Under our agreement with Roche, through a joint manufacturing committee composed of representatives from Roche and Gilead, we have the opportunity to review Roche's existing manufacturing capacity for Tamiflu and global plans for manufacturing Tamiflu. Astellas US LLC, our corporate partner for Lexiscan in the United States, is responsible for the commercial manufacture and supply of product in the United States and is dependent on a single supplier for the API of Lexiscan.

For our future products, we continue to develop additional manufacturing capabilities and establish additional third-party suppliers to manufacture sufficient quantities of our product candidates to undertake clinical trials and to manufacture sufficient quantities of any product that is approved for commercial sale.

Our Manufacturing Facilities

At our Foster City, California facility, we conduct process chemistry research and development activities, manufacture API for our clinical trials and oversee our third-party contract manufacturers.

At our San Dimas, California facility, we package and label solid oral dosage form products, including Epclusa, Harvoni, Sovaldi, Truvada, Atripla, Stribild, Complera/Eviplera, Viread, Genvoya, Odefsey, Descovy, Vemlidy, Emtriva, Ranexa and Zydelig, and label Hepsera and Letairis. We also manufacture and label AmBisome and Cayston at our San Dimas facility. We depend on a single supplier for the high quality cholesterol and the API used in the manufacture of AmBisome. Because we are the exclusive supplier of key drug product intermediates of AmBisome, in the event of a disaster, including an earthquake, equipment failure or other difficulty, we may be unable to replace this manufacturing capacity in a timely manner and may be unable to manufacture AmBisome to meet market needs.

We utilize our Cork, Ireland facility primarily for solid dose tablet manufacturing of certain of our antiviral products, as well as product packaging activities. We package and label drug product for Epclusa, Harvoni, Sovaldi, Truvada, Atripla, Stribild, Complera/Eviplera, Viread, Genvoya, Odefsey, Descovy, Vemlidy, Tybost and Vitekta and label Hepsera and Emtriva at our facilities in Cork, Ireland. We also perform quality control testing, final labeling and secondary packaging of both AmBisome and Cayston and final release of many of our products for the European Union and elsewhere at this facility. We distribute our products to the European Union and other international markets from our Dublin, Ireland site.

At our Edmonton, Alberta facility in Canada, we carry out process research and scale-up of our clinical development candidates, manufacture API for both investigational and commercial products and conduct chemical development activities to improve existing commercial manufacturing processes. We also manufacture the API of Letairis and Hepsera at our Edmonton site.

Our Oceanside, California facility is designed and equipped to produce biologic compounds for toxicological, Phase 1 and Phase 2 clinical studies. We use the facility for the process development and manufacture of GS-5745 bulk drug substance, an investigational MMP9 mAb inhibitor, and other biologics.

Third-party Manufacturers

Our third-party manufacturers and corporate partners are independent entities who are subject to their own unique operational and financial risks which are out of our control. If we or any of these third-party manufacturers or corporate partners fail to perform as required, this could impair our ability to deliver our products on a timely basis or receive royalties or cause delays in our clinical trials and applications for regulatory approval. Further, we may have to write-off the costs of manufacturing any batch that fails to pass quality inspection or meet regulatory approval. To the extent these risks materialize and affect their performance obligations to us, our financial results may be adversely affected. In addition, we, our third-party manufacturers and our corporate partners may only be able to produce some of our products at one or a limited number of facilities and, therefore, have limited manufacturing capacity for certain products.

We believe the technology we use to manufacture our products is proprietary. For products manufactured by our third-party contract manufacturers, we have disclosed all necessary aspects of this technology to enable them to manufacture the products for us. We have agreements with these third-party manufacturers that are intended to restrict these manufacturers from using or revealing this technology, but we cannot be certain that these third-party manufacturers will comply with these restrictions. In addition, these third-party manufacturers could develop their own technology related to the work they perform for us that we may need to manufacture our products. We could be required to enter into additional agreements with these third-party manufacturers if we want to use that technology ourselves or allow another manufacturer to use that technology. The third-party manufacturer could refuse to allow us to use their technology or could demand terms to use their technology that are not acceptable to us.

Regulation of Manufacturing Process

The manufacturing process for pharmaceutical products is highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations. We, our third-party manufacturers and our corporate partners are subject to current Good Manufacturing Practices, which are extensive regulations governing manufacturing processes, stability testing, record keeping and quality standards as defined by FDA and EMA. Similar regulations are in effect in other countries.

Our manufacturing operations are subject to routine inspections by regulatory agencies. For example, in 2014, we received a letter from FDA related to the extent of method revalidations being conducted, stability program oversight, audit trail review/data management and Quality Management System gaps. We completed and filed our responses to these observations with FDA. If we are unable to remedy the deficiencies cited by FDA or to the extent there are additional deficiencies cited by FDA in future inspections, our currently marketed products and the timing of regulatory approval of products in development could be adversely affected. Further, there is risk that regulatory agencies in other countries where marketing applications are pending will undertake similar additional reviews or apply a heightened standard of review, which could delay the regulatory approvals for products in those countries. If approval of any of our product candidates were delayed or if production of our marketed products was interrupted, our anticipated revenues and our stock price would be adversely affected.

Access to Supplies and Materials

We need access to certain supplies and products to conduct our clinical trials and manufacture our products. If we are unable to purchase sufficient quantities of these materials or find suitable alternate materials in a timely manner, our development efforts for our product candidates may be delayed or our ability to manufacture our products would be limited, which would limit our ability to generate revenues. For example, a significant portion of the raw materials and intermediates used to manufacture our antiviral products are supplied by third-party manufacturers and corporate partners outside of the United States. As a result, any political or economic factors in a specific country or region, including any changes in or interpretations of trade regulations, compliance requirements or tax legislation, that would limit or prevent third parties outside of the United States from supplying these materials would adversely affect our ability to manufacture and supply our antiviral products to meet market needs and have a material and adverse effect on our operating results.

Seasonal Operations and Backlog

Our worldwide product sales do not reflect any significant degree of seasonality.

For the most part, we operate in markets characterized by short lead times and the absence of significant backlogs. We do not believe that backlog information is material to our business as a whole.

Government Regulation

Our operations and activities are subject to extensive regulation by numerous government authorities in the United States and other countries. In the United States, the European Union and other countries, drugs are subject to rigorous regulation. Federal and state statutes and regulations govern the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of our products. As a result of these regulations, product development and product approval processes are very expensive and time consuming. The regulatory requirements applicable to drug development and approval are subject to change. For example, in December 2016, former U.S. President Obama signed into law the 21st Century Cures Act, which contains a broad range of measures aimed at spurring drug discovery, development and delivery. These and other legal and regulatory changes may impact our operations in the future.

A country's regulatory agency, such as FDA in the United States and EMA for the European Union, must approve a drug before it can be sold in the respective country or countries. The general process for drug approval in the United States is summarized below. Many other countries, including countries in the European Union and Japan, have very similar regulatory structures.

Preclinical Testing

Before we can test a drug candidate in humans, we must study the drug in laboratory experiments and in animals to generate data to support the drug candidate's potential benefits and safety. We submit this data to FDA in an investigational new drug (IND) application seeking its approval to test the compound in humans.

Clinical Trials

If FDA accepts the IND, the drug candidate can then be studied in human clinical trials to determine if the drug candidate is safe and effective. These clinical trials involve three separate phases that often overlap, can take many years and are very expensive. These three phases, which are subject to considerable regulation, are as follows:

- Phase 1. The drug candidate is given to a small number of healthy human control subjects or patients suffering from the indicated disease, to test for safety, dose tolerance, pharmacokinetics, metabolism, distribution and excretion.
- Phase 2. The drug candidate is given to a limited patient population to determine the effect of the drug candidate in treating the disease, the best dose of the drug candidate, and the possible side effects and safety risks of the drug candidate. It is not uncommon for a drug candidate that appears promising in Phase 1 clinical trials to fail in the more rigorous Phase 2 clinical trials.
- Phase 3. If a drug candidate appears to be effective and safe in Phase 2 clinical trials, Phase 3 clinical trials are commenced to confirm those results. Phase 3 clinical trials are conducted over a longer term, involve a significantly larger population, are conducted at numerous sites in different geographic regions and are carefully designed to provide reliable and conclusive data regarding the safety and benefits of a drug candidate. It is not uncommon for a drug candidate that appears promising in Phase 2 clinical trials to fail in the more rigorous and extensive Phase 3 clinical trials.

FDA Approval Process

When we believe that the data from our clinical trials show an acceptable benefit-risk profile, we submit the appropriate filing, usually in the form of an NDA or supplemental NDA, with FDA seeking approval to sell the drug candidate for a particular use. FDA may hold a public hearing where an independent advisory committee of expert advisors asks additional questions and makes recommendations regarding the drug candidate. This committee makes a recommendation to FDA that is not binding but is generally followed by FDA. If FDA agrees that the compound has met the required level of safety and efficacy for a particular use, it will allow us to sell the drug candidate in the United States for that use. It is not unusual, however, for FDA to reject an application because it believes that the drug candidate is not safe enough or efficacious enough or because it does not believe that the data submitted is reliable or conclusive.

At any point in this process, the development of a drug candidate can be stopped for a number of reasons including safety concerns and lack of treatment benefit. We cannot be certain that any clinical trials that we are currently conducting or any that we conduct in the future will be completed successfully or within any specified time period. We may choose, or FDA may require us, to delay or suspend our clinical trials at any time if it appears that the patients are being exposed to an unacceptable health risk or if the drug candidate does not appear to have sufficient treatment benefit.

FDA may also require Phase 4 non-registrational studies to explore scientific questions to further characterize safety and efficacy during commercial use of our drug. FDA may also require us to provide additional data or information, improve our manufacturing processes, procedures or facilities or may require extensive surveillance to monitor the safety or benefits of our product candidates if it determines that our filing does not contain adequate evidence of the safety and benefits of the drug. In addition, even if FDA approves a drug, it could limit the uses of the drug. FDA can withdraw approvals if it does not believe that we are complying with regulatory standards or if problems are uncovered or occur after approval.

In addition to obtaining FDA approval for each drug, we obtain FDA approval of the manufacturing facilities for any drug we sell, including those of companies who manufacture our drugs for us. All of these facilities are subject to periodic inspections by FDA. FDA must also approve foreign establishments that manufacture products to be sold in the United States and these facilities are subject to periodic regulatory inspection. Our manufacturing facilities located in California, including our Oceanside and San Dimas facilities, also must be licensed by the State of California in compliance with local regulatory requirements. Our manufacturing facilities located in Canada, including our Edmonton, Alberta facility, and our facilities located near Dublin and in Cork, Ireland, also must obtain local licenses and permits in compliance with local regulatory requirements.

Drugs that treat serious or life threatening diseases and conditions that are not adequately addressed by existing drugs, and for which the development program is designed to address the unmet medical need, may be designated as fast track candidates by FDA and may be eligible for priority review. Drugs for the treatment of HIV infection that are designated for use under the U.S. President's Emergency Plan for AIDS Relief may also qualify for an expedited or priority review.

Rest of World

Drugs are also subject to extensive regulation outside of the United States. In the European Union, there is a centralized approval procedure that authorizes marketing of a product in all countries of the European Union (which includes most major countries in Europe). If this centralized approval procedure is not used, approval in one country of the European Union can be used to obtain approval in another country of the European Union under one of two simplified application processes: the mutual recognition procedure or the decentralized procedure, both of which rely on the principle of mutual recognition. After receiving regulatory approval through any of the European registration procedures, separate pricing and reimbursement approvals are also required in most countries. The European Union also has requirements for approval of manufacturing facilities for all products that are approved for sale by the European regulatory authorities.

Pricing and Reimbursement

Successful commercialization of our products depends, in part, on the availability of governmental and third-party payer reimbursement for the cost of such products and related treatments in the markets where we sell our products. Government health authorities, private health insurers and other organizations generally provide reimbursement. In the United States, the European Union, Japan and other significant or potentially significant markets for our products and product candidates, government authorities and third-party payers are increasingly attempting to limit or regulate the price of medical products and services. A significant portion of our sales of the majority of our products are subject to substantial discounts from list price.

In addition, the non-retail sector in the United States, which includes government institutions, including state ADAPs, Veterans Administration (VA), correctional facilities and large health maintenance organizations, tends to be even less consistent in terms of buying patterns and often causes quarter-over-quarter fluctuations that do not necessarily mirror patient demand for our products. Federal and state budget pressures, including sequestration, as well as the annual grant cycles for federal and state funds, may cause purchasing patterns to not reflect patient demand of our products. For example, in the first quarters of certain prior years, we observed large non-retail purchases of our HIV products by a number of state ADAPs that exceeded patient demand. We believe such purchases were driven by the grant cycle for federal ADAP funds. Additionally, during the second half of 2016, we experienced fluctuations in VA new HCV patient starts and purchasing patterns due to VA funding. We expect to continue to experience fluctuations in the purchasing patterns of our non-retail customers which may result in fluctuations in our product sales, revenues and earnings in the future. In light of the global economic downturn and budget crises faced by many European countries, we have observed variations in purchasing patterns induced by cost containment measures in Europe. We believe these measures have caused some government agencies and other purchasers to reduce inventory of our products in the distribution channels, which has decreased our revenues and caused fluctuations in our product sales and earnings. We may continue to see this trend in the future.

In addition, future sales of our HCV products are difficult to estimate because demand depends, in part, on the extent of reimbursement of our HCV products by private and government payers. In light of continued fiscal and debt crises experienced by several countries in the European Union and Japan, governments have announced or implemented measures to manage healthcare expenditures. We may continue to experience global pricing pressure which could result in larger discounts or rebates on our products or delayed reimbursement, which negatively impacts our product sales and results of operations. Also, private and public payers can choose to exclude our HCV products from their formulary coverage lists or limit the types of patients for whom coverage will be provided, which would negatively impact the demand for, and revenues of, our HCV products. Any change in the formulary coverage, reimbursement levels or discounts or rebates offered on our HCV products to payers may impact our anticipated revenues. We expect pricing pressure in the HCV market to continue.

As our products mature, private insurers and government payers often reduce the amount they will reimburse patients, which increases pressure on us to reduce prices. Further, as new branded or generic products are introduced into major markets, our ability to maintain pricing and market share may be affected.

See also our Item 1A - risk factor "A substantial portion of our revenues is derived from sales of products to treat HCV and HIV. If we are unable to maintain or continue increasing sales of these products, our results of operations may be adversely affected."

In February 2016, we received a subpoena from the U.S. Attorney's Office for the District of Massachusetts requesting documents related to our support of 501(c)(3) organizations that provide financial assistance to patients, and for our HCV products, documents concerning our provision of financial assistance to patients. Other companies have disclosed similar inquiries. We are cooperating with this inquiry. It is possible that any actions taken by the U.S. Department of Justice could result in civil penalties or injunctive relief, negative publicity or other negative actions that could harm our reputation, reduce demand for our products and/or reduce coverage of our products, including by federal health care programs such as Medicare and Medicaid and state health care programs. If any or all of these events occur, our business and stock price could be materially and adversely affected.

United States Healthcare Reform

Legislative and regulatory changes to government prescription drug procurement and reimbursement programs occur relatively frequently in the United States and foreign jurisdictions. In the United States, we, along with other pharmaceutical manufacturers of branded drug products, are required to pay a portion of an industry fee (also known as the branded prescription drug (BPD) fee), calculated based on select government sales during the year as a percentage of total industry government sales. The amount of the annual BPD fee imposed on the pharmaceutical industry as a whole was \$3.0 billion in 2016, and will increase to \$4.0 billion in 2017, increase to a peak of \$4.1 billion in 2018, and then decrease to \$2.8 billion in 2019 and thereafter. Our BPD fee expenses were \$270 million in 2016, \$414 million in 2015 and \$590 million in 2014. The BPD fee is not tax deductible. In addition, discussions continue at the federal level on legislation that would either allow or require the federal government to directly negotiate price concessions from pharmaceutical manufacturers or set minimum requirements for Medicare Part D pricing. Further, certain states have proposed legislation that seeks to regulate pharmaceutical drug pricing. If such proposed legislation is passed, we may experience additional pricing pressures on our products.

There has been extensive discussion about a possible repeal or amendment of The Patient Protection and Affordable Care Act (the Affordable Care Act) or other government action, which could negatively impact the use and/or reimbursement of our products. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, that while not law, is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of the Affordable Care Act. Further, on January 20, 2017, the new administration issued an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress could also consider legislation to replace repealed elements of the Affordable Care Act.

In addition, many states have proposed legislation that seeks to indirectly or directly regulate pharmaceutical drug pricing by requiring biopharmaceutical manufacturers to publicly report proprietary pricing information or to place a maximum price ceiling on pharmaceutical products purchased by state agencies. If such proposed legislation is passed, we may experience additional pricing pressures on our products. Similar bills have been previously introduced at the federal level and we expect that additional legislation may be introduced this year. The potential effect of health insurance market destabilization during ongoing repeal and replace discussions, as well as the impact of potential changes to the way the Medicaid program is financed, will likely affect patients' sources of insurance and resultant drug coverage. Discussions continue at the federal level regarding policies that would either allow or require the U.S. government to directly negotiate drug prices with pharmaceutical manufacturers for Medicare patients, require manufacturers to pay higher rebates in Medicare Part D, give states more flexibility on drugs that are covered under the Medicaid program, and other policy proposals that could impact reimbursement for our products. Other discussions have centered on legislation that would permit the re-importation of prescription medications from Canada or other countries. It is difficult to predict the impact, if any, of any such legislation on the use and reimbursement of our products in the United States, including the potential for the importation of generic versions of our products.

In addition, state Medicaid programs could request additional supplemental rebates on our products as a result of the increase in the federal base Medicaid rebate. Private insurers could also use the enactment of these increased rebates to exert pricing pressure on our products, and to the extent that private insurers or managed care programs follow Medicaid coverage and payment developments, the adverse effects may be magnified by private insurers adopting lower payment schedules.

Health Care Fraud and Abuse Laws and Anti-Bribery Laws

We are subject to various federal and state laws pertaining to health care "fraud and abuse," including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal for 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 to the breadth of the statutory provisions and the increasing attention being given to them by law enforcement authorities, it is possible that certain of our practices may be challenged under anti-kickback or similar laws. False claims laws generally prohibit anyone from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment by federal and certain state

payers (including Medicare and Medicaid), or knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim. Our sales, marketing, patient support and medical activities may be subject to scrutiny under these laws. In addition, the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws generally prohibit companies and their intermediaries from making improper payments for the purpose of obtaining or retaining business. Our policies mandate compliance with these anti-bribery laws. We operate in parts of the world that have experienced governmental corruption to some degree. In certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices or may require us to interact with doctors and hospitals, some of which may be state controlled, in a manner that is different than local custom. Despite our training and compliance program, our internal control policies and procedures may not protect us from reckless or criminal acts committed by our employees or agents. Violations of fraud and abuse laws or anti-bribery 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 health care programs (including Medicare and Medicaid). Violations can also lead to the imposition of a Corporate Integrity Agreement or similar government oversight program. If the government were to allege against or convict us of violating these laws, there could be a disruption on our business and material adverse effect on our results of operations.

Compulsory Licenses

In a number of developing countries, government officials and other interested groups have suggested that pharmaceutical companies should make drugs for HCV or HIV infection available at low cost. Alternatively, governments in those developing countries could require that we grant compulsory licenses to allow competitors to manufacture and sell their own versions of our products, thereby reducing our product sales. For example, there is growing attention on the availability of HCV therapies and some activists are advocating for the increased availability of HCV therapies through other means including compulsory licenses. In the past, certain offices of the government of Brazil have expressed concern over the affordability of our HIV products and declared that they were considering issuing compulsory licenses to permit the manufacture of otherwise patented products for HIV infection, including Viread. In addition, concerns over the cost and availability of Tamiflu related to a potential avian flu pandemic and H1N1 influenza generated international discussions over compulsory licensing of our Tamiflu patents. For example, the Canadian government considered allowing Canadian manufacturers to manufacture and export the active ingredient in Tamiflu to eligible developing and least developed countries under Canada's Access to Medicines Regime. Furthermore, Roche issued voluntary licenses to permit third-party manufacturing of Tamiflu. For example, Roche granted a sublicense to Shanghai Pharmaceutical (Group) Co., Ltd. for China and a sublicense to India's Hetero Drugs Limited for India and certain developing countries. If compulsory licenses permit generic manufacturing to override our product patents for our HCV products, HIV products or Tamiflu, or if we are required to grant compulsory licenses for these products, it could reduce our earnings and cash flows and harm our business.

In addition, certain countries do not permit enforcement of our patents, or permit our patents to issue, and third-party manufacturers are able to sell generic versions of our products in those countries. For example, in July 2009, the Brazilian patent authority rejected our patent application for TDF, the active pharmaceutical ingredient in Viread. This was the highest level of appeal available to us within the Brazilian patent authority. Because we do not currently have a patent in Brazil, the Brazilian government now purchases its supply of TDF from generic manufacturers. In the first quarter of 2017, the Brazilian Health Regulatory Agency rejected our patent applications related to sofosbuvir and our HCV products. We plan to appeal this decision. Sales of generic versions of our products could significantly reduce our sales and adversely affect our results of operations, particularly if generic versions of our products are imported into territories where we have existing commercial sales.

Employees

As of January 31, 2017, we had approximately 9,000 employees. We believe we have good relations with our employees.

Environment, Health and Safety

We strive to reduce our environmental footprint and implement sustainable business process and practices. We incorporate sustainability throughout the development and distribution of our medicines. From the safety and regulatory compliance of our products to the regular efficiency improvements we make to our manufacturing processes, the operations surrounding our product portfolio are routinely evaluated for new and innovative ways to further incorporate social and environmental responsibility. Our practices include ethical sourcing of materials, green chemistry practices, solvent recycling and continued improvements to the sustainability and efficiency of the API and product development process. Gilead sites around the world identify opportunities to reduce natural resource usage through water conservation, sustainable building practices, energy conservation, recycling and diversion from landfill and alternative transportation. We continue to look for ways to minimize our impact on the environment. Some factors that contribute to our environmental impact include greenhouse gas emissions produced by employee commutes, the energy and water consumed by our facilities, and the use of hazardous materials such as chemicals, viruses and radioactive compounds in our R&D facilities. Please refer to our 2015 Corporate Social Responsibility Report found on our website at

www.gilead.com under “Responsibility” for some of the measures we have taken to mitigate the environmental impact from our business.

We are subject to a number of laws and regulations that require compliance with federal, state, and local regulations regarding workplace safety and protection of the environment. We anticipate additional regulations in the near future. Laws and regulations are implemented and under consideration to mitigate the effects of climate change mainly caused by greenhouse gas emissions. Our business is not energy intensive. Therefore, we do not anticipate being subject to a cap and trade system or other mitigation measure that would materially impact our capital expenditures, operations, or competitive position. Based on current information, and subject to the finalization of proposed regulations, we believe that our primary risk related to climate change is increased energy costs.

Other Information

We are subject to the information requirements of the Exchange Act. Therefore, we file periodic reports, proxy statements and other information with the SEC. Such reports, proxy statements and other information may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549 or by calling the SEC at 1-800-SEC-0330, by sending an electronic message to the SEC at publicinfo@sec.gov or by sending a fax to the SEC at 1-202-777-1027. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

The mailing address of our headquarters is 333 Lakeside Drive, Foster City, California 94404, and our telephone number at that location is 650-574-3000. Our website is www.gilead.com. Through a link on the “Investors” section of our website (under “SEC Filings” in the “Financial Information” section), we make available the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the SEC: our Annual Reports on Form 10-K; Quarterly Reports on Form 10-Q; Current Reports on Form 8-K; and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. All such filings are available free of charge upon request.

Transactions with Iran

We did not have any transactions with Iran during 2016 that would require disclosure in this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

In evaluating our business, you should carefully consider the following risks in addition to the other information in this Annual Report on Form 10-K. A manifestation of any of the following risks could materially and adversely affect our business, results of operations and financial condition. We note these factors for investors as permitted by the Private Securities Litigation Reform Act of 1995. It is not possible to predict or identify all such factors and, therefore, you should not consider the following risks to be a complete statement of all the potential risks or uncertainties that we face.

A substantial portion of our revenues is derived from sales of products to treat HCV and HIV. If we are unable to increase HIV sales or if HCV sales decrease more than anticipated, then our results of operations may be adversely affected.

During the year ended December 31, 2016, sales of Epclusa, Harvoni and Sovaldi for the treatment of HCV accounted for approximately 50% of our total product sales. The primary driver of our HCV product revenues is patient starts, followed by market share, average treatment duration and price. Since the second quarter of 2015, the number of new patient starts has diminished, and we expect patient starts to decline relative to 2016 in all major markets, resulting in a decline in HCV revenues. Revenue per patient may also decline as a result of increased competition and pricing pressures, a larger than anticipated shift in our payer mix to more highly discounted payer segments and geographic regions and a decrease in the average duration of treatment as fewer patients are treated for 24 or 12 weeks and more patients are treated for 8 weeks. We also could experience a decline in market share due to increased competition from new HCV products that enter the market.

In addition, future sales of Epclusa, Harvoni and Sovaldi are difficult to estimate because demand depends, in part, on the extent of reimbursement of our HCV products by private and government payers. In light of continued financial crises experienced by several countries in the European Union, some governments have announced or implemented measures to further reduce healthcare expenditures. We may continue to experience global pricing pressure which could result in larger discounts or rebates on our products or delayed reimbursement, which negatively impacts our product sales and results of operations. Also, private and public payers can choose to exclude Epclusa, Harvoni and Sovaldi from their formulary coverage lists or limit the types of patients for whom coverage will be provided, which would negatively impact the demand for, and revenues of, Epclusa, Harvoni and Sovaldi. Any change in the formulary coverage, reimbursement levels or discounts or rebates offered on our HCV products to payers may impact our anticipated revenues. We expect pricing pressure in the HCV market to continue. If we are unable to achieve our forecasted HCV sales, our HCV product revenues and results of operations could be negatively affected, and our stock price could experience significant volatility.

We receive a substantial portion of our revenue from sales of our products for the treatment of HIV infection, which include Descovy, Odefsey, Genvoya, Truvada, Stribild, Complera/Eviplera and Atripla. During the year ended December 31, 2016, sales of our HIV products accounted for approximately 43% of our total product sales. Most of our HIV products contain tenofovir alafenamide (TAF), tenofovir disoproxil fumarate (TDF) and/or emtricitabine, which belong to the nucleoside class of antiviral therapeutics. In addition, if the treatment paradigm for HIV changes, causing nucleoside-based therapeutics to fall out of favor, or if we are unable to maintain or increase our HIV product sales, our results of operations would likely suffer and we would likely need to scale back our operations, including our spending on research and development (R&D) efforts.

We may be unable to sustain or increase sales of our HCV or HIV products for any number of reasons including, but not limited to, the reasons discussed above and the following:

- As our HCV and HIV products are used over a longer period of time in many patients and in combination with other products, and additional studies are conducted, new issues with respect to safety, resistance and interactions with other drugs may arise, which could cause us to provide additional warnings or contraindications on our labels, narrow our approved indications or halt sales of a product, each of which could reduce our revenues.
- As our products mature, private insurers and government payers often reduce the amount they will reimburse patients for these products, which increases pressure on us to reduce prices.
- If physicians do not see the benefit of our HCV or HIV products, the sales of our HCV or HIV products will be limited.
- As new branded or generic products are introduced into major markets, our ability to maintain pricing and market share may be affected. For example, TDF, one of the active pharmaceutical ingredients in Stribild, Complera/Eviplera, Atripla and Truvada, and the main active pharmaceutical ingredient in Viread, is expected to face generic competition in the United States, the European Union and other countries in 2017. In addition, because emtricitabine, the other active pharmaceutical ingredient of Truvada, faced generic competition in the European Union in 2016, Truvada is also expected to face generic competition in the European Union and other countries outside of the United States in 2017. This may have a negative impact on our business and results of operations.

If we fail to commercialize new products or expand the indications for existing products, our prospects for future revenues may be adversely affected.

If we do not introduce new products or increase sales of our existing products, we will not be able to increase or maintain our total revenues nor continue to expand our R&D efforts. Drug development is inherently risky and many product candidates fail during the drug development process. For example, during 2016 we announced that we terminated our Phase 2 and 2b studies of simtuzumab for the treatment of idiopathic pulmonary fibrosis, NASH and primary sclerosing cholangitis, our Phase 2 and 2/3 studies of GS-5745 for the treatment of Crohn's Disease and ulcerative colitis, our Phase 2 studies of selonsertib for the treatment of pulmonary arterial hypertension and diabetic kidney disease, and our studies of eleclazine for the treatment of cardiovascular diseases. In addition, we may decide to terminate product development after expending significant resources and effort. For example, after completion of two Phase 3 studies of momelotinib for the treatment of myelofibrosis in 2016, we decided to terminate the development of momelotinib.

In the fourth quarter of 2016 and the first quarter of 2017, we filed our new drug application (NDA) and marketing authorization application (MAA) in the United States and European Union for the approval of an investigational, once-daily, single-tablet regimen of sofosbuvir 400 mg, velpatasvir 100 mg and voxilaprevir 100 mg (SOF/VEL/VOX) for the treatment of direct-acting antiviral (DAA)-experienced HCV-infected patients. These and any future marketing applications we file may not be approved by the regulatory authorities on a timely basis, or at all. Even if marketing approval is granted for these products, there may be significant limitations on their use. Further, we may be unable to file our marketing applications for new products.

Our inability to accurately predict demand for our products, uptake of new products or fluctuations in customer inventories makes it difficult for us to accurately forecast sales and may cause our forecasted revenues and earnings to fluctuate, which could adversely affect our financial results and our stock price.

We may be unable to accurately predict demand for our products, including the uptake of new products, as demand is dependent on a number of factors. For example, our HCV products, Epclusa, Harvoni and Sovaldi, represent a significant change in the treatment paradigm for HCV-infected patients due to the shortened duration of treatment and the elimination of pegylated interferon injection and ribavirin in most patient populations. Because these products represent a cure and competitors' HCV products have entered the market and will continue to enter the market, revenues from our HCV products are difficult for us and investors to estimate. The primary driver of our HCV product revenues is patient starts, followed by market share, average treatment duration and price. In our experience, the number of patient starts is very difficult to accurately predict. In addition, demand for Epclusa, Harvoni and Sovaldi will depend on the extent of reimbursement of our HCV products by private and public payers in the United States and other countries. Private and public payers can choose to exclude Epclusa, Harvoni or Sovaldi from their formulary coverage lists or limit the types of patients for whom coverage will be provided, which would negatively impact the demand for

and revenues of Eclusa, Harvoni and Sovaldi. We continue to experience pricing pressure in the United States, the European Union, Japan and other countries. Any change in the formulary coverage, reimbursement levels or discounts or rebates offered on our HCV products to payers may negatively impact our anticipated revenues. In addition, because rebate claims for product discounts are made by payers one or two quarters in arrears, we estimate the rebates we will be required to pay in connection with sales during a particular quarter based on claims data from prior quarters. In the first quarter of 2016, we received higher than expected prior quarter rebate claims. This had the effect of lowering our revenue for the quarter. Because HCV-related revenues are difficult to predict, investors may have widely varying expectations that may be materially higher or lower than our actual or anticipated revenues. To the extent our actual or anticipated HCV product revenues exceed or fall short of these expectations, our stock price may experience significant volatility.

During the year ended December 31, 2016, approximately 88% of our product sales in the United States were to three wholesalers, McKesson Corp., AmerisourceBergen Corp., and Cardinal Health, Inc. The U.S. wholesalers with whom we have entered into inventory management agreements make estimates to determine end user demand and may not be completely effective in matching their inventory levels to actual end user demand. As a result, changes in inventory levels held by those wholesalers can cause our operating results to fluctuate unexpectedly if our sales to these wholesalers do not match end user demand. In addition, inventory is held at retail pharmacies and other non-wholesaler locations with whom we have no inventory management agreements and no control over buying patterns. Adverse changes in economic conditions or other factors may cause retail pharmacies to reduce their inventories of our products, which would reduce their orders from wholesalers and, consequently, the wholesalers' orders from us, even if end user demand has not changed. For example, during the fourth quarter of 2015, strong wholesaler and sub-wholesaler purchases of our HIV products resulted in inventory draw-down by wholesalers and sub-wholesalers in the first quarter of 2016. As inventory in the distribution channel fluctuates from quarter to quarter, we may continue to see fluctuations in our earnings and a mismatch between prescription demand for our products and our revenues.

In addition, the non-retail sector in the United States, which includes government institutions, including state ADAPs, VA, correctional facilities and large health maintenance organizations, tends to be even less consistent in terms of buying patterns and often causes quarter-over-quarter fluctuations that do not necessarily mirror patient demand for our products. Federal and state budget pressures, including sequestration, as well as the annual grant cycles for federal and state funds, may cause purchasing patterns to not reflect patient demand of our products. For example, in the first quarters of certain prior years, we observed large non-retail purchases of our HIV products by a number of state ADAPs that exceeded patient demand. We believe such purchases were driven by the grant cycle for federal ADAP funds. Additionally, during the second half of 2016, we experienced fluctuations in VA new HCV patient starts and purchasing patterns due to VA funding. We expect to continue to experience fluctuations in the purchasing patterns of our non-retail customers which may result in fluctuations in our product sales, revenues and earnings in the future. In light of the global economic downturn and budget crises faced by many European countries, we have observed variations in purchasing patterns induced by cost containment measures in Europe. We believe these measures have caused some government agencies and other purchasers to reduce inventory of our products in the distribution channels, which has decreased our revenues and caused fluctuations in our product sales and earnings. We may continue to see this trend in the future.

We may be required to pay significant damages to Merck as a result of a jury's finding that we willfully infringed a patent owned by Merck's Idenix subsidiary.

In December 2013, Idenix, Universita Degli Studi di Cagliari (UDSG), Centre National de la Recherche Scientifique and L'Université Montpellier II sued us in U.S. District Court for the District of Delaware alleging that the commercialization of sofosbuvir will infringe Idenix's U.S. Patent No. 7,608,600 (the '600 patent) and that an interference exists between the '600 patent and our U.S. Patent No. 8,415,322. Also in December 2013, Idenix and UDSG sued us in the U.S. District Court for the District of Massachusetts alleging that the commercialization of sofosbuvir will infringe U.S. Patent Nos. 6,914,054 (the '054 patent) and 7,608,597 (the '597 patent). In June 2014, the court transferred the Massachusetts litigation to the U.S. District Court for the District of Delaware. Idenix was acquired by Merck in August 2014.

A jury trial was held in December 2016 on the '597 patent. In December 2016, the jury found that we willfully infringed the asserted claims of the '597 patent and awarded Idenix \$2.54 billion in past damages. The parties will file post-trial motions and briefings during the first quarter of 2017, and we expect the judge to rule in the third or fourth quarter of 2017. Once the judge has issued these rulings, the case will move to the U.S. Court of Appeal for the Federal Circuit.

Although we cannot predict with certainty the ultimate outcome of this litigation, we believe the jury verdict to be in error, and that errors were also made by the court with respect to certain rulings made before and during trial. We expect that our arguments in the forthcoming post-trial motions and on appeal will focus on one or more of the arguments we made to the judge and jury, those being (i) when properly construed, Gilead does not infringe the claims of the '597 patent, (ii) the patent is invalid for failure to properly describe the claimed invention and (iii) the patent is invalid because it does not enable one of skill in the art to practice the claimed invention.

If the jury's verdict is upheld on appeal, our estimated potential loss as of December 31, 2016 would include (i) the \$2.54 billion determined by the jury, which represents 10% of our adjusted revenues from sofosbuvir containing products from launch

through August 2016, (ii) approximately \$230 million, which represents 10% of our adjusted revenues from sofosbuvir containing products from September 2016 through December 31, 2016, (iii) pre-judgment interest, (iv) enhanced damages of up to three times the sum of (i) and (ii) above as a result of the jury's finding of willfulness, and (v) attorney's fees. Therefore, we estimate the range of possible loss through December 31, 2016 to be between zero and \$8.5 billion. This sum excludes (i) an immaterial amount related to pre-judgment sales and interest in January 2017, and (ii) going forward royalties yet to be assessed by the court, which we have estimated would be 10%, but which could be up to three times higher as a result of the jury's finding of willfulness, and which would be payable based on adjusted revenues from sofosbuvir-containing products for the period from January 26, 2017 through expiry of the Idenix patent in May 2021. We expect the judge to rule on the amount of going forward royalties and any enhanced damages in the course of deciding the post-trial motions at a time to be determined by the judge in this case. The court's determination of enhanced damages, if any, can also be appealed.

If the jury's verdict is upheld on appeal, the amount we could be required to pay could be material. The timing and magnitude of the amount of any such payment could have a material adverse impact on our results of operations and stock price.

Our results of operations may be adversely affected by current and potential future healthcare reforms.

Legislative and regulatory changes to government prescription drug procurement and reimbursement programs occur relatively frequently in the United States and foreign jurisdictions. In the United States, we, along with other pharmaceutical manufacturers of branded drug products, are required to pay a portion of an industry fee (also known as the branded prescription drug (BPD) fee), calculated based on select government sales during the year as a percentage of total industry government sales. The amount of the annual BPD fee imposed on the pharmaceutical industry as a whole is \$3.0 billion in 2016, which will increase to \$4.0 billion in 2017, increase to a peak of \$4.1 billion in 2018, and then decrease to \$2.8 billion in 2019 and thereafter. Our BPD fee expenses were \$270 million in 2016, \$414 million in 2015 and \$590 million in 2014. The BPD fee is not tax deductible.

There has been extensive discussion about a possible repeal or amendment of The Patient Protection and Affordable Care Act (the Affordable Care Act) or other government action, which could negatively impact the use and/or reimbursement of our products. In January 2017, Congress voted to adopt a budget resolution for fiscal year 2017, that while not law, is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of the Affordable Care Act. Further, on January 20, 2017, the new administration issued an Executive Order directing federal agencies with authorities and responsibilities under the Affordable Care Act to waive, defer, grant exemptions from, or delay the implementation of any provision of the Affordable Care Act that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress could also consider legislation to replace repealed elements of the Affordable Care Act.

In addition, many states have proposed legislation that seeks to indirectly or directly regulate pharmaceutical drug pricing by requiring biopharmaceutical manufacturers to publicly report proprietary pricing information or to place a maximum price ceiling on pharmaceutical products purchased by state agencies. If such proposed legislation is passed, we may experience additional pricing pressures on our products. Similar bills have been previously introduced at the federal level and we expect that additional legislation may be introduced this year. The potential effect of health insurance market destabilization during ongoing repeal and replace discussions, as well as the impact of potential changes to the way the Medicaid program is financed, will likely affect patients' sources of insurance and resultant drug coverage. Discussions continue at the federal level regarding policies that would either allow or require the U.S. government to directly negotiate drug prices with pharmaceutical manufacturers for Medicare patients, require manufacturers to pay higher rebates in Medicare Part D, give states more flexibility on drugs that are covered under the Medicaid program, and other policy proposals that could impact reimbursement for our products. Other discussions have centered on legislation that would permit the re-importation of prescription medications from Canada or other countries. It is difficult to predict the impact, if any, of any such legislation on the use and reimbursement of our products in the United States, including the potential for the importation of generic versions of our products.

In addition, state Medicaid programs could request additional supplemental rebates on our products as a result of the increase in the federal base Medicaid rebate. Private insurers could also use the enactment of these increased rebates to exert pricing pressure on our products, and to the extent that private insurers or managed care programs follow Medicaid coverage and payment developments, the adverse effects may be magnified by private insurers adopting lower payment schedules.

Our existing products are subject to reimbursement from government agencies and other third parties. Pharmaceutical pricing and reimbursement pressures may reduce profitability.

Successful commercialization of our products depends, in part, on the availability of governmental and third-party payer reimbursement for the cost of such products and related treatments in the markets where we sell our products. Government health authorities, private health insurers and other organizations generally provide reimbursement. In the United States, the European Union, Japan and other significant or potentially significant markets for our products and product candidates, government authorities and third-party payers are increasingly attempting to limit or regulate the price of medical products and services. A significant portion of our sales of the majority of our products are subject to significant discounts from list price. See also our risk factor "A

substantial portion of our revenues is derived from sales of products to treat HCV and HIV. If we are unable to maintain or continue increasing sales of these products, our results of operations may be adversely affected.”

Patient assistance programs for pharmaceutical products have come under increasing scrutiny by governments, legislative bodies and enforcement agencies. These activities may result in actions that have the effect of reducing prices or harming our business or reputation.

Recently, there has been enhanced scrutiny of company-sponsored patient assistance programs, including insurance premium and co-pay assistance programs and donations to third-party charities that provide such assistance. If we, or our vendors or donation recipients, are deemed to have failed to comply with relevant laws, regulations or government guidance in any of these areas, we could be subject to criminal and civil sanctions, including significant fines, civil monetary penalties and exclusion from participation in government healthcare programs, including Medicare and Medicaid, actions against executives overseeing our business, and burdensome remediation measures.

In February 2016, we received a subpoena from the U.S. Attorney’s Office for the District of Massachusetts requesting documents related to our support of 501(c)(3) organizations that provide financial assistance to patients, and for our HCV products, documents concerning our provision of financial assistance to patients. Other companies have disclosed similar inquiries. We are cooperating with this inquiry.

It is possible that any actions taken by the U.S. Department of Justice as a result of this inquiry or any future action taken by federal or local governments, legislative bodies and enforcement agencies could result in civil penalties or injunctive relief, negative publicity or other negative actions that could harm our reputation, reduce demand for our products and/or reduce coverage of our products, including by federal health care programs such as Medicare and Medicaid and state health care programs. If any or all of these events occur, our business and stock price could be materially and adversely affected.

Approximately 36% of our product sales occur outside the United States, and currency fluctuations and hedging expenses may cause our earnings to fluctuate, which could adversely affect our stock price.

Because a significant percentage of our product sales are denominated in foreign currencies, primarily the Euro and Yen, we face exposure to adverse movements in foreign currency exchange rates. When the U.S. dollar strengthens against these foreign currencies, the relative value of sales made in the respective foreign currency decreases. Conversely, when the U.S. dollar weakens against these currencies, the relative value of such sales increases. Overall, we are a net receiver of foreign currencies and, therefore, benefit from a weaker U.S. dollar and are adversely affected by a stronger U.S. dollar.

We use foreign currency exchange forward and option contracts to hedge a percentage of our forecasted international sales, primarily those denominated in the Euro and Yen. We also hedge certain monetary assets and liabilities denominated in foreign currencies, which reduces but does not eliminate our exposure to currency fluctuations between the date a transaction is recorded and the date that cash is collected or paid. Foreign currency exchange, net of hedges, had an unfavorable impact of \$498 million on our 2016 product sales compared to 2015 and an unfavorable impact of \$737 million on our 2015 revenues compared to 2014.

We cannot predict future fluctuations in the foreign currency exchange rates of the U.S. dollar. If the U.S. dollar appreciates significantly against certain currencies and our hedging program does not sufficiently offset the effects of such appreciation, our results of operations will be adversely affected and our stock price may decline.

Additionally, the expenses that we recognize in relation to our hedging activities can also cause our earnings to fluctuate. The level of hedging expenses that we recognize in a particular period is impacted by the changes in interest rate spreads between the foreign currencies that we hedge and the U.S. dollar.

We face significant competition.

We face significant competition from large global pharmaceutical and biotechnology companies, specialized pharmaceutical firms and generic drug manufacturers. Our products compete with other available products based primarily on efficacy, safety, tolerability, acceptance by doctors, ease of patient compliance, ease of use, price, insurance and other reimbursement coverage, distribution and marketing.

Our HCV products, Epclusa, Harvoni and Sovaldi, compete with Viekira Pak (ombitasvir, paritaprevir and ritonavir tablets co-packaged with dasabuvir tablets) and Viekira XR (dasabuvir, ombitasvir, paritaprevir and ritonavir) marketed by AbbVie Inc. (AbbVie), Zepatier (elbasvir and grazoprevir) marketed by Merck & Co. Inc. (Merck), Daklinza (daclastavir) marketed by Bristol-Myers Squibb (BMS) and Olysio (simeprevir) marketed by Janssen Therapeutics. We expect a new short duration, all-oral direct-acting antiviral product to be launched by a competitor in 2017, which may negatively impact our HCV market share.

Our HIV products compete primarily with products from ViiV, which markets fixed-dose combination products that compete with Descovy, Odefsey, Genvoya, Stribild, Complera/Eviplera, Atripla and Truvada. For example, two products marketed by ViiV, Tivicay (dolutegravir), an integrase inhibitor, and Triumeq, a single-tablet triple-combination antiretroviral regimen, have adversely impacted sales of our HIV products. In addition, lamivudine, marketed by ViiV, competes with emtricitabine, the active pharmaceutical ingredient of Emtriva and a component of Genvoya, Stribild, Complera/Eviplera, Atripla and Truvada. For Tybost, we compete with ritonavir marketed by AbbVie.

We also face competition from generic HIV products. Generic versions of lamivudine and Combivir (lamivudine and zidovudine) are available in the United States and certain other countries. Generic versions of Sustiva (efavirenz), a component of our Atripla, are now available in Canada and Europe and we anticipate competition from generic efavirenz in the United States in December 2017. We have observed some pricing pressure related to the Sustiva component of our Atripla sales. TDF, one of the active pharmaceutical ingredients in Stribild, Complera/Eviplera, Atripla and Truvada, and the main active pharmaceutical ingredient in Viread, is expected to face generic competition in the United States, the European Union and other countries in 2017. In addition, because emtricitabine, the other active pharmaceutical ingredient of Truvada, faced generic competition in the European Union in 2016, Truvada is also expected to face generic competition in the European Union and other countries outside of the United States in 2017.

Our HBV products, Vemlidy, Viread and Hepsera, face competition from Baraclude (entecavir) marketed by BMS as well as generic entecavir. Our HBV products also compete with Tyzeka/Sebivo (telbivudine) marketed by Novartis.

Zydelig competes with Imbruvica (ibrutinib) marketed by Pharmacyclics LLC (an AbbVie company), Gazyva (obinutuzumab) marketed by Genentech (a member of the Roche Group) and Treanda (bendamustine hydrochloride) marketed by Cephalon, Inc.

Letairis competes with Tracleer (bosentan) and Opsumit (macitentan) marketed by Actelion Pharmaceuticals US, Inc. and also with Adcirca (tadalafil) marketed by United Therapeutics Corporation and Pfizer.

Ranexa competes predominantly with generic compounds from three distinct classes of drugs for the treatment of chronic angina in the United States, including generic and/or branded beta-blockers, calcium channel blockers and long-acting nitrates.

Cayston competes with Tobi (tobramycin inhalation solution) marketed by Novartis.

Tamiflu competes with Relenza (zanamivir) marketed by GSK and products sold by generic competitors.

AmBisome competes with Vfend (voriconazole) marketed by Pfizer and caspofungin, a product developed by Merck that is marketed as Cancidas in the United States and as Caspofungin elsewhere. In addition, we are aware of at least three lipid formulations that claim similarity to AmBisome becoming available outside of the United States. These formulations may reduce market demand for AmBisome. Furthermore, the manufacture of lipid formulations of amphotericin B is very complex and if any of these formulations are found to be unsafe, sales of AmBisome may be negatively impacted by association.

In addition, a number of companies are pursuing the development of technologies which are competitive with our existing products or research programs. These competing companies include specialized pharmaceutical firms and large pharmaceutical companies acting either independently or together with other pharmaceutical companies. Furthermore, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection and may establish collaborative arrangements for competitive products or programs. If any of these competitors gain market share on our products, it could adversely affect our results of operations and stock price.

If significant safety issues arise for our marketed products or our product candidates, our future sales may be reduced, which would adversely affect our results of operations.

The data supporting the marketing approvals for our products and forming the basis for the safety warnings in our product labels were obtained in controlled clinical trials of limited duration and, in some cases, from post-approval use. As our products are used over longer periods of time by many patients with underlying health problems, taking numerous other medicines, we expect to continue to find new issues such as safety, resistance or drug interaction issues, which may require us to provide additional warnings or contraindications on our labels or narrow our approved indications, each of which could reduce the market acceptance of these products.

Regulatory authorities have been moving towards more active and transparent pharmacovigilance and are making greater amounts of stand-alone safety information and clinical trial data directly available to the public through websites and other means, e.g. periodic safety update report summaries, risk management plan summaries and various adverse event data. Safety information, without the appropriate context and expertise, may be misinterpreted and lead to misperception or legal action which may potentially cause our product sales or stock price to decline.

Further, if serious safety, resistance or drug interaction issues arise with our marketed products, sales of these products could be limited or halted by us or by regulatory authorities and our results of operations would be adversely affected.

Our operations depend on compliance with complex FDA and comparable international regulations. Failure to obtain broad approvals on a timely basis or to maintain compliance could delay or halt commercialization of our products.

The products we develop must be approved for marketing and sale by regulatory authorities and, once approved, are subject to extensive regulation by FDA, the European Medicines Agency (EMA) and comparable regulatory agencies in other countries. We are continuing clinical trials for many of our products for currently approved and additional uses. We anticipate that we will file for marketing approval in additional countries and for additional indications and products over the next several years. These products may fail to receive such marketing approvals on a timely basis, or at all.

Further, how we manufacture and sell our products is subject to extensive regulation and review. Discovery of previously unknown problems with our marketed products or problems with our manufacturing, safety reporting or promotional activities may result in restrictions on our products, including withdrawal of the products from the market. If we fail to comply with applicable regulatory requirements, including those related to promotion and manufacturing, we could be subject to penalties including fines, suspensions of regulatory approvals, product recalls, seizure of products and criminal prosecution.

For example, under FDA rules, we are often required to conduct post-approval clinical studies to assess a known serious risk, signals of serious risk or to identify an unexpected serious risk and implement a Risk Evaluation and Mitigation Strategy for our products, which could include a medication guide, patient package insert, a communication plan to healthcare providers or other elements as FDA deems are necessary to assure safe use of the drug, which could include imposing certain restrictions on the distribution or use of a product. Failure to comply with these or other requirements, if imposed on a sponsor by FDA, could result in significant civil monetary penalties and our operating results may be adversely affected.

The results and anticipated timelines of our clinical trials are uncertain and may not support continued development of a product candidate, which would adversely affect our prospects for future revenue growth.

We are required to demonstrate the safety and efficacy of products that we develop for each intended use through extensive preclinical studies and clinical trials. The results from preclinical and early clinical studies do not always accurately predict results in later, large-scale clinical trials. Even successfully completed large-scale clinical trials may not result in marketable products. For example, during 2016 we announced that we terminated our Phase 2 and 2b studies of simtuzumab for the treatment of idiopathic pulmonary fibrosis, NASH and primary sclerosing cholangitis, our Phase 2 and 2/3 studies of GS-5745 for the treatment of Crohn's Disease and ulcerative colitis, our Phase 2 studies of selonsertib for the treatment of pulmonary arterial hypertension and diabetic kidney disease, and our studies of eleclazine for the treatment of cardiovascular diseases, after determining that study data showed insufficient evidence of treatment benefit. In addition, after completion of two Phase 3 studies of momelotinib for the treatment of myelofibrosis, we have decided to terminate development of momelotinib. If any of our product candidates fails to achieve its primary endpoint in clinical trials, if safety issues arise or if the results from our clinical trials are otherwise inadequate to support regulatory approval of our product candidates, commercialization of that product candidate could be delayed or halted. In addition, we may also face challenges in clinical trial protocol design.

If the clinical trials for any of the product candidates in our pipeline are delayed or terminated, our prospects for future revenue growth would be adversely impacted. For example, we face numerous risks and uncertainties with our product candidates, including the single-tablet regimen of bictegravir, emtricitabine and TAF for the treatment of HIV infection; Descovy for PrEP; selonsertib for the treatment of NASH; idelalisib for the treatment of relapsed refractory chronic lymphocytic leukemia; GS-5745 for the treatment of gastric cancer; and filgotinib for the treatment of rheumatoid arthritis, Crohn's disease and ulcerative colitis, each currently in Phase 3 clinical trials, that could prevent completion of development of these product candidates. These risks include our ability to enroll patients in clinical trials, the possibility of unfavorable results of our clinical trials, the need to modify or delay our clinical trials or to perform additional trials and the risk of failing to obtain FDA and other regulatory body approvals. As a result, our product candidates may never be successfully commercialized. Further, we may make a strategic decision to discontinue development of our product candidates if, for example, we believe commercialization will be difficult relative to other opportunities in our pipeline. If these programs and others in our pipeline cannot be completed on a timely basis or at all, then our prospects for future revenue growth may be adversely impacted. In addition, clinical trials involving our commercial products could raise new safety issues for our existing products, which could in turn decrease our revenues and harm our business.

Due to our reliance on third-party contract research organizations to conduct our clinical trials, we are unable to directly control the timing, conduct, expense and quality of our clinical trials.

We extensively outsource our clinical trial activities and usually perform only a small portion of the start-up activities in-house. We rely on independent third-party contract research organizations (CROs) to perform most of our clinical studies, including document preparation, site identification, screening and preparation, pre-study visits, training, program management and bioanalytical analysis. Many important aspects of the services performed for us by the CROs are out of our direct control. If there is any dispute or disruption in our relationship with our CROs, our clinical trials may be delayed. Moreover, in our regulatory submissions, we rely on the quality and validity of the clinical work performed by third-party CROs. If any of our CROs' processes,

methodologies or results were determined to be invalid or inadequate, our own clinical data and results and related regulatory approvals could be adversely affected.

We depend on relationships with other companies for sales and marketing performance, development and commercialization of product candidates and revenues. Failure to maintain these relationships, poor performance by these companies or disputes with these companies could negatively impact our business.

We rely on a number of significant collaborative relationships with major pharmaceutical companies for our sales and marketing performance in certain territories. These include collaborations with Janssen of Odefsey and Complera/Eviplera; BMS for Atripla in the United States, Europe and Canada; F. Hoffmann-La Roche Ltd. (together with Hoffmann-La Roche Inc., Roche) for Tamiflu worldwide; and GSK for ambrisentan in territories outside of the United States. In some countries, we rely on international distributors for sales of Truvada, Viread, Hepsera, Emtriva and AmBisome. Some of these relationships also involve the clinical development of these products by our partners. Reliance on collaborative relationships poses a number of risks, including the risk that:

- we are unable to control the resources our corporate partners devote to our programs or products;
- disputes may arise with respect to the ownership of rights to technology developed with our corporate partners;
- disagreements with our corporate partners could cause delays in, or termination of, the research, development or commercialization of product candidates or result in litigation or arbitration;
- contracts with our corporate partners may fail to provide significant protection or may fail to be effectively enforced if one of these partners fails to perform;
- our corporate partners have considerable discretion in electing whether to pursue the development of any additional products and may pursue alternative technologies or products either on their own or in collaboration with our competitors;
- our corporate partners with marketing rights may choose to pursue competing technologies or to devote fewer resources to the marketing of our products than they do to products of their own development; and
- our distributors and our corporate partners may be unable to pay us, particularly in light of current economic conditions.

Given these risks, there is a great deal of uncertainty regarding the success of our current and future collaborative efforts. If these efforts fail, our product development or commercialization of new products could be delayed or revenues from products could decline.

In addition, Letairis and Cayston are distributed through third-party specialty pharmacies, which are pharmacies specializing in the dispensing of medications for complex or chronic conditions that may require a high level of patient education and ongoing counseling. The use of specialty pharmacies requires significant coordination with our sales and marketing, medical affairs, regulatory affairs, legal and finance organizations and involves risks, including but not limited to risks that these specialty pharmacies will:

- not provide us with accurate or timely information regarding their inventories, patient data or safety complaints;
- not effectively sell or support Letairis or Cayston;
- not devote the resources necessary to sell Letairis or Cayston in the volumes and within the time frames that we expect;
- not be able to satisfy their financial obligations to us or others; or
- cease operations.

We also rely on a third party to administer our Letairis Education and Access Program, the restricted distribution program designed to support Letairis. This third party provides information and education to prescribers and patients on the risks of Letairis, confirms insurance coverage and investigates alternative sources of reimbursement or assistance, ensures fulfillment of the risk management requirements mandated for Letairis by FDA and coordinates and controls dispensing to patients through the third-party specialty pharmacies. Failure of this third party or the specialty pharmacies that distribute Letairis to perform as expected may result in regulatory action from FDA or decreased Letairis sales, either of which would harm our business.

Our success will depend to a significant degree on our ability to defend our patents and other intellectual property rights both domestically and internationally. We may not be able to obtain effective patents to protect our technologies from use by competitors and patents of other companies could require us to stop using or pay for the use of required technology.

Patents and other proprietary rights are very important to our business. Our success will depend to a significant degree on our ability to:

- obtain patents and licenses to patent rights;

- preserve trade secrets;
- defend against infringement and efforts to invalidate our patents; and
- operate without infringing on the intellectual property of others.

If we have a properly drafted and enforceable patent, it can be more difficult for our competitors to use our technology to create competitive products and more difficult for our competitors to obtain a patent that prevents us from using technology we create. As part of our business strategy, we actively seek patent protection both in the United States and internationally and file additional patent applications, when appropriate, to cover improvements in our compounds, products and technology.

We have a number of U.S. and foreign patents, patent applications and rights to patents related to our compounds, products and technology, but we cannot be certain that issued patents will be enforceable or provide adequate protection or that pending patent applications will result in issued patents. Patent applications are confidential for a period of time before a patent is issued. As a result, we may not know if our competitors filed patent applications for technology covered by our pending applications or if we were the first to invent or first to file an application directed toward the technology that is the subject of our patent applications. Competitors may have filed patent applications or received patents and may obtain additional patents and proprietary rights that block or compete with our products. In addition, if competitors file patent applications covering our technology, we may have to participate in litigation, interference or other proceedings to determine the right to a patent. Litigation, interference or other proceedings are unpredictable and expensive, such that, even if we are ultimately successful, our results of operations may be adversely affected by such events.

For example, TDF, one of the active pharmaceutical ingredients in Stribild, Complera/Eviplera, Atripla and Truvada, and the main active pharmaceutical ingredient in Viread, is expected to face generic competition in the United States, the European Union and other countries in 2017. In addition, because emtricitabine, the other active pharmaceutical ingredient of Truvada, faced generic competition in the European Union in 2016, Truvada is also expected to face generic competition in the European Union and other countries outside of the United States in 2017. The entry of these generic products may lead to market share and price erosion and have a negative impact on our business and results of operations. In addition, patents do not cover the ranolazine compound, the active ingredient of Ranexa. Instead, when it was discovered that only a sustained-release formulation of ranolazine would achieve therapeutic plasma levels, patents were obtained on those formulations and the characteristic plasma levels they achieve. Patents do not cover the active ingredients in AmBisome.

We may obtain patents for certain products many years before marketing approval is obtained for those products. Because patents have a limited life, which may begin to run prior to the commercial sale of the related product, the commercial value of the patent may be limited. However, we may be able to apply for patent term extensions or supplementary protection certificates in some countries.

Generic manufacturers have sought, and may continue to seek, FDA approval to market generic versions of our products through an abbreviated new drug application (ANDA), the application form typically used by manufacturers seeking approval of a generic drug. See a description of our ANDA litigation in Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K and risk factor entitled "Litigation with generic manufacturers has increased our expenses which may continue to reduce our earnings. If we are unsuccessful in all or some of these lawsuits, some or all of our claims in the patents may be narrowed or invalidated and generic versions of our products could be launched prior to our patent expiry." beginning on page 39.

Our success depends in large part on our ability to operate without infringing upon the patents or other proprietary rights of third parties.

If we infringe the valid patents of third parties, we may be prevented from commercializing products or may be required to obtain licenses from these third parties. We may not be able to obtain alternative technologies or any required license on reasonable terms or at all. If we fail to obtain these licenses or alternative technologies, we may be unable to develop or commercialize some or all of our products. For example, we are aware of patents that may relate to our operation of LEAP, our restricted distribution program designed to support Letairis and we are aware of patents and patent applications owned by other parties that may claim to cover the use of sofosbuvir. We are also aware of U.S. Patent No. 9044509 assigned to the U.S. Department of Health and Human Services that purports to claim a process of protecting a primate host from infection by an immunodeficiency retrovirus by administering a combination of emtricitabine and tenofovir or TDF prior to exposure of the host to the immunodeficiency retrovirus. We have been in contact with the U.S. Department of Health and Human Services about the scope and relevance of the patent. See also a description of our litigation regarding sofosbuvir in Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K and the risk factor entitled "If any party is successful in establishing exclusive rights to Eplclusa, Harvoni and/or Sovaldi, our expected revenues and earnings from the sale of those products could be adversely affected" beginning on page 36.

Furthermore, we also rely on unpatented trade secrets and improvements, unpatented internal know-how and technological innovation. For example, a great deal of our liposomal manufacturing expertise, which is a key component of our liposomal

technology, is not covered by patents but is instead protected as a trade secret. We protect these rights mainly through confidentiality agreements with our corporate partners, employees, consultants and vendors. These agreements provide that all confidential information developed or made known to an individual during the course of their relationship with us will be kept confidential and will not be used or disclosed to third parties except in specified circumstances. In the case of employees, the agreements provide that all inventions made by an individual while employed by us will be our exclusive property. We cannot be certain that these parties will comply with these confidentiality agreements, that we have adequate remedies for any breach or that our trade secrets will not otherwise become known or be independently discovered by our competitors. Under some of our R&D agreements, inventions become jointly owned by us and our corporate partner and in other cases become the exclusive property of one party. In certain circumstances, it can be difficult to determine who owns a particular invention and disputes could arise regarding those inventions. If our trade secrets or confidential information become known or independently discovered by competitors or if we enter into disputes over ownership of inventions, our business and results of operations could be adversely affected.

If any party is successful in establishing exclusive rights to Epclusa, Harvoni and/or Sovaldi, our expected revenues and earnings from the sale of those products could be adversely affected.

We own patents and patent applications that claim sofosbuvir (Sovaldi) as a chemical entity and its metabolites and the fixed-dose combinations of ledipasvir and sofosbuvir (Harvoni) and sofosbuvir and velpatasvir (Epclusa). Third parties may have, or may obtain rights to, patents that allegedly could be used to prevent or attempt to prevent us from commercializing Epclusa, Harvoni or Sovaldi. For example, we are aware of patents and patent applications owned by other parties that may be alleged by such parties to cover the use of Epclusa, Harvoni and Sovaldi. We cannot predict the ultimate outcome of intellectual property claims related to Epclusa, Harvoni or Sovaldi, and we have spent, and will continue to spend, significant resources defending against these claims. If third parties successfully obtain valid and enforceable patents, and successfully prove infringement of those patents by Epclusa, Harvoni and/or Sovaldi, we could be prevented from selling sofosbuvir unless we were able to obtain a license under such patents. Such a license may not be available on commercially reasonable terms or at all.

[Interference Proceedings and Litigation with Idenix Pharmaceuticals, Inc. \(Idenix\), Universita Degli Studi di Cagliari \(UDSG\), Centre National de la Recherche Scientifique and L'Universite Montpellier II](#)

In February 2012, we received notice that the U.S. Patent and Trademark Office (USPTO) had declared Interference No. 105,871 (First Idenix Interference) between our U.S. Patent No. 7,429,572 (the '572 patent) and Idenix's pending U.S. Patent Application No. 12/131,868 to determine who was the first to invent certain nucleoside compounds. In January 2014, the USPTO Patent Trial and Appeal Board (PTAB) determined that Pharmasset and not Idenix was the first to invent the compounds. Idenix has appealed the PTAB's decisions to the U.S. District Court for the District of Delaware, which has stayed that appeal pending the outcome of the appeal of the interference involving Idenix's U.S. Patent No. 7,608,600 (the '600 patent) as described below.

In December 2013, after receiving our request to do so, the USPTO declared Interference No. 105,981 (Second Idenix Interference) between our pending U.S. Patent Application No. 11/854,218 and Idenix's U.S. Patent No. 7,608,600 (the '600 patent). The '600 patent includes claims directed to methods of treating HCV with nucleoside compounds. In March 2015, the PTAB determined that Pharmasset and not Idenix was the first to invent the claimed methods of treating HCV. Idenix appealed this decision in both the U.S. District Court for the District of Delaware and the U.S. Court of Appeal for the Federal Circuit (CAFC). The CAFC heard oral arguments in September 2016, and we are awaiting its decision. We filed a motion to dismiss the appeal in Delaware, and the court has stayed the appeal relating to the Second Idenix Interference.

We believe that the Idenix claims involved in the First and Second Idenix Interferences, and similar U.S. and foreign patents claiming the same compounds, metabolites and uses thereof, are invalid. As a result, we filed an Impeachment Action in the Federal Court of Canada to invalidate Idenix Canadian Patent No. 2,490,191 (the '191 patent), which is the Canadian patent that corresponds to the '600 patent. Idenix asserted that the commercialization of Sovaldi in Canada will infringe its '191 patent and that our Canadian Patent No. 2,527,657, corresponding to our '572 patent, is invalid. In November 2015, the Canadian court held that Idenix's patent is invalid and that our patent is valid. Idenix appealed the decision to the Canadian Federal Court of Appeal in November 2015. The appeal hearing was held in January 2017 and we are awaiting the decision.

We filed a similar legal action in Norway in the Oslo District Court seeking to invalidate Idenix's Norwegian patent corresponding to the '600 patent. In September 2013, Idenix filed an invalidation action in the Norwegian proceedings against our Norwegian Patent No. 333700, which corresponds to the '572 patent. In March 2014, the Norwegian court found all claims in the Idenix Norwegian patent to be invalid and upheld the validity of all claims in our patent. Idenix appealed the decision to the Norwegian Court of Appeal. In April 2016, the Court of Appeal issued its decision invalidating the Idenix patent and upholding our patent. Idenix has not filed a further appeal.

In January 2013, we filed a legal action in the Federal Court of Australia seeking to invalidate Idenix's Australian patent corresponding to the '600 patent. In April 2013, Idenix asserted that the commercialization of Sovaldi in Australia infringes its Australian patent corresponding to the '600 patent. In March 2016, the Australian court revoked Idenix's Australian patent. Idenix has appealed this decision. The appeal hearing was held in November 2016 and we are awaiting the decision.

In March 2014, the European Patent Office (EPO) granted Idenix European Patent No. 1 523 489 (the '489 patent), which corresponds to the '600 patent. The same day that the '489 patent was granted, we filed an opposition with the EPO seeking to revoke the '489 patent. An opposition hearing was held in February 2016, and the EPO ruled in our favor and revoked the '489 patent. Idenix has appealed. In March 2014, Idenix also initiated infringement proceedings against us in the United Kingdom (UK), Germany and France alleging that the commercialization of Sovaldi would infringe the UK, German and French counterparts of the '489 patent. A trial was held in the UK in October 2014. In December 2014, the High Court of Justice of England and Wales (UK Court) invalidated all challenged claims of the '489 patent on multiple grounds. Idenix appealed. In November 2016, the appeals court affirmed the UK Court's decision invalidating Idenix's patent. In March 2015, the German court in Düsseldorf determined that the Idenix patent was highly likely to be invalid and stayed the infringement proceedings pending the outcome of the opposition hearing held by the EPO in February 2016. Idenix has not appealed this decision of the German court staying the proceedings. Upon Idenix's request, the French proceedings have been stayed. Idenix has not been awarded patents corresponding to the '600 patent in Japan or China.

See also our risk factor "We may be required to pay significant damages to Merck as a result of a jury's finding that we willfully infringed a patent owned by Merck's Idenix subsidiary."

Idenix was acquired by Merck in August 2014, and Merck continues to pursue the Idenix claims described herein.

Litigation with Merck

In August 2013, Merck contacted us requesting that we pay royalties on the sales of sofosbuvir and obtain a license to U.S. Patent No. 7,105,499 (the '499 patent) and U.S. Patent No. 8,481,712 (the '712 patent), which it co-owns with Ionis Pharmaceuticals, Inc. The '499 and '712 patents cover compounds which do not include, but may relate to, sofosbuvir. We filed a lawsuit in August 2013 in the U.S. District Court for the Northern District of California seeking a declaratory judgment that the Merck patents are invalid and not infringed. During patent prosecution, Merck amended its patent application in an attempt to cover compounds related to sofosbuvir. Initially, in March 2016, a jury determined that we had not established that Merck's patents are invalid for lack of written description or lack of enablement and awarded Merck \$200 million in damages. However, in June 2016, the court ruled in our favor on our defense of unclean hands and determined that Merck may not recover any damages from us for the '499 and '712 patents. The judge has determined that Merck is required to pay our attorney's fees due to the exceptional nature of this case. The amount of fees owed to us by Merck is yet to be determined by the court.

Merck has filed a notice of appeal to the Court of Appeals for the Federal Circuit regarding the court's decision on our defense of unclean hands. We appealed the issue relating to the invalidity of Merck's patent. If the decision on our defense of unclean hands is reversed on appeal and Merck's patent is upheld, we may be required to pay damages and a royalty on sales of sofosbuvir-containing products following the appeal. In that event, the judge has indicated that she will determine the amount of the royalty, if necessary, at the conclusion of any appeal in this case.

Litigation with the University of Minnesota

The University of Minnesota (the University) has obtained Patent No. 8,815,830 ('830 patent), which purports to broadly cover nucleosides with antiviral and anticancer activity. In August 2016, the University filed a lawsuit against us in the U.S. District Court for the District of Minnesota, alleging that the commercialization of sofosbuvir-containing products infringes the '830 patent. We believe that the '830 patent is invalid and will not be infringed by the continued commercialization of sofosbuvir.

European Patent Claims

In February 2015, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering sofosbuvir that expires in 2028. In October 2016, the EPO upheld the validity of certain claims of our sofosbuvir patent. We anticipate that the challengers will appeal this decision in favor of our patent. The appeal process may take several years.

In January 2016, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering TAF that expires in 2021.

In March 2016, three parties filed oppositions in the EPO requesting revocation of our granted European patent covering cobicistat that expires in 2027.

While we are confident in the strength of our patents, we cannot predict the ultimate outcome of these actions. If we are unsuccessful in defending these oppositions, some or all of our patent claims may be narrowed or revoked and the patent protection for sofosbuvir, TAF and cobicistat in Europe could be substantially shortened or eliminated entirely. If our patents are revoked, and no other European patents are granted covering these compounds, our exclusivity may be based entirely on regulatory exclusivity granted by EMA. Sovaldi has been granted regulatory exclusivity that will prevent generic sofosbuvir from entering the European Union for 10 years following approval of Sovaldi, or January 2024. If we lose exclusivity for Sovaldi prior to 2028, our expected revenues and results of operations could be negatively impacted for the years including and succeeding the year in which such exclusivity is lost, which may cause our stock price to decline.

Manufacturing problems, including at our third-party manufacturers and corporate partners, could cause inventory shortages and delay product shipments and regulatory approvals, which may adversely affect our results of operations.

In order to generate revenue from our products, we must be able to produce sufficient quantities of our products to satisfy demand. Many of our products are the result of complex manufacturing processes. The manufacturing process for pharmaceutical products is also highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations.

Our products are either manufactured at our own facilities or by third-party manufacturers or corporate partners. We depend on third parties to perform manufacturing activities effectively and on a timely basis for the majority of our solid dose products. In addition, Roche, either by itself or through third parties, is responsible for manufacturing Tamiflu. We, our third-party manufacturers and our corporate partners are subject to Good Manufacturing Practices (GMP), which are extensive regulations governing manufacturing processes, stability testing, record keeping and quality standards as defined by FDA and EMA. Similar regulations are in effect in other countries.

Our third-party manufacturers and corporate partners are independent entities who are subject to their own unique operational and financial risks which are out of our control. If we or any of these third-party manufacturers or corporate partners fail to perform as required, this could impair our ability to deliver our products on a timely basis or receive royalties or cause delays in our clinical trials and applications for regulatory approval. Further, we may have to write-off the costs of manufacturing any batch that fails to pass quality inspection or meet regulatory approval. In addition, we, our third-party manufacturers and our corporate partners may only be able to produce some of our products at one or a limited number of facilities and, therefore, have limited manufacturing capacity for certain products. To the extent these risks materialize and affect their performance obligations to us, our financial results may be adversely affected.

Our manufacturing operations are subject to routine inspections by regulatory agencies. If we are unable to remedy any deficiencies cited by FDA in these inspections, our currently marketed products and the timing of regulatory approval of products in development could be adversely affected. Further, there is risk that regulatory agencies in other countries where marketing applications are pending will undertake similar additional reviews or apply a heightened standard of review, which could delay the regulatory approvals for products in those countries. If approval of any of our product candidates were delayed or if production of our marketed products was interrupted, our anticipated revenues and our stock price would be adversely affected.

We may not be able to obtain materials or supplies necessary to conduct clinical trials or to manufacture and sell our products, which would limit our ability to generate revenues.

We need access to certain supplies and products to conduct our clinical trials and to manufacture our products. If we are unable to purchase sufficient quantities of these materials or find suitable alternate materials in a timely manner, our development efforts for our product candidates may be delayed or our ability to manufacture our products would be limited, which would limit our ability to generate revenues.

Suppliers of key components and materials must be named in the NDA or MAA filed with FDA, EMA or other regulatory authority for any product candidate for which we are seeking marketing approval, and significant delays can occur if the qualification of a new supplier is required. Even after a manufacturer is qualified by the regulatory authority, the manufacturer must continue to expend time, money and effort in the area of production and quality control to ensure full compliance with GMP. Manufacturers are subject to regular, periodic inspections by the regulatory authorities following initial approval. If, as a result of these inspections, a regulatory authority determines that the equipment, facilities, laboratories or processes do not comply with applicable regulations and conditions of product approval, the regulatory authority may suspend the manufacturing operations. If the manufacturing operations of any of the single suppliers for our products are suspended, we may be unable to generate sufficient quantities of commercial or clinical supplies of product to meet market demand, which would in turn decrease our revenues and harm our business. In addition, if delivery of material from our suppliers were interrupted for any reason, we may be unable to ship certain of our products for commercial supply or to supply our products in development for clinical trials. In addition, some of our products and the materials that we utilize in our operations are made at only one facility. For example, we manufacture certain drug product intermediates utilized in AmBisome exclusively at our facilities in San Dimas, California. In the event of a disaster, including an earthquake, equipment failure or other difficulty, we may be unable to replace this manufacturing capacity in a timely manner and may be unable to manufacture AmBisome to meet market needs.

In addition, we depend on a single supplier for amphotericin B, the active pharmaceutical ingredient of AmBisome, and high-quality cholesterol in the manufacture of AmBisome. We also rely on a single source for the active pharmaceutical ingredients found in Letairis and Cayston. Astellas US LLC, which markets Lexiscan in the United States, is responsible for the commercial manufacture and supply of product in the United States and is dependent on a single supplier for the active pharmaceutical ingredient of Lexiscan. Problems with any of the single suppliers we depend on may negatively impact our development and commercialization efforts.

A significant portion of the raw materials and intermediates used to manufacture our antiviral products are supplied by third-party manufacturers and corporate partners outside of the United States. As a result, any political or economic factors in a specific country or region, including any changes in or interpretations of trade regulations, compliance requirements or tax legislation, that would limit or prevent third parties outside of the United States from supplying these materials would adversely affect our ability to manufacture and supply our antiviral products to meet market needs and have a material and adverse effect on our operating results.

Litigation with generic manufacturers has increased our expenses which may continue to reduce our earnings. If we are unsuccessful in all or some of these lawsuits, some or all of our claims in the patents may be narrowed or invalidated and generic versions of our products could be launched prior to our patent expiry.

As part of the approval process for some of our products, FDA granted us a New Chemical Entity (NCE) exclusivity period during which other manufacturers' applications for approval of generic versions of our product will not be approved. Generic manufacturers may challenge the patents protecting products that have been granted NCE exclusivity one year prior to the end of the NCE exclusivity period. Generic manufacturers have sought and may continue to seek FDA approval for a similar or identical drug through an ANDA, the application form typically used by manufacturers seeking approval of a generic drug. To seek approval for a generic version of a product having NCE status, a generic manufacturer may submit its ANDA to FDA four years after the branded product's approval. For sofosbuvir, this date falls in December 2017. Consequently, it is possible that one or more generic manufacturers may file an ANDA for sofosbuvir in December 2017.

Current legal proceedings of significance with some of our generic manufacturers include:

Apotex

In June 2014, we received notice that Apotex Inc. (Apotex) submitted an abbreviated new drug submission (ANDS) to Health Canada requesting permission to manufacture and market a generic version of Truvada and a separate ANDS requesting permission to manufacture and market a generic version of Viread. In the notice, Apotex alleges that three of the patents associated with Truvada and two of the patents associated with Viread are invalid, unenforceable and/or will not be infringed by Apotex's manufacture, use or sale of a generic version of Truvada or Viread. In August 2014, we filed lawsuits against Apotex in the Federal Court of Canada seeking orders of prohibition against approval of these ANDS. A hearing in those cases was held in April 2016. In July 2016, the court issued an order prohibiting the Canadian Minister of Health from approving Apotex's generic version of our Viread product until the expiry of our patents in July 2017. The court declined to prohibit approval of Apotex's generic version of our Truvada product. The court's decision did not rule on the validity of the patents. The launch of Apotex's generic version of our Truvada product would be at risk of infringement of our patents, including patents that we were unable to assert in the present lawsuit, and liability for our damages. Apotex has appealed the court's decision.

Teva

In November 2011, December 2011 and August 2012, we received notices that Teva Pharmaceuticals (Teva) submitted an ANDS to the Canadian Minister of Health requesting permission to manufacture and market generic versions of Truvada, Atripla and Viread. In the notices, Teva alleges that the patents associated with Truvada, Atripla and Viread are invalid, unenforceable and/or will not be infringed by Teva's manufacture, use or sale of generic versions of those products. We filed lawsuits against Teva in the Federal Court of Canada seeking an order of prohibition against approval of these applications.

In December 2013, the court issued an order prohibiting the Canadian Minister of Health from approving Teva's generic versions of our Viread, Truvada and Atripla products until expiry of our patent in July 2017. Teva has appealed that decision. The court's decision did not rule on the validity of the patents and accordingly the only issue on appeal is whether the Canadian Minister of Health should be prohibited from approving Teva's products. In November 2016, we and Teva entered into a settlement agreement to resolve the ongoing contested proceedings concerning Teva's ANDS for generic versions of Truvada, Atripla, and Viread as well as Gilead's patents associated with Truvada, Atripla, and Viread.

Mylan

In February 2016, we received notice that Mylan Pharmaceuticals, Inc. (Mylan) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Tybost (cobicistat). In the notice, Mylan alleges that the patent covering cobicistat is invalid as obvious and that Mylan's generic product cannot infringe an invalid claim. In March 2016, we filed lawsuits against Mylan in the U.S. District Court for the District of Delaware and U.S. District Court for the Northern District of West Virginia. In January 2017, we received a letter from Mylan notifying us that it had submitted a duplicate ANDA to FDA for this same product. We are currently evaluating Mylan's letter. The trial in Delaware is scheduled for January 2018. The patent in suit that covers Tybost is also listed in the Orange Book for Stribild and Genvoya.

Watson

In February 2015, we received notice that Watson Laboratories, Inc. (Watson) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, Watson alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by Watson's manufacture, use or sale of a generic version of Letairis. In April 2015, we filed a lawsuit against Watson in the U.S. District Court for the District of New Jersey. In January 2017, we reached an agreement with Watson to settle the litigation.

SigmaPharm

In June 2015, we received notice that SigmaPharm Laboratories, LLC (SigmaPharm) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, SigmaPharm alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by SigmaPharm's manufacture, use or sale of a generic version of Letairis. In June 2015, we filed a lawsuit against SigmaPharm in the U.S. District Court for the District of New Jersey for infringement of our patents. The date for trial against SigmaPharm is not yet set but estimated to occur in the second quarter of 2017.

We cannot predict the ultimate outcome of the foregoing actions and other litigation with generic manufacturers, and we may spend significant resources enforcing and defending these patents. If we are unsuccessful in these lawsuits, some or all of our original claims in the patents may be narrowed or invalidated and the patent protection for Truvada, Viread and Letairis in the United States and Atripla, Truvada and Viread in Canada could be substantially shortened. Further, if all of the patents covering one or more products are invalidated, FDA or the Canadian Minister of Health could approve the requests to manufacture a generic version of such products in the United States or Canada, respectively, prior to the expiration date of those patents. The sale of generic versions of these products earlier than their patent expiration would have a significant negative effect on our revenues and results of operations.

We face credit risks from our Emerging Market and Southern European customers that may adversely affect our results of operations.

We have exposure to customer credit risks in emerging markets and Southern Europe. Southern European product sales to government-owned or supported customers in Southern Europe, specifically Spain, Italy, Portugal and Greece have historically been subject to significant payment delays due to government funding and reimbursement practices. This has resulted and may continue to result in days sales outstanding being significantly higher in these countries due to the average length of time that accounts receivable remain outstanding. As of December 31, 2016, our accounts receivable, net in Southern Europe, specifically Greece, Italy, Portugal and Spain, totaled approximately \$317 million, of which \$110 million were greater than 120 days past due, including \$45 million greater than 365 days past due.

Historically, receivable balances with certain publicly-owned hospitals accumulate over a period of time and are then subsequently settled as large lump sum payments. This pattern is also experienced by other pharmaceutical companies that sell directly to hospitals. If significant changes were to occur in the reimbursement practices of these European governments or if government funding becomes unavailable, we may not be able to collect on amounts due to us from these customers and our results of operations would be adversely affected.

Imports from countries where our products are available at lower prices and counterfeit versions of our products could have a negative impact on our reputation and business.

Prices for our products are based on local market economics and competition and sometimes differ from country to country. Our sales in countries with relatively higher prices may be reduced if products can be imported into those or other countries from lower price markets. There have been cases in which other pharmaceutical products were sold at steeply discounted prices in the developing world and then re-exported to European countries where they could be re-sold at much higher prices. If this happens with our products, particularly Truvada and Viread, which we have agreed to make available at substantially reduced prices to more than 130 countries participating in our Gilead Access Program, or Atripla and Complera, which Merck and Janssen, respectively, distributes at substantially reduced prices to HIV infected patients in developing countries, our revenues would be adversely affected. In addition, we have established partnerships with India-based generic manufacturers to distribute generic versions of tenofovir disoproxil fumarate and TAF, to 112 developing world countries, including India. We expanded these agreements to include rights to Stribild, Tybost and Vitekta. We also entered into agreements with certain India-based generic manufacturers to produce and distribute generic emtricitabine in the developing world, including single-tablet regimens containing emtricitabine and fixed-dose combinations of emtricitabine co-formulated with our other HIV medicines. Starting in 2014, we entered into licensing agreements with India-based generic manufacturers to produce and distribute generic versions of our HCV products to 101 developing countries. If generic versions of our HIV and HCV products under these licenses are then re-exported to the United States, Europe or other markets outside of these developing world countries, our revenues would be adversely affected. We also make our HCV products available in low- and middle-income countries at significantly discounted prices. If the discounted

HCV products are re-exported from these low- and middle-income countries into the United States or other higher price markets, our revenues could be adversely affected.

In addition, purchases of our products in countries where our selling prices are relatively low for resale in countries in which our selling prices are relatively high may adversely impact our revenues and gross margin and may cause our sales to fluctuate from quarter to quarter. For example, in the European Union, we are required to permit products purchased in one country to be sold in another country. Purchases of our products in countries where our selling prices are relatively low for resale in countries in which our selling prices are relatively high can affect the inventory level held by our wholesalers and can cause the relative sales levels in the various countries to fluctuate from quarter to quarter and not reflect the actual consumer demand in any given quarter. These quarterly fluctuations may impact our earnings, which could adversely affect our stock price and harm our business.

Further, third parties may illegally distribute and sell counterfeit versions of our products, which do not meet the rigorous quality standards of our manufacturing and supply chain. For example, in the first quarter of 2017, bottles of counterfeit drugs labeled under the Harvoni brand name were discovered at a retail pharmacy chain and pharmaceutical wholesalers in Japan. We are investigating this matter and cooperating with the Japanese health ministry. In order to help prevent similar issues in Japan, we accelerated planned changes to our product packaging to make counterfeiting more difficult. We actively take actions to discourage counterfeits of our products around the world, including working with local regulatory and legal authorities to enforce laws against counterfeit drugs. Counterfeit drugs pose a serious risk to patient health and safety. Our reputation and business could suffer as a result of counterfeit drugs sold under our brand name.

Expensive litigation and government investigations have increased our expenses which may continue to reduce our earnings.

We are involved in a number of litigation, investigation and other dispute-related matters that require us to expend substantial internal and financial resources. We expect these matters will continue to require a high level of internal and financial resources for the foreseeable future. These matters have reduced and will continue to reduce our earnings. Please see a description of our litigation, investigation and other dispute-related matters in Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The outcome of such lawsuits or any other lawsuits that may be brought against us, the investigations or any other investigations that may be initiated, are inherently uncertain, and adverse developments or outcomes can result in significant expenses, monetary damages, penalties or injunctive relief against us that could significantly reduce our earnings and cash flows and harm our business.

In some countries, we may be required to grant compulsory licenses for our products or our patents may not be enforced.

In a number of developing countries, government officials and other interested groups have suggested that pharmaceutical companies should make drugs for HCV or HIV infection available at low cost. Alternatively, governments in those developing countries could require that we grant compulsory licenses to allow competitors to manufacture and sell their own versions of our products, thereby reducing our product sales. For example, there is growing attention on the availability of HCV therapies and some activists are advocating for the increased availability of HCV therapies through other means including compulsory licenses. In the past, certain offices of the government of Brazil have expressed concern over the affordability of our HIV products and declared that they were considering issuing compulsory licenses to permit the manufacture of otherwise patented products for HIV infection, including Viread. In addition, concerns over the cost and availability of Tamiflu related to a potential avian flu pandemic and H1N1 influenza generated international discussions over compulsory licensing of our Tamiflu patents. For example, the Canadian government considered allowing Canadian manufacturers to manufacture and export the active ingredient in Tamiflu to eligible developing and least developed countries under Canada's Access to Medicines Regime. Furthermore, Roche issued voluntary licenses to permit third-party manufacturing of Tamiflu. For example, Roche granted a sublicense to Shanghai Pharmaceutical (Group) Co., Ltd. for China and a sublicense to India's Hetero Drugs Limited for India and certain developing countries. If compulsory licenses permit generic manufacturing to override our product patents for our HCV, HIV or other products, or if we are required to grant compulsory licenses for these products, it could reduce our earnings and cash flows and harm our business.

In addition, certain countries do not permit enforcement of our patents, or permit our patents to issue, and third-party manufacturers are able to sell generic versions of our products in those countries. For example, in July 2009, the Brazilian patent authority rejected our patent application for tenofovir disoproxil fumarate, the active pharmaceutical ingredient in Viread. This was the highest level of appeal available to us within the Brazilian patent authority. Because we do not currently have a patent in Brazil, the Brazilian government now purchases its supply of tenofovir disoproxil fumarate from generic manufacturers. In the first quarter of 2017, the Brazilian Health Regulatory Agency rejected our patent applications related to sofosbuvir and our HCV products. We plan to appeal this decision. Sales of generic versions of our products could significantly reduce our sales and adversely affect our results of operations, particularly if generic versions of our products are imported into territories where we have existing commercial sales.

We may face significant liability resulting from our products that may not be covered by insurance and such liability could materially reduce our earnings.

The testing, manufacturing, marketing and use of our commercial products, as well as product candidates in development, involve substantial risk of product liability claims. These claims may be made directly by consumers, healthcare providers, pharmaceutical companies or others. We may be unable to maintain sufficient insurance coverage for product liabilities that may arise. In addition, the cost to defend lawsuits or pay damages for product liability claims may exceed our insurance coverage. If we are unable to maintain adequate coverage or if claims exceed our coverage, our financial condition and our ability to clinically test our product candidates and market our products will be adversely affected. In addition, negative publicity associated with any claims, regardless of their merit, may decrease the future demand for our products and impair our financial condition.

Business disruptions from natural or man-made disasters may harm our future revenues.

Our worldwide operations could be subject to business interruptions stemming from natural or man-made disasters for which we may be self-insured. Our corporate headquarters and Fremont locations, which together house a majority of our R&D activities, and our San Dimas and Oceanside manufacturing facilities are located in California, a seismically active region. As we may not carry adequate earthquake insurance and significant recovery time could be required to resume operations, our financial condition and operating results could be materially adversely affected in the event of a major earthquake.

We are dependent on information technology systems, infrastructure and data.

We are dependent upon information technology systems, infrastructure and data. The multitude and complexity of our computer systems make them inherently vulnerable to service interruption or destruction, malicious intrusion and random attack. Likewise, data privacy or security breaches by employees or others may pose a risk that sensitive data, including our intellectual property, trade secrets or personal information of our employees, patients, customers or other business partners may be exposed to unauthorized persons or to the public. Cyberattacks are increasing in their frequency, sophistication and intensity. Cyberattacks could include the deployment of harmful malware, denial-of-service, social engineering and other means to affect service reliability and threaten data confidentiality, integrity and availability. Our business partners face similar risks and any security breach of their systems could adversely affect our security posture. While we have invested, and continue to invest, in the protection of our data and information technology infrastructure, there can be no assurance that our efforts will prevent service interruptions, or identify breaches in our systems, that could adversely affect our business and operations and/or result in the loss of critical or sensitive information, which could result in financial, legal, business or reputational harm to us. In addition, our liability insurance may not be sufficient in type or amount to cover us against claims related to security breaches, cyberattacks and other related breaches.

Changes in our effective income tax rate could reduce our earnings.

We are subject to income taxes in the United States and various foreign jurisdictions including Ireland. Due to economic and political conditions, various countries are actively considering changes to existing tax laws. We cannot predict the form or timing of potential legislative changes that could have a material adverse impact on our results of operations. In addition, significant judgment is required in determining our worldwide provision for income taxes. Various factors may have favorable or unfavorable effects on our income tax rate including, but not limited to, changes in forecasted demand for our HCV products, our portion of the non-tax deductible annual BPD fee, the accounting for stock options and other share-based awards, mergers and acquisitions, the ability to manufacture product in our Cork, Ireland facility, the amortization of certain acquisition related intangibles for which we receive no tax benefit, future levels of R&D spending, changes in the mix of earnings in the various tax jurisdictions in which we operate, changes in overall levels of pre-tax earnings and resolution of federal, state and foreign income tax audits. The impact on our income tax provision resulting from the above mentioned factors may be significant and could have a negative impact on our consolidated results of operations.

Our income tax returns are subject to audit by federal, state and foreign tax authorities. We are currently under examination by the Internal Revenue Service for the 2010, 2011, 2012, 2013 and 2014 tax years and by various state and foreign jurisdictions. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. Resolution of one or more of these exposures in any reporting period could have a material impact on the results of operations for that period.

If we fail to attract and retain highly qualified personnel, we may be unable to successfully develop new product candidates, conduct our clinical trials and commercialize our product candidates.

Our future success will depend in large part on our continued ability to attract and retain highly qualified scientific, technical and management personnel, as well as personnel with expertise in clinical testing, governmental regulation and commercialization. We face competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations. Competition for qualified personnel in the biopharmaceutical field is intense, and there is a limited pool

of qualified potential employees to recruit. We may not be able to attract and retain quality personnel on acceptable terms. If we are unsuccessful in our recruitment and retention efforts, our business may be harmed.

There can be no assurance that we will pay dividends or continue to repurchase stock.

Our Board of Directors authorized a dividend program under which we intend to pay quarterly dividends of \$0.52 per share, subject to quarterly declarations by our Board of Directors. Our Board of Directors also approved the repurchase of up to \$12.0 billion of our common stock, of which \$9 billion is available for repurchase as of December 31, 2016. Any future declarations, amount and timing of any dividends and/or the amount and timing of such stock repurchases are subject to capital availability and determinations by our Board of Directors that cash dividends and/or stock repurchases are in the best interest of our stockholders and are in compliance with all respective laws and our agreements applicable to the declaration and payment of cash dividends and the repurchase of stock. Our ability to pay dividends and/or repurchase stock will depend upon, among other factors, our cash balances and potential future capital requirements for strategic transactions, including acquisitions, debt service requirements, results of operations, financial condition and other factors beyond our control that our Board of Directors may deem relevant. A reduction in or elimination of our dividend payments, our dividend program and/or stock repurchases could have a negative effect on our stock price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Foster City, California, where we house our administrative, manufacturing and R&D activities. We also have R&D facilities in Oceanside, California; Fremont, California; Seattle, Washington; and Alberta, Canada and manufacturing facilities in San Dimas, California; Oceanside, California; Alberta, Canada; and Cork, Ireland. Our global operations include offices in Europe, North America, Asia, South America, Africa, Australia, India and the Middle East.

We believe that our existing properties, including both owned and leased sites, are in good condition and suitable for the conduct of our business. We believe our capital resources are sufficient to purchase, lease or construct any additional facilities required to meet our expected long-term growth needs.

ITEM 3. LEGAL PROCEEDINGS

For a description of our significant pending legal proceedings, please see Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

Our common stock is traded on the Nasdaq Global Select Market under the symbol "GILD". The following table sets forth the high and low intra-day sale prices per share of our common stock on the Nasdaq Global Select Market for the periods indicated. These prices represent quotations among dealers without adjustments for retail mark-ups, markdowns or commissions and may not represent prices of actual transactions.

	2016		2015	
	High	Low	High	Low
First Quarter	\$100.68	\$81.89	\$107.77	\$93.18
Second Quarter	\$103.10	\$77.92	\$123.37	\$95.38
Third Quarter	\$88.85	\$76.67	\$120.37	\$86.00
Fourth Quarter	\$80.00	\$70.83	\$111.11	\$94.37

As of February 16, 2017, we had 1,307,066,900 shares of common stock outstanding held by approximately 349 stockholders of record, which include shares held by a broker, bank or other nominee.

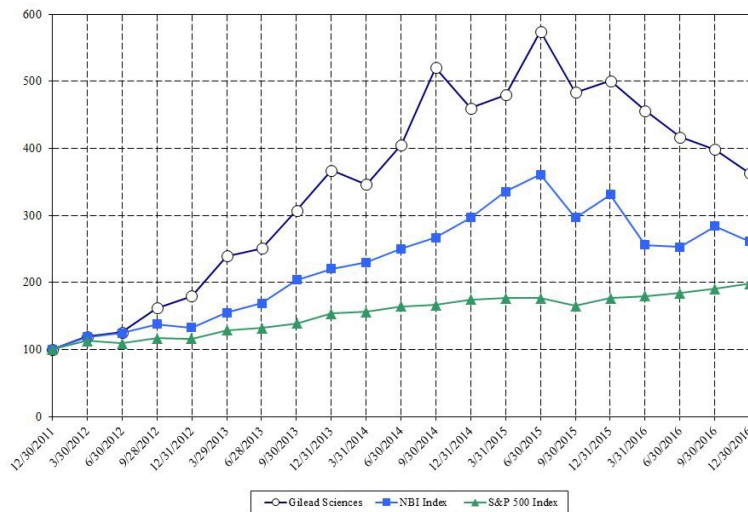
Dividends

During 2016, we declared and paid quarterly cash dividends for an aggregate amount of \$2.5 billion or \$1.84 per common share. During 2015, we initiated a quarterly cash dividend of \$0.43 per share that began in the second quarter of 2015 and declared and paid an aggregate amount of \$1.9 billion or \$1.29 per common share. See Note 13, Stockholders' Equity of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information.

Performance Graph ⁽¹⁾

The following graph compares our cumulative total stockholder return for the past five years to two indices: the Standard & Poor's 500 Stock Index, labeled S&P 500 Index; and the Nasdaq Biotechnology Index, labeled NBI Index. The stockholder return shown on the graph below is not necessarily indicative of future performance, and we do not make or endorse any predictions as to future stockholder returns.

Comparison of Cumulative Total Return on Investment for the Past Five Years ⁽²⁾



Notes:

- ⁽¹⁾ This section is not "soliciting material," is not deemed "filed" with the SEC and is not to be incorporated by reference in any of our filings under the Securities Act or the Exchange Act whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.
- ⁽²⁾ Shows the cumulative return on investment assuming an investment of \$100 in our common stock, the NBI Index and the S&P 500 Index on December 30, 2011, and that all dividends were reinvested.

Issuer Purchases of Equity Securities

In 2016, we repurchased 123 million shares of our common stock for an aggregate purchase price of \$11.0 billion, of which \$5.0 billion was through an accelerated stock repurchase program and \$6.0 billion was through open market transactions.

In February 2016, our Board of Directors authorized a \$12.0 billion share repurchase program (2016 Program) under which repurchases may be made in the open market or in privately negotiated transactions. We started repurchases under the 2016 Program in April 2016. The table below summarizes our stock repurchase activity under the 2016 Program for the three months ended December 31, 2016:

	Total Number of Shares Purchased (in thousands)	Average Price Paid per Share (in dollars)	Total Number of Shares Purchased as Part of Publicly Announced Program (in thousands)	Maximum Fair Value of Shares that May Yet Be Purchased Under the Program (in millions)
October 1 - October 31, 2016	4,722	\$ 74.77	4,694	\$ 9,649
November 1 - November 30, 2016	4,827	\$ 75.07	4,607	\$ 9,304
December 1 - December 31, 2016	4,139	\$ 73.55	4,128	\$ 9,000
Total	<u>13,688</u> ⁽¹⁾	\$ 74.51	<u>13,429</u> ⁽¹⁾	

Note:

⁽¹⁾ The difference between the total number of shares purchased and the total number of shares purchased as part of publicly announced program is due to shares of common stock withheld by us from employee restricted stock awards in order to satisfy applicable tax withholding obligations.

ITEM 6. SELECTED FINANCIAL DATA

GILEAD SCIENCES, INC.
SELECTED CONSOLIDATED FINANCIAL DATA
(in millions, except per share data)

	Year Ended December 31,				
	2016	2015	2014	2013	2012
CONSOLIDATED STATEMENT OF INCOME DATA:					
Total revenues ⁽¹⁾	\$ 30,390	\$ 32,639	\$ 24,890	\$ 11,202	\$ 9,702
Total costs and expenses ⁽¹⁾	\$ 12,757	\$ 10,446	\$ 9,625	\$ 6,678	\$ 5,692
Income from operations	\$ 17,633	\$ 22,193	\$ 15,265	\$ 4,524	\$ 4,010
Provision for income taxes	\$ 3,609	\$ 3,553	\$ 2,797	\$ 1,151	\$ 1,038
Net income	\$ 13,488	\$ 18,106	\$ 12,059	\$ 3,057	\$ 2,574
Net income attributable to Gilead	\$ 13,501	\$ 18,108	\$ 12,101	\$ 3,075	\$ 2,592
Net income per share attributable to Gilead common stockholders - basic	\$ 10.08	\$ 12.37	\$ 7.95	\$ 2.01	\$ 1.71
Shares used in per share calculation - basic	1,339	1,464	1,522	1,529	1,515
Net income per share attributable to Gilead common stockholders - diluted	\$ 9.94	\$ 11.91	\$ 7.35	\$ 1.81	\$ 1.64
Shares used in per share calculation - diluted	1,358	1,521	1,647	1,695	1,583
Cash dividends declared per share	\$ 1.84	\$ 1.29	\$ —	\$ —	\$ —

	December 31,				
	2016	2015	2014	2013	2012
CONSOLIDATED BALANCE SHEET DATA:					
Cash, cash equivalents and marketable securities ⁽²⁾	\$ 32,380	\$ 26,208	\$ 11,726	\$ 2,571	\$ 2,582
Working capital ⁽²⁾	\$ 11,226	\$ 14,872	\$ 11,953	\$ 590	\$ 1,918
Total assets ⁽²⁾⁽³⁾	\$ 56,977	\$ 51,716	\$ 34,601	\$ 22,555	\$ 21,202
Other long-term obligations	\$ 296	\$ 395	\$ 586	\$ 262	\$ 281
Long-term debt, including current portion ⁽²⁾⁽³⁾	\$ 26,346	\$ 22,055	\$ 12,341	\$ 6,612	\$ 8,186
Retained earnings	\$ 18,154	\$ 18,001	\$ 12,732	\$ 6,106	\$ 3,705
Total stockholders' equity	\$ 19,363	\$ 19,113	\$ 15,819	\$ 11,745	\$ 9,544

Notes:

- (1) See Management's Discussion and Analysis of Financial Condition and Results of Operations included in Item 7 of this Annual Report on Form 10-K for a description of our results of operations for 2016.
- (2) During 2016, we issued \$5.0 billion principal amount of senior unsecured notes in a registered offering. We also repaid \$285 million of principal balance of convertible senior notes due in May 2016 and \$700 million of principal balance of senior unsecured notes due in December 2016.
- During 2015, we issued \$10.0 billion principal amount of senior unsecured notes in a registered offering. We also repaid \$213 million of principal balance of convertible senior notes due in May 2016.
- During 2014, we issued \$8.0 billion principal amount of senior unsecured notes in registered offerings. We also repaid \$912 million of principal balance of convertible senior notes due in May 2014, \$750 million of principal balance of senior unsecured notes due in December 2014 and \$600 million under our five-year revolving credit facility agreement.
- During 2013, we repaid \$1.5 billion of principal balance of convertible senior notes and repaid \$150 million under our five-year revolving credit facility agreement.
- During 2012, we completed the acquisition of Pharmasset, Inc. and recognized consideration transferred of \$11.1 billion which was primarily recorded in Intangible assets, net. We financed the transaction with approximately \$5.2 billion in cash on hand, \$2.2 billion in bank debt issued in January 2012 and \$3.7 billion in senior unsecured notes issued in December 2011.
- (3) In 2016, we retrospectively adopted Accounting Standards Update No. 2015-03 "Simplifying the Presentation of Debt Issuance Costs," which requires presentation of debt issuance costs as a direct deduction from the carrying amount of a recognized debt liability on the balance sheet. As a result, we reclassified unamortized debt issuance costs from assets to Long-term debt, including current portion for each of the years presented.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to help the reader understand our results of operations and financial condition. MD&A is provided as a supplement to, and should be read in conjunction with, our audited Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements and other disclosures included in Item 8 of this Annual Report on Form 10-K (including the disclosures under Part I, Item 1A, "Risk Factors"). Our Consolidated Financial Statements have been prepared in accordance with U.S. generally accepted accounting principles and are presented in U.S. dollars.

Management Overview

Gilead Sciences, Inc. (Gilead, we or us), incorporated in Delaware on June 22, 1987, is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet medical need. With each new discovery and investigational drug candidate, we strive to transform and simplify care for people with life-threatening illnesses around the world. We have operations in more than 30 countries worldwide, with headquarters in Foster City, California. Gilead's primary areas of focus include human immunodeficiency virus (HIV), liver diseases such as chronic hepatitis C virus (HCV) infection and chronic hepatitis B virus (HBV) infection, hematology/oncology, cardiovascular and inflammation/respiratory diseases. We seek to add to our existing portfolio of products through our internal discovery and clinical development programs and through product acquisition and in-licensing strategies.

Our portfolio of marketed products includes AmBisome[®], Atripla[®], Cayston[®], Complera[®]/Eviplera[®], Descovy[®], Emtriva[®], Epclusa[®], Genvoya[®], Harvoni[®], Hepsera[®], Letairis[®], Odefsey[®], Ranexa[®], Sovaldi[®], Stribild[®], Truvada[®], Tybost[®], Vemlidy[®], Viread[®], Vitekta[®], and Zydelig[®]. We have U.S. and international commercial sales operations, with marketing subsidiaries in over 30 countries. We also sell and distribute certain products through our corporate partners under royalty-paying collaborative agreements.

2016 Business Highlights

During 2016, we continued to advance our product pipeline across our therapeutic areas with the goal of delivering best-in-class drugs that advance the current standard of care and/or address unmet medical need. Highlights of our 2016 activities include:

- Submission of marketing authorization applications for the once-daily, single-tablet regimen of sofosbuvir 400 mg, velpatasvir 100 mg and voxilaprevir 100 mg for the treatment of HCV-infected patients to U.S. Food and Drug Administration (FDA) and the European Commission.
- FDA and Japanese Ministry of Health, Labour and Welfare (MHLW) approval of Vemlidy, a once-daily treatment for adults with HBV infection with compensated liver disease.
- European Commission approval of marketing authorization for once-daily Truvada in combination with safer-sex practices to reduce the risk of sexually acquired HIV-1 infection among uninfected adults at high risk, a strategy known as pre-exposure prophylaxis, or PrEP.
- FDA and European Commission approval of Epclusa, the first all-oral, pan-genotypic, single-tablet regimen for the treatment of adults with genotype 1-6 chronic HCV infection.
- FDA and the European Commission approval of two tenofovir alafenamide (TAF)-based regimens, Odefsey and Descovy, a fixed-dose combination for the treatment of HIV-1 infection.
- Purchase of Nimbus Apollo, Inc. (Nimbus), a wholly-owned subsidiary of Nimbus Therapeutics, and its Acetyl-CoA Carboxylase (ACC) inhibitor program. The Nimbus program includes the lead candidate NDI-010976, an ACC inhibitor, and other pre-clinical ACC inhibitors for the potential treatment of non-alcoholic steatohepatitis (NASH), hepatocellular carcinoma and other diseases.
- Closed on a license and collaboration agreement with Galapagos NV (Galapagos), a clinical-stage biotechnology company based in Belgium, for the development and commercialization of filgotinib, a JAK1-selective inhibitor being investigated for inflammatory disease indications.

2016 Financial Highlights

During 2016, total revenues decreased to \$30.4 billion and total product sales decreased to \$30.0 billion, compared to \$32.6 billion and \$32.2 billion in 2015, respectively, primarily due to lower sales of Harvoni and Sovaldi, partially offset by sales of Epclusa and TAF-based products, Genvoya, Descovy and Odefsey. In the United States, product sales were \$19.3 billion in 2016, compared to \$21.2 billion in 2015. In Europe, product sales were \$6.1 billion in 2016, compared to \$7.2 billion in 2015. In Japan, product sales were \$2.5 billion, compared to \$1.9 billion in 2015. Sales in other international locations were \$2.1 billion in 2016, compared to \$1.9 billion in 2015.

Research and development (R&D) expenses increased 69% to \$5.1 billion for 2016 compared to 2015, primarily due to the overall progression of clinical studies, including ongoing milestone payments, our purchase of an FDA priority review voucher, up-front collaboration expenses related to our license and collaboration agreement with Galapagos and our purchase of Nimbus. In addition, we recorded in-process R&D (IPR&D) impairment charges related to momelotinib and simtuzumab.

Selling, general and administrative (SG&A) expenses were \$3.4 billion for 2016 and 2015. Declines in our branded prescription drug (BPD) fee expense were offset by higher costs to support new product launches and our geographic expansion.

Net income attributable to Gilead for 2016 was \$13.5 billion or \$9.94 per diluted share, compared to \$18.1 billion or \$11.91 per diluted share in 2015, primarily due to lower product sales and higher R&D expenses. Year-over-year earnings per share were favorably impacted by our share repurchase activities. During 2016, we repurchased a total of 123 million shares for \$11.0 billion, of which 54 million shares or \$5.0 billion were repurchased under an accelerated stock repurchase program.

As of December 31, 2016, we had \$32.4 billion of cash, cash equivalents and marketable securities, compared to \$26.2 billion as of December 31, 2015. This increase was primarily due to the issuance of \$5.0 billion aggregate principal amount of senior unsecured notes in September 2016 (the 2016 Notes). During 2016, we generated \$16.7 billion in operating cash flow, utilized \$11.0 billion to repurchase stock and paid cash dividends of \$2.5 billion.

Outlook 2017

In 2017, we will continue to maintain our strong operating and financial discipline. From a R&D perspective, we will continue to invest in conducting new and ongoing clinical studies, which support both our existing products and our product candidates. We expect to move forward on a number of late-stage clinical studies for new product candidates, including progress of our Phase 3 studies of selonsertib for NASH. In order to further develop our product pipeline, we will focus on leveraging our capital to pursue external licensing and acquisition opportunities which fit into our long-term strategic plan.

From a commercial perspective, we will continue to focus on supporting the uptake of our recently launched TAF-based regimens and continue to promote the use of our existing commercial products. We also hired a field-based team to promote Truvada for PrEP as we believe it will continue to be an integral part of our growth in HIV in the United States as communities embrace the public health benefits of prevention. In HCV, it is very difficult for us to accurately predict our revenue because HCV is a cure market. We expect patient starts to decline relative to 2016 in all major markets, and this will be the primary driver of our expected decline in total product sales. We also expect product sales to be impacted by the effects of competition on market share and net price, as well as a continued decrease in the average duration of treatment as fewer patients are treated for 24 or 12 weeks and more patients are treated for 8 weeks. While we anticipate HCV revenues in 2017 to decline from prior year levels, there are still many patients to treat and we expect our HCV products to generate significant revenues and cash flows in the future. We will continue to focus on helping HCV patients get diagnosed and into treatment care. In addition, we will continue to invest strategically and selectively in educational programs that raise awareness and access to our medications.

We will continue to focus on ensuring patient access to our products around the world. Our progress on all of these initiatives is subject to a number of uncertainties, including, but not limited to, the continuation of an uncertain global macroeconomic environment; additional pricing pressures from payers and competitors; slower than anticipated growth in our HIV franchise; an increase in discounts, chargebacks and rebates due to ongoing contracts and future negotiations with commercial and government payers; market share and price erosion caused by the introduction of generic versions of Truvada outside the United States and Viread later in 2017; inaccuracies in our HCV patient start estimates; potential amendments to the Affordable Care Act or other government action that could have the effect of lowering prices; a larger than anticipated shift in payer mix to more highly discounted payer segment; and volatility in foreign currency exchange rates.

2016 Results of Operations

Total Revenues

The following table summarizes the period over period changes in our product sales and royalty, contract and other revenues:

(In millions, except percentages)	2016	Change	2015	Change	2014
Revenues:					
Product sales	\$ 29,953	(7)%	\$ 32,151	31%	\$ 24,474
Royalty, contract and other revenues	437	(10)%	488	17%	416
Total revenues	<u>\$ 30,390</u>	<u>(7)%</u>	<u>\$ 32,639</u>	<u>31%</u>	<u>\$ 24,890</u>

Product Sales

2016 Compared to 2015

Total product sales were \$30.0 billion in 2016, compared to \$32.2 billion in 2015, primarily due to a decrease in antiviral product sales.

Antiviral product sales, which include sales of our HIV and other antiviral products and our HCV products, were \$27.7 billion in 2016, compared to \$30.2 billion in 2015. HIV and other antiviral product sales were \$12.9 billion in 2016, compared to \$11.1 billion in 2015. The increase was primarily driven by the continued uptake of our TAF-based products, Genvoya, Descovy and Odefsey, partially offset by decreases in sales of tenofovir disoproxil (TDF)-based products. HCV product sales, which consist of Harvoni, Sovaldi and Epclusa, were \$14.8 billion in 2016, compared to \$19.1 billion in 2015. The declines were due to lower sales of Harvoni and Sovaldi, partially offset by sales of Epclusa, which was launched in 2016 across various locations.

Other product sales, which include sales of Letairis, Ranexa and AmBisome, were \$2.2 billion in 2016, an increase of 14% compared to \$1.9 billion in 2015.

Of our product sales in 2016, 36% were generated outside the United States. We faced exposure to movements in foreign currency exchange rates, primarily in the Euro and Yen. We used foreign currency exchange contracts to hedge a percentage of our foreign currency exposure. Foreign currency exchange, net of hedges, had an unfavorable impact of \$498 million on our 2016 product sales compared to 2015.

We record product sales net of estimated mandatory and supplemental discounts to government payers, in addition to discounts to private payers, including rebates, chargebacks, cash discounts for prompt payment, distributor fees and other related costs. These deductions are generally referred to as gross-to-net deductions and totaled \$20.3 billion or 40% of gross product sales in 2016, compared to \$18.1 billion or 36% in 2015. Of the \$20.3 billion in 2016, \$19.1 billion or 38% of gross product sales was related to government and other rebates and chargebacks, and \$1.2 billion was related to cash discounts for prompt payment, distributor fees and other related costs. The increase in our 2016 gross-to-net deductions was primarily due to an increase in discounts and a higher percentage of sales to more deeply discounted segments for our HCV products in the United States.

Product sales in the United States decreased by 9% to \$19.3 billion in 2016, compared to \$21.2 billion in 2015. Declines in sales of our HCV products were partially offset by increases in sales of our HIV and other antiviral products. The increases in the sales of our HIV and other antiviral products were primarily driven by sales of our newly launched TAF-based products and a favorable revision to our rebate reserves of \$332 million, primarily related to our TDF-based products.

Product sales in Europe decreased by 15% to \$6.1 billion in 2016, compared to \$7.2 billion in 2015, primarily due to lower Harvoni and Sovaldi sales volume. Foreign currency exchange, net of hedges, had an unfavorable impact of \$503 million on our product sales in 2016 compared to 2015.

Product sales in Japan, which consist of Sovaldi and Harvoni, increased by 31% to \$2.5 billion in 2016, compared to \$1.9 billion in 2015. The increase was primarily driven by higher sales volume of Harvoni, which was launched in September 2015, partially offset by a mandatory price reduction of 32% for Sovaldi and Harvoni that was effective April 1, 2016.

Product sales in other international locations increased by 10% to \$2.1 billion in 2016, compared to \$1.9 billion in 2015, primarily driven by continued launches of our HCV and TAF-based products across various locations.

2015 Compared to 2014

Total product sales were \$32.2 billion in 2015, compared to \$24.5 billion in 2014, primarily driven by an increase in antiviral product sales.

Antiviral product sales were \$30.2 billion in 2015, compared to \$22.8 billion in 2014. The increase was primarily driven by the launch of Harvoni across various geographies, partially offset by a decline in Sovaldi sales with patients being prescribed Harvoni instead of Sovaldi. HIV products also contributed to the sales increases primarily due to increased sales of our newer HIV single-tablet regimens, Stribild, Complera/Eviplera and Genvoya, partially offset by declines in Atripla sales volumes.

Other product sales, which include sales of Letairis, Ranexa, AmBisome and Zydelig, were \$1.9 billion in 2015, an increase of 16% compared to \$1.7 billion in 2014.

Of our product sales in 2015, 34% were generated outside the United States. Foreign currency exchange, net of hedges, had an unfavorable impact of \$737 million on our 2015 product sales compared to 2014.

Our gross-to-net deductions totaled \$18.1 billion or 36% in 2015, compared to \$7.3 billion or 23% in 2014. Of the \$18.1 billion in 2015, \$16.4 billion or 33% of gross product sales was related to government and other rebates and chargebacks, and \$1.7 billion was related to cash discounts for prompt payment, distributor fees and other related costs. Our 2015 gross-to-net deductions attributable to our HCV product sales exceeded our overall gross-to-net of 36% in order to obtain formulary status or expand access for patients.

Product sales in the United States increased by 17% to \$21.2 billion in 2015, compared to \$18.1 billion in 2014, primarily due to sales of Harvoni and increases in sales of Stribild, Truvada and Complera, partially offset by declines in sales of Sovaldi.

Product sales in Europe increased by 39% to \$7.2 billion in 2015, compared to \$5.1 billion in 2014, primarily due to sales of Harvoni. Foreign currency exchange, net of hedges, had an unfavorable impact of \$611 million on our product sales in 2015 compared to 2014.

Product sales in other international locations increased to \$3.8 billion in 2015 compared to \$1.2 billion in 2014, primarily due to the launch in Japan of Sovaldi in May 2015 and Harvoni in September 2015.

The following table summarizes the period over period changes in our product sales:

(In millions, except percentages)	2016	Change	2015	Change	2014
Antiviral products:					
<i>HCV products</i>					
Harvoni	\$ 9,081	(34)%	\$ 13,864	*	\$ 2,127
Sovaldi	4,001	(24)%	5,276	(49)%	10,283
Epclusa	1,752	*	—	*	—
<i>HIV and other antiviral products</i>					
Truvada	3,566	3 %	3,459	4 %	3,340
Atripla	2,605	(17)%	3,134	(10)%	3,470
Stribild	1,914	5 %	1,825	52 %	1,197
Genvoya	1,484	*	45	*	—
Complera/Eviplera	1,457	2 %	1,427	16 %	1,228
Viread	1,186	7 %	1,108	5 %	1,058
Odefsey	329	*	—	*	—
Descovy	298	*	—	*	—
Other antiviral	72	4 %	69	(22)%	88
Total antiviral products	27,745	(8)%	30,207	33 %	22,791
Other products:					
Letairis	819	17 %	700	18 %	595
Ranexa	677	15 %	588	15 %	510
AmBisome	356	2 %	350	(10)%	388
Zydelig	168	27 %	132	*	23
Other	188	8 %	174	4 %	167
Total product sales	\$ 29,953	(7)%	\$ 32,151	31 %	\$ 24,474

* Percentage not meaningful

The following is additional discussion of our results by product:

- *Harvoni*

Harvoni was approved by FDA in October 2014, by the European Commission in November 2014 and by the Japanese MHLW in July 2015.

Harvoni sales accounted for 33%, 46% and 9% of our total antiviral product sales for 2016, 2015 and 2014, respectively. In 2016, product sales were \$4.9 billion in the United States, \$1.8 billion in Europe, \$1.8 billion in Japan and \$491 million in other international locations. In 2015, product sales were \$10.1 billion in the United States, \$2.2 billion in Europe, \$1.0 billion in Japan and \$545 million in other international locations. In 2014, product sales were \$2.0 billion in the United States and \$103 million in Europe.

In the United States, the decrease in 2016 compared to 2015 was primarily due to lower sales volume and a lower average net selling price, which was partially offset by a favorable revision to our sales return reserve of \$181 million recorded during the second quarter of 2016. The number of patients that started treatment with Harvoni in the United States peaked in the first half of 2015, as many warehoused patients initiated treatment after the product launch. In Europe, the decrease in 2016 compared to 2015 was primarily due to lower sales volume and unfavorable foreign currency exchange, net of hedges. In Japan, the increase in 2016 compared to 2015 was driven by higher sales volume, partially offset by a mandatory price reduction of 32% that was effective April 1, 2016. In other international locations, the decrease in 2016 compared to 2015 was primarily due to a lower average net selling price, partially offset by the continued launches of Harvoni across various locations.

The increase in product sales in 2015 compared to 2014 was primarily due to the launch of Harvoni in the United States, Europe and Japan.

- *Sovaldi*

Sovaldi was approved by FDA in December 2013, by the European Commission in January 2014 and by the Japanese MHLW in March 2015.

Sovaldi sales accounted for 14%, 17% and 45% of our total antiviral product sales for 2016, 2015 and 2014, respectively. In 2016, product sales were \$1.9 billion in the United States, \$891 million in Europe, \$635 million in Japan and \$580 million in other international locations. In 2015, product sales were \$2.4 billion in the United States, \$1.6 billion in Europe, \$878 million in Japan and \$409 million in other international locations. In 2014, product sales were \$8.5 billion in the United States, \$1.5 billion in Europe and \$230 million in other international locations.

In the United States, the decrease in 2016 compared to 2015 was primarily due to lower sales volume, partially offset by a favorable revision to our sales return reserve of \$98 million recorded during the second quarter of 2016. In Europe, the decrease in 2016 compared to 2015 was primarily due to lower sales volume. In Japan, the decrease in 2016 compared to 2015 was primarily due to a mandatory price reduction of 32% that was effective April 1, 2016 and lower sales volume. In other international locations, the increase in 2016 compared to 2015 was primarily driven by higher sales volume.

The decrease in product sales in 2015 compared to 2014 was primarily due to volume declines in the United States with patients being prescribed Harvoni instead of Sovaldi, partially offset by volume increases in Japan and Europe due to the launch of Sovaldi.

- *Epclusa*

Epclusa was launched in the United States and Europe in June and July 2016, respectively, and accounted for 6% of our total antiviral product sales. In 2016, product sales were \$1.8 billion, primarily driven by sales in the United States of \$1.6 billion.

- *Truvada*

Truvada sales accounted for 13%, 11% and 15% of our total antiviral product sales for 2016, 2015 and 2014, respectively. In 2016, product sales were \$2.4 billion in the United States, \$913 million in Europe and \$269 million in other international locations. In 2015, product sales were \$2.1 billion in the United States, \$1.1 billion in Europe and \$284 million in other international locations. In 2014, product sales were \$1.8 billion in the United States, \$1.3 billion in Europe and \$278 million in other international locations.

Truvada sales increased by 3% to \$3.6 billion in 2016, compared to \$3.5 billion in 2015, primarily due to a higher average net selling price and higher sales volume in the United States, as a result of the increased usage of Truvada for PrEP. Truvada sales increased by 4% in 2015, compared to \$3.3 billion in 2014, primarily due to sales volume growth and an increase in the average net selling price in the United States.

- *Atripla*

Atripla sales accounted for 9%, 10% and 15% of our total antiviral product sales for 2016, 2015 and 2014, respectively. In 2016, product sales were \$1.9 billion in the United States, \$520 million in Europe and \$187 million in other international locations. In 2015, product sales were \$2.2 billion in the United States, \$694 million in Europe and \$218 million in other international locations. In 2014, product sales were \$2.4 billion in the United States, \$888 million in Europe and \$225 million in other international locations.

Atripla sales decreased by 17% to \$2.6 billion in 2016, compared to \$3.1 billion in 2015 and by 10% in 2015, compared to \$3.5 billion in 2014, primarily due to declines in sales volume as doctors prescribed newer regimens, including TDF- and TAF-based regimens. The efavirenz component of Atripla, which has a gross margin of zero, comprised \$966 million, \$1.2 billion and \$1.3 billion of our Atripla sales in 2016, 2015 and 2014, respectively.

A generic version of Bristol-Myers Squibb Company's Sustiva (efavirenz) was made available in Canada and Europe in 2013 and will be made available in the United States in 2017. While we have observed some pricing pressure related to the efavirenz component of our Atripla sales, we have not yet observed any meaningful splitting of the Atripla single-tablet regimen.

- *Stribild*

Stribild sales accounted for 7%, 6% and 5% of our total antiviral product sales for 2016, 2015 and 2014, respectively. In 2016, product sales were \$1.5 billion in the United States and \$314 million in Europe. In 2015, product sales were \$1.5 billion in the United States and \$282 million in Europe. In 2014, product sales were \$1.0 billion in the United States and \$145 million in Europe.

Stribild sales increased by 5% to \$1.9 billion in 2016, compared to \$1.8 billion in 2015, primarily due to a favorable revision to our rebate reserves of \$223 million during the third quarter of 2016, partially offset by lower sales volume as a result of the continued launch of our new TAF-based product, Genvoya. Stribild sales increased by 52% in 2015, compared to \$1.2 billion in 2014, primarily due to higher sales volume in the United States and Europe.

- *TAF-based regimens - Genvoya, Descovy and Odefsey*

Genvoya was launched in the United States and Europe in November 2015. Descovy was launched in the United States and Europe in April 2016. Odefsey was launched in the United States in March 2016 and launched in Europe in July 2016.

Our newly launched TAF-based regimens accounted for 8% of our total antiviral product sales for 2016. In 2016, product sales of our TAF-based regimens were \$2.1 billion, primarily driven by sales in the United States of \$1.8 billion.

- *Complera/Eviplera*

Complera/Eviplera sales accounted for 5% of our total antiviral product sales for 2016, 2015 and 2014. In 2016, product sales were \$821 million in the United States and \$580 million in Europe. In 2015, product sales were \$796 million in the United States and \$576 million in Europe. In 2014, product sales were \$663 million in the United States and \$513 million in Europe.

Complera/Eviplera sales increased by 2% to \$1.5 billion in 2016, compared to \$1.4 billion in 2015, primarily due to a favorable revision to our rebate reserves of \$89 million during the third quarter of 2016. Complera/Eviplera increased by 16% in 2015, compared to \$1.2 billion in 2014, driven primarily by higher sales volume in the United States and Europe.

Royalty, Contract and Other Revenues

The following table summarizes the period over period changes in our royalty, contract and other revenues:

(In millions, except percentages)	2016	Change	2015	Change	2014
Royalty, contract and other revenues	\$ 437	(10)%	\$ 488	17%	\$ 416

Royalty, contract and other revenues declined by 10% to \$437 million in 2016, compared to \$488 million in 2015 and increased by 17% in 2015, compared to \$416 million in 2014. The changes were primarily due to royalty revenues from F. Hoffman-La Roche Ltd for sales of Tamiflu. The majority of our royalties are recognized in the quarter following the quarter in which the corresponding product sales occur.

Cost of Goods Sold and Product Gross Margin

The following table summarizes the period over period changes in our product sales, cost of goods sold and product gross margin:

(In millions, except percentages)	2016	Change	2015	Change	2014
Total product sales	\$ 29,953	(7)%	\$ 32,151	31%	\$ 24,474
Cost of goods sold	\$ 4,261	6%	\$ 4,006	6%	\$ 3,788
Product gross margin	86%		88%		85%

Our product gross margin for 2016 decreased compared to 2015 primarily due to changes in product mix, as our HCV product sales decreased as a percentage of total product sales. Our product gross margin for 2015 increased compared to 2014 primarily due to changes in product mix, as Atripla sales, which include the efavirenz component at a gross margin of zero, declined and HCV product sales increased as a percentage of total product sales.

Research and Development Expenses

The following table summarizes the period over period changes in R&D expenses:

(In millions, except percentages)	2016	Change	2015	Change	2014
R&D expenses	\$ 5,098	69%	\$ 3,014	6%	\$ 2,854

R&D expenses summarized above consisted primarily of clinical studies performed by contract research organizations, materials and supplies, licenses and fees, up-front payments under collaboration agreements, milestone payments, personnel costs, including salaries, benefits and stock-based compensation and overhead allocations consisting of various support and facilities-related costs.

We do not track total R&D expenses by product candidate, therapeutic area or development phase. However, we manage our R&D expenses by identifying the R&D activities we anticipate will be performed during a given period and then prioritizing efforts based on scientific data, probability of successful development, market potential, available human and capital resources and other considerations. We continually review our R&D pipeline and the status of development and, as necessary, reallocate resources among the R&D portfolio that we believe will best support the future growth of our business.

The following table provides a breakout of R&D expenses by major cost type:

(In millions, except percentages)	2016	2015	2014
Clinical studies and outside services	\$ 3,219	\$ 1,634	\$ 1,688
Personnel and infrastructure expenses	1,122	1,041	900
Facilities, IT and other costs	325	339	266
IPR&D impairment charges	432	—	—
Total	\$ 5,098	\$ 3,014	\$ 2,854

In 2016, R&D expenses increased \$2.1 billion or 69%, compared to 2015, primarily due to increases in clinical studies and outside services expenses of \$1.6 billion. The increases in clinical studies and outside services were primarily due to the overall progression of clinical studies, including ongoing milestone payments, our purchase of an FDA priority review voucher, up-front collaboration expenses related to our license and collaboration agreement with Galapagos and our purchase of Nimbus. IPR&D impairment charges were a result of termination of clinical developments for momelotinib and simtuzumab.

In 2015, R&D expenses increased \$160 million or 6%, compared to 2014, primarily due to increases in personnel and infrastructure expenses of \$141 million and facilities, IT and other costs of \$73 million to support our ongoing clinical study activity and geographic expansion. In 2014, clinical studies and outside services included expenses of \$350 million for collaboration and acquisition related expenses and the purchase of an FDA priority review voucher.

Selling, General and Administrative Expenses

The following table summarizes the period over period changes in SG&A expenses:

(In millions, except percentages)	2016	Change	2015	Change	2014
SG&A expenses	\$ 3,398	(1)%	\$ 3,426	15%	\$ 2,983

SG&A expenses relate to sales and marketing, finance, human resources, legal and other administrative activities. Expenses are primarily comprised of facilities and overhead costs, outside marketing, advertising and legal expenses, and other general and administrative costs. SG&A expenses also include the BPD fee. In the United States, we, along with other pharmaceutical manufacturers of branded drug products, are required to pay a portion of an industry fee (the BPD fee), which is estimated based on select government sales during each calendar year as a percentage of total industry government sales and is trued-up upon receipt of invoices from the Internal Revenue Service (IRS). The amount of the annual BPD fee imposed on the pharmaceutical industry as a whole was \$3.0 billion in 2016 and will increase to \$4.0 billion in 2017.

In 2016, SG&A expenses were flat compared to 2015. Declines in our BPD fee were offset by higher costs to support new product launches and our geographic expansion. The 2016 BPD fee was favorably impacted by a credit of \$191 million based on receipt of the IRS invoice.

In 2015, SG&A expenses increased \$443 million or 15% compared to 2014, primarily due to an increase of \$627 million in headcount-related, marketing and other expenses to support the growth and geographic expansion of our business, partially offset by a decrease in BPD fee of \$100 million based on receipt of the IRS invoice.

Our BPD fee expenses were \$270 million in 2016, \$414 million in 2015 and \$590 million in 2014. The BPD fee is not tax deductible.

Interest Expense

In 2016, interest expense increased to \$964 million, compared to \$688 million in 2015, primarily due to the issuance of \$5.0 billion aggregate principal amount of the 2016 Notes and \$10.0 billion aggregate principal amount of senior unsecured notes (the 2015 Notes). In 2015, interest expense increased to \$688 million, compared to \$412 million in 2014, primarily due to the issuance of the 2015 Notes and the issuance of \$8.0 billion aggregate principal amount of senior unsecured notes in 2014.

Other Income (Expense), Net

Other income (expense), net was \$428 million, \$154 million and \$3 million in 2016, 2015 and 2014, respectively, primarily due to our cash, cash equivalents and marketable securities earning a higher yield.

Provision for Income Taxes

Our provision for income taxes was \$3.6 billion, \$3.6 billion and \$2.8 billion in 2016, 2015 and 2014, respectively. The effective tax rate of 21.1%, 16.4% and 18.8% for 2016, 2015 and 2014, respectively, differed from the U.S. federal statutory rate of 35% primarily due to earnings from non-U.S. subsidiaries that operate in jurisdictions with lower tax rates than the United States and where the earnings are considered indefinitely reinvested.

Liquidity and Capital Resources

We believe that our existing capital resources, supplemented by our cash flows generated from operating activities will be adequate to satisfy our capital needs for the foreseeable future. The following table summarizes our cash, cash equivalents, and marketable securities and working capital (in millions):

	December 31,		
	2016	2015	2014
Cash, cash equivalents and marketable securities	\$ 32,380	\$ 26,208	\$ 11,726
Working capital	\$ 11,226	\$ 14,872	\$ 11,953

Cash, Cash Equivalents and Marketable Securities

Cash, cash equivalents and marketable securities totaled \$32.4 billion at December 31, 2016, an increase of \$6.2 billion or 24% when compared to \$26.2 billion at December 31, 2015. During 2016, we generated \$16.7 billion in operating cash flow, received \$4.9 billion in net proceeds from the 2016 Notes, utilized \$11.0 billion to repurchase stock, repaid \$985 million principal balance of our senior notes and convertible senior notes and paid cash dividends of \$2.5 billion.

Cash, cash equivalents and marketable securities totaled \$26.2 billion at December 31, 2015, an increase of \$14.5 billion or 124% when compared to \$11.7 billion at December 31, 2014. During 2015, we generated \$20.3 billion in operating cash flow, received \$9.9 billion in net proceeds from our issuance of senior unsecured notes, utilized \$10.0 billion to repurchase stock, utilized \$3.9 billion to settle 46 million warrants related to the convertible senior notes due in May 2016 (the Convertible Notes) and paid cash dividends of \$1.9 billion.

Of the total cash, cash equivalents and marketable securities at December 31, 2016, approximately \$27.4 billion was generated from operations in foreign jurisdictions and is intended for use in our foreign operations. We do not rely on unrepatriated earnings as a source of funds for our domestic business as we expect to have sufficient cash flow and borrowing capacity in the United States to fund our domestic operational and strategic needs.

Working Capital

Working capital was \$11.2 billion at December 31, 2016. The decrease of \$3.6 billion from working capital as of December 31, 2015 was primarily due to a decline in cash and cash equivalents, as a result of an increase in our long-term marketable securities.

Working capital was \$14.9 billion at December 31, 2015. The increase of \$2.9 billion from working capital as of December 31, 2014 was driven primarily by the increase in cash, cash equivalents and short-term marketable securities and an increase in accounts receivable, partially offset by increases in accrued government and other rebates.

Cash Flows

The following table summarizes our cash flow activities (in millions):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Cash provided by (used in):			
Operating activities	\$ 16,669	\$ 20,329	\$ 12,818
Investing activities	\$ (11,985)	\$ (12,475)	\$ (1,823)
Financing activities	\$ (9,347)	\$ (4,963)	\$ (3,025)

Cash Provided by Operating Activities

Cash provided by operating activities represents the cash receipts and disbursements related to all of our activities other than investing and financing activities. Operating cash flow is derived by adjusting our net income for non-cash items and changes in operating assets and liabilities. Cash provided by operating activities decreased by \$3.7 billion to \$16.7 billion in 2016 when compared to 2015, primarily due to lower cash receipts as a result of lower product sales and higher cash payments related to accrued government and other rebates and chargebacks. Cash flows from operations may decrease in the future as our HCV product sales are expected to decline.

Cash provided by operating activities increased by \$7.5 billion to \$20.3 billion in 2015 when compared to 2014, primarily due to higher cash receipts as a result of higher product sales.

Cash Used in Investing Activities

Cash used in investing activities primarily consists of net purchases of marketable securities and other investments and our capital expenditures. Cash used in investing activities decreased by \$490 million to \$12.0 billion in 2016 when compared to 2015, primarily due to lower net purchases of marketable securities, partially offset by other investments related to our license and collaboration agreement with Galapagos.

Cash used in investing activities increased by \$10.7 billion to \$12.5 billion in 2015 when compared to 2014, primarily due to higher net purchases of marketable securities.

Cash Used in Financing Activities

Cash used in financing activities increased by \$4.4 billion to \$9.3 billion in 2016 when compared to 2015, primarily due to higher repurchases of our common stock, higher net payments on debt, higher payments of cash dividends and lower proceeds from the issuances of debt. These increases were partially offset by lower payments to settle warrants related to the Convertible Notes.

Cash used in financing activities increased by \$1.9 billion to \$5.0 billion in 2015 when compared to 2014, primarily due to higher repurchases of our common stock and payments of cash dividends, which began in 2015. These increases were partially offset by lower net payments on debt and higher proceeds from the issuances of debt.

Debt and Credit Facility

Long-Term Obligations

The summary of our borrowings under various financing arrangements is included in Note 11, Debt and Credit Facility of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

Debt Financing

In September 2016, we issued our 2016 Notes in the aggregate principal amount of \$5.0 billion and in December 2016, repaid \$700 million of principal balance related to our senior unsecured notes. In September 2015, we issued our 2015 Notes in the aggregate principal amount of \$10.0 billion. We intend to use the net proceeds from the 2016 Notes and 2015 Notes for general corporate purposes, which may include the repayment of debt, working capital, payments of cash dividends, repurchases of our outstanding common stock pursuant to our authorized share repurchase program and future acquisitions. We are required to comply with certain covenants under our notes indentures and as of December 31, 2016, we were not in violation of any covenants.

Convertible Notes Repayment and Warrant Settlements

Our Convertible Notes were partially converted during 2016 and 2015 and on May 1, 2016, the remainder matured. We repaid an aggregate principal balance of \$285 million and \$213 million during 2016 and 2015, respectively. We also paid in cash \$956 million and \$784 million during 2016 and 2015, respectively, related to the conversion spread of the Convertible Notes. We received \$956 million and \$784 million in cash during 2016 and 2015, respectively, from our convertible note hedges related to the Convertible Notes. During 2015, a portion of the warrants related to the Convertible Notes was modified and settled, and in August 2016, the remainder expired. We paid \$469 million and \$3.9 billion during 2016 and 2015, respectively, to settle the warrants as the average market price of our common stock exceeded the warrants' exercise price.

Credit Facility

In 2016, we terminated our existing revolving credit facility and entered into a new \$2.5 billion, five-year revolving credit facility maturing in May 2021. The facility can be used for working capital requirements and for general corporate purposes, including, without limitation, acquisitions. We are required to comply with certain covenants under the credit agreement and as of December 31, 2016, we were not in violation of any covenants, and no amounts were outstanding under the revolving credit facility.

Capital Return Program

Stock Repurchase Programs

In February 2016, our Board of Directors authorized a \$12.0 billion stock repurchase program (2016 Program). Purchases under the 2016 Program may be made in the open market or in privately negotiated transactions. The 2016 Program commenced after the \$15.0 billion stock repurchase program authorized by our Board of Directors in January 2015 was completed in the second quarter of 2016. The \$5.0 billion stock repurchase program authorized by our Board of Directors in May 2014 was completed in the first quarter of 2015. The \$5.0 billion repurchase program authorized by our Board of Directors in January 2011 was completed in 2014. As of December 31, 2016, the remaining authorized repurchase amount under the 2016 Program was \$9 billion.

The following table summarizes our stock repurchases under the above-described programs (in millions):

	2016	2015	2014
Shares repurchased and retired	123	95	59
Amount	\$ 11,001	\$ 10,002	\$ 5,349

Dividends

On February 7, 2017, we announced that our Board of Directors declared a quarterly cash dividend of \$0.52 per share of our common stock, with a payment date of March 30, 2017 to all stockholders of record as of the close of business on March 16, 2017.

In April 2016, we announced that our Board of Directors declared a quarterly cash dividend of \$0.47 per common share, which became effective for the second quarter of 2016. During 2016, we declared and paid quarterly cash dividends for an aggregate amount of \$2.5 billion or \$1.84 per common share.

In the second quarter of 2015, we initiated a cash dividend of \$0.43 per common share. During 2015, we declared and paid quarterly cash dividends for an aggregate amount of \$1.9 billion or \$1.29 per share.

Capital Resources

We believe our existing capital resources, supplemented by cash flows generated from our operations, will be adequate to satisfy our capital needs for the foreseeable future. Our future capital requirements will depend on many factors, including but not limited to the following:

- the commercial performance of our current and future products;

- the progress and scope of our R&D efforts, including preclinical studies and clinical trials;
- the cost, timing and outcome of regulatory reviews;
- the expansion of our sales and marketing capabilities;
- the possibility of acquiring additional manufacturing capabilities or office facilities;
- the possibility of acquiring other companies or new products;
- debt service requirements;
- the establishment of additional collaborative relationships with other companies; and
- costs associated with the defense, settlement and adverse results of government investigations and litigation, including matters related to sofosbuvir.

We may in the future require additional funding, which could be in the form of proceeds from equity or debt financings. If such funding is required, we cannot guarantee that it will be available to us on favorable terms, if at all.

Critical Accounting Policies, Estimates and Judgments

The discussion and analysis of our financial condition and results of operations is based on our Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures. On an ongoing basis, we evaluate and base our estimates on historical experience and on various other market specific and other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

We believe the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our Consolidated Financial Statements.

Revenue Recognition

Product Sales

We recognize revenues from product sales when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable and collectability is reasonably assured. We record product sales net of estimated mandatory and supplemental discounts to government payers, in addition to discounts to private payers, and other related charges. These are generally referred to as gross-to-net deductions and are recorded in the same period the related sales occur. Government and other rebates and chargebacks represent the majority of our gross-to-net deductions and require complex and significant judgment by management. Estimates are assessed each period and updated to reflect current information.

Government and Other Rebates and Chargebacks

Government and other rebates and chargebacks include amounts paid to payers and healthcare providers in the United States, including Medicaid rebates, AIDS Drug Assistance Programs, Veterans Administration and Public Health Service discounts, and other rebates, as well as foreign government rebates. Rebates and chargebacks are based on contractual arrangements or statutory requirements which may vary by product, by payer and individual payer plans.

For qualified programs that can purchase our products through wholesalers or other distributors at a lower contractual price, the wholesalers or distributors charge back to us the difference between their acquisition cost and the lower contractual price. Our consolidated allowances for government and other chargebacks that are payable to our direct customers are classified as reductions of accounts receivable, and totaled \$636 million as of December 31, 2016 and \$907 million as of December 31, 2015.

Our consolidated allowance for government and other rebates that will be paid to parties other than our direct customers are recorded in Accrued government and other rebates on our Consolidated Balance Sheets, and totaled \$5.0 billion as of December 31, 2016 and \$4.1 billion as of December 31, 2015.

Our allowances for government and other rebates and chargebacks are estimated based on products sold, historical utilization rates, pertinent third-party industry information, estimated patient population, known market events or trends, channel inventory data and/or other market data. We also consider new information regarding changes in programs' regulations and guidelines that would impact the amount of the actual rebates and/or our expectations regarding future utilization rates for these programs. We believe that the methodology that we use to estimate our government and other rebates and chargebacks is reasonable and appropriate given the current facts and circumstances. However, actual results may differ significantly from our estimates. During the last

three years, our actual government rebates and chargebacks claimed for prior periods have varied by less than 5% from our estimates.

The following table summarizes the consolidated activities and ending balances in our government and other rebates and chargebacks accounts (in millions):

Accrued government and other rebates and chargebacks:	Balance at Beginning of Year	Decrease/(Increase) to Product Sales	Payments	Balance at End of Year
Year ended December 31, 2016:				
Activity related to 2016 sales	\$ —	\$ 19,219	\$ (13,920)	\$ 5,299
Activity related to sales prior to 2016	5,025	(148)	(4,519)	358
Total	\$ 5,025	\$ 19,071	\$ (18,439)	\$ 5,657
Year ended December 31, 2015:				
Activity related to 2015 sales	\$ —	\$ 16,400	\$ (11,597)	\$ 4,803
Activity related to sales prior to 2015	2,536	7	(2,321)	222
Total	\$ 2,536	\$ 16,407	\$ (13,918)	\$ 5,025

The majority of the increase in allowance for government and other rebates and chargebacks in 2016 compared to 2015 was driven by higher rebates and chargebacks for our HCV products.

Legal Contingencies

We are a party to various legal actions. The most significant of these are described in Note 12, Commitments and Contingencies - Legal Proceedings of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. It is not possible to determine the outcome of these matters. We recognize accruals for such actions to the extent that we conclude that a loss is both probable and reasonably estimable. We accrue for the best estimate of a loss within a range; however, if no estimate in the range is better than any other, then we accrue the minimum amount in the range. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the possible loss.

Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of the inherent uncertainty and unpredictability related to these matters, accruals are based on what we believe to be the best information available at the time of our assessment, including the legal facts and circumstances of the case, status of the proceedings, applicable law and the views of legal counsel. Upon the final resolution of such matters, it is possible that there may be a loss in excess of the amount recorded, and such amounts could have a material adverse effect on our results of operations, cash flows or financial position. We periodically reassess these matters when additional information becomes available and adjust our estimates and assumptions when facts and circumstances indicate the need for any changes.

We did not recognize any accruals for such matters as of December 31, 2016 and 2015 as we did not believe losses were probable.

Valuation of Intangible Assets

In conjunction with our business combinations, we have recorded intangible assets primarily related to IPR&D projects. We had total intangible assets of \$9.0 billion as of December 31, 2016 and \$10.2 billion as of December 31, 2015.

The identifiable intangible assets are measured at their respective fair values as of the acquisition date. The models used in valuing these intangible assets require the use of significant estimates and assumptions including but not limited to:

- estimates of revenues and operating profits related to the products or product candidates;
- the probability of success for unapproved product candidates considering their stages of development;
- the time and resources needed to complete the development and approval of product candidates;
- the life of the potential commercialized products and associated risks, including the inherent difficulties and uncertainties in developing a product candidate such as obtaining FDA and other regulatory approvals; and
- risks related to the viability of and potential alternative treatments in any future target markets.

We believe the fair values used to record intangible assets acquired in connection with a business combination are based upon reasonable estimates and assumptions given the facts and circumstances as of the related valuation dates.

Intangible assets related to IPR&D projects are considered to be indefinite-lived until the completion or abandonment of the associated R&D efforts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives at that point in time. During the period the assets are considered indefinite-lived, they are not amortized but are tested for impairment on an annual basis as well as between annual tests if we become aware of any events or changes that would indicate that it is more likely than not that the fair value of the IPR&D projects below their respective carrying amounts. The fair value of our indefinite-lived intangible assets is dependent on assumptions such as the expected timing or probability of achieving the specified milestones, changes in projected revenues or changes in discount rates. Significant judgment is employed in determining these assumptions and changes to our assumptions could have a significant impact on our results of operations in any given period.

In 2016, the estimated fair value of our IPR&D related to momelotinib and simtuzumab was written down to zero due to termination of clinical developments of such programs, and as a result, we recorded impairment charges of \$432 million within Research and development expenses on our Consolidated Statements of Income included in Item 8 of this Annual Report on Form 10-K.

Intangible assets with finite useful lives are amortized over their estimated useful lives primarily on a straight-line basis. Intangible assets with finite useful lives are reviewed for impairment when facts or circumstances suggest that the carrying value of these assets may not be recoverable.

Tax Provision

We estimate our income tax provision, including deferred tax assets and liabilities, based on significant management judgment. We evaluate the realization of all or a portion of our deferred tax assets on a quarterly basis. We record a valuation allowance to reduce our deferred tax assets to the amounts that are more likely than not to be realized. We consider future taxable income, ongoing tax planning strategies and our historical financial performance in assessing the need for a valuation allowance. If we expect to realize deferred tax assets for which we have previously recorded a valuation allowance, we will reduce the valuation allowance in the period in which such determination is first made. The valuation allowance was \$126 million as of December 31, 2016 and \$6 million as of December 31, 2015. The increase of our valuation allowance from December 31, 2015 to December 31, 2016 was primarily due to write down of the IPR&D value of momelotinib during 2016.

We are subject to income taxes in the United States and various foreign jurisdictions including Ireland. Due to economic and political conditions, various countries are actively considering changes to existing tax laws. We cannot predict the form or timing of potential legislative changes that could have a material adverse impact on our results of operations. In addition, significant judgment is required in determining our worldwide provision for income taxes.

We record liabilities related to uncertain tax positions in accordance with the guidance that clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements by prescribing a minimum recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. An adverse resolution of one or more of these uncertain tax positions in any period could have a material impact on the results of operations for that period.

At December 31, 2016 and 2015, we had total federal, state and foreign unrecognized tax benefits of \$1.9 billion and \$1.4 billion, respectively. Of the total unrecognized tax benefits, \$1.8 billion and \$1.3 billion at December 31, 2016 and 2015, respectively, if recognized, would reduce our effective tax rate in the period of recognition. As of December 31, 2016, we do not believe our unrecognized tax benefits will significantly change in the next 12 months. Due to the high degree of uncertainty on the timing of clarification from the IRS and other tax authorities regarding our uncertain tax positions, we are unable to reasonably estimate the period of cash settlement, if any, with the respective tax authorities.

We file federal, state and foreign income tax returns in the United States and in many jurisdictions abroad. For federal income tax purposes, the statute of limitations is open for 2010 and onwards. For certain acquired entities, the statute of limitations is open for all years from inception due to our utilization of their net operating losses and credits carried over from prior years. For California income tax purposes, the statute of limitations is open for 2010 and onwards.

Our income tax returns are subject to audit by federal, state and foreign tax authorities. We are currently under examination by the IRS for the 2010, 2011, 2012, 2013 and 2014 tax years and by various state and foreign jurisdictions. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. We periodically evaluate our exposures associated with our tax filing positions.

Off Balance Sheet Arrangements

We do not have any off balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K.

Contractual Obligations

Our contractual obligations consist of debt obligations, operating leases, capital commitments, purchase obligations for active pharmaceutical ingredients and inventory-related items and clinical trials contracts. The following table summarizes our significant enforceable and legally binding obligations, future commitments and obligations related to all contracts that we are likely to continue regardless of the fact that certain of these obligations may be cancelable as of December 31, 2016 (in millions):

Contractual Obligations	Payments due by Period				
	Total	Less than one year	1-3 years	3-5 years	More than 5 years
Debt ⁽¹⁾	\$ 42,874	\$ 982	\$ 3,769	\$ 6,582	\$ 31,541
Operating lease obligations	369	75	120	72	102
Capital commitments ⁽²⁾	880	536	341	1	2
Purchase obligations ⁽³⁾⁽⁴⁾	2,124	1,551	505	44	24
Clinical trials ⁽⁵⁾	1,737	752	675	204	106
Total ⁽⁶⁾	<u>\$ 47,984</u>	<u>\$ 3,896</u>	<u>\$ 5,410</u>	<u>\$ 6,903</u>	<u>\$ 31,775</u>

Notes:

- (1) Debt primarily consisted of senior unsecured notes, including principal and interest payments. Interest payments are incurred and calculated based on terms of the related notes. See Note 11, Debt and Credit Facility of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information.
- (2) Amounts include firm capital project commitments primarily relating to construction of new buildings.
- (3) Amounts include firm purchase commitments primarily relating to active pharmaceutical ingredients and certain inventory-related items. These amounts include minimum purchase requirements.
- (4) In addition to the above, we have committed to make potential future milestone payments to third parties as part of licensing, collaboration and development arrangements. 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 neither probable nor reasonably estimable, such contingencies have not been recorded on our Consolidated Balance Sheets and have not been included in the table above.
- (5) At December 31, 2016, we had several clinical studies in various clinical trial phases. Our most significant clinical trial expenditures are to contract research organizations (CROs). Although all of our material contracts with CROs are cancelable, we historically have not canceled such contracts. These amounts reflect commitments based on existing contracts and do not reflect any future modifications to, or terminations of, existing contracts or anticipated or potential new contracts.
- (6) As of December 31, 2016, our Consolidated Balance Sheets reflect liabilities for unrecognized tax positions, interest and penalties totaling \$1.9 billion. Due to the high degree of uncertainty on the timing of future cash settlement and other events that could extinguish these liabilities, we are unable to estimate the period of cash settlement and therefore we have excluded the liabilities related to unrecognized tax positions from the table above.

Recent Accounting Pronouncements

The information required by this item is included in Note 1, Organization and Summary of Significant Accounting Policies of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks that may result from changes in foreign currency exchange rates, interest rates and credit risks. To reduce certain of these risks, we enter into various types of foreign currency or interest rate derivative hedging transactions, follow investment guidelines and monitor outstanding receivables as part of our risk management program.

Foreign Currency Exchange Risk

Our operations include manufacturing and sales activities in the United States, Canada and Ireland as well as sales activities in countries outside the United States, including Europe and Asia Pacific. 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 we distribute our products. Our operating results are exposed to changes in foreign currency exchange rates between the U.S. dollar and various foreign currencies, the most significant of which are the Euro and Yen. When the U.S. dollar strengthens against these currencies, the relative value of sales made in the respective foreign currency decreases. Conversely, when the U.S. dollar weakens against these currencies, the relative amounts of such sales increase. Overall, we are a net receiver of foreign currencies and, therefore, benefit from a weaker U.S. dollar and are adversely affected by a stronger U.S. dollar relative to those foreign currencies in which we transact significant amounts of business.

Approximately 36% of our product sales were denominated in foreign currencies during 2016. To partially mitigate the impact of changes in currency exchange rates on net cash flows from our foreign currency denominated sales, we may enter into foreign currency exchange forward and option contracts. We also hedge certain monetary assets and liabilities denominated in foreign currencies, which reduces but does not eliminate our exposure to currency fluctuations between the date a transaction is recorded and the date that cash is collected or paid. In general, the market risks of these contracts are offset by corresponding gains and losses on the transactions being hedged.

As of December 31, 2016 and 2015, we had open foreign currency forward contracts with notional amounts of \$6.2 billion and \$9.1 billion, respectively. A hypothetical 10% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates at December 31, 2016 would have resulted in a reduction in fair value of these contracts of approximately \$583 million on this date and, if realized, would negatively affect earnings over the remaining life of the contracts. The same hypothetical movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates at December 31, 2015, would have resulted in a reduction in fair value of these contracts of approximately \$893 million on this date and, if realized, would negatively affect earnings over the remaining life of the contracts. The analysis does not consider the impact that hypothetical changes in foreign currency exchange rates would have on anticipated transactions that these foreign currency sensitive instruments were designed to offset.

Interest Rate Risk

Our portfolio of available-for-sale marketable securities and our fixed and variable rate liabilities create an exposure to interest rate risk. With respect to our investment portfolio, we adhere to an investment policy that requires us to limit amounts invested in securities based on credit rating, maturity, industry group and investment type and issuer, except for securities issued by the U.S. government. The goals of our investment policy, in order of priority, are as follows:

- safety and preservation of principal and diversification of risk;
- liquidity of investments sufficient to meet cash flow requirements; and
- competitive after-tax rate of return.

The following table summarizes the expected maturities and average interest rates of our interest-generating assets and interest-bearing liabilities at December 31, 2016 (in millions, except percentages):

	Expected Maturity						Total	Total Fair Value
	2017	2018	2019	2020	2021	Thereafter		
Assets								
Available-for-sale debt securities	\$ 3,914	\$ 8,834	\$ 9,018	\$ 1,158	\$ 747	\$ 728	\$ 24,399	\$ 24,399
Average interest rate	1.21%	1.43%	1.69%	1.31%	1.53%	1.99%		
Liabilities								
Debt ⁽¹⁾	\$ —	\$ 1,000	\$ 812	\$ 2,500	\$ 2,250	\$ 20,000	\$ 26,562	\$ 27,002
Average interest rate	—%	1.85%	2.05%	2.51%	4.44%	4.00%		

Note:

⁽¹⁾ As of December 31, 2016, our debt consisted primarily of fixed rate senior unsecured notes, which were reported at their amortized cost on our Consolidated Balance Sheets. Since these instruments bear interest at fixed rates, changes in interest rates do not affect interest expense or cash flows; however, the fair value of these instruments fluctuates when interest rates change. In addition to the senior unsecured notes, we have a \$2.5 billion five-year revolving credit facility. Interest charged on loans under the revolving credit facility is based on floating rates which may fluctuate when interest rates change. There were no amounts outstanding under the revolving credit facility as of December 31, 2016. See Note 11, Debt and Credit Facility of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information.

Credit Risk

We are subject to credit risk from our portfolio of cash equivalents and marketable securities. Under our investment policy, we limit amounts invested in such securities by credit rating, maturity, industry group, investment type and issuer, except for securities issued by the U.S. government. We are not exposed to any significant concentrations of credit risk from these financial instruments. The goals of our investment policy, in order of priority, are as follows: safety and preservation of principal and diversification of risk; liquidity of investments sufficient to meet cash flow requirements; and a competitive after-tax rate of return.

We are also subject to credit risk from our accounts receivable related to our product sales. The majority of our trade accounts receivable arises from product sales in the United States and Europe.

As of December 31, 2016, our accounts receivable, net in Southern Europe, specifically Greece, Italy, Portugal and Spain, totaled approximately \$317 million, of which \$110 million were greater than 120 days past due, including \$45 million greater than 365 days past due. As of December 31, 2015, our accounts receivable, net in Southern Europe, specifically Greece, Italy, Portugal and Spain, totaled approximately \$713 million, of which \$213 million were greater than 120 days past due, including \$31 million greater than 365 days past due. To date, we have not experienced significant losses with respect to the collection of our accounts receivable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

GILEAD SCIENCES, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
Years ended December 31, 2016, 2015 and 2014

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Gilead Sciences, Inc.

We have audited the accompanying consolidated balance sheets of Gilead Sciences, Inc. as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. 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 the Company'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 Gilead Sciences, Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, 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), Gilead Sciences, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated February 27, 2017 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Redwood City, California
February 27, 2017

GILEAD SCIENCES, INC.
Consolidated Balance Sheets
(in millions, except per share amounts)

	December 31,	
	2016	2015
Assets		
Current assets:		
Cash and cash equivalents	\$ 8,229	\$ 12,851
Short-term marketable securities	3,666	1,756
Accounts receivable, net of allowances of \$763 at December 31, 2016 and \$1,032 at December 31, 2015	4,514	5,854
Inventories	1,587	1,955
Deferred tax assets	857	828
Prepaid and other current assets	1,592	1,518
Total current assets	20,445	24,762
Property, plant and equipment, net	2,865	2,276
Long-term portion of prepaid royalties	423	400
Long-term deferred tax assets	402	324
Long-term marketable securities	20,485	11,601
Intangible assets, net	8,971	10,247
Goodwill	1,172	1,172
Other long-term assets	2,214	934
Total assets	\$ 56,977	\$ 51,716
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 1,206	\$ 1,178
Accrued government and other rebates	5,021	4,118
Other accrued liabilities	2,790	3,172
Deferred revenues	202	440
Current portion of long-term debt and other obligations, net	—	982
Total current liabilities	9,219	9,890
Long-term debt, net	26,346	21,073
Long-term income taxes payable	1,753	1,243
Other long-term obligations	296	395
Commitments and contingencies (Note 12)		
Equity component of currently redeemable convertible notes	—	2
Stockholders' equity:		
Preferred stock, par value \$0.001 per share; 5 shares authorized; none outstanding	—	—
Common stock, par value \$0.001 per share; shares authorized of 5,600 at December 31, 2016 and December 31, 2015; shares issued and outstanding of 1,310 at December 31, 2016 and 1,422 at December 31, 2015	1	1
Additional paid-in capital	454	444
Accumulated other comprehensive income	278	88
Retained earnings	18,154	18,001
Total Gilead stockholders' equity	18,887	18,534
Noncontrolling interest	476	579
Total stockholders' equity	19,363	19,113
Total liabilities and stockholders' equity	\$ 56,977	\$ 51,716

See accompanying notes.

GILEAD SCIENCES, INC.
Consolidated Statements of Income
(in millions, except per share amounts)

	Year Ended December 31,		
	2016	2015	2014
Revenues:			
Product sales	\$ 29,953	\$ 32,151	\$ 24,474
Royalty, contract and other revenues	437	488	416
Total revenues	30,390	32,639	24,890
Costs and expenses:			
Cost of goods sold	4,261	4,006	3,788
Research and development expenses	5,098	3,014	2,854
Selling, general and administrative expenses	3,398	3,426	2,983
Total costs and expenses	12,757	10,446	9,625
Income from operations	17,633	22,193	15,265
Interest expense	(964)	(688)	(412)
Other income (expense), net	428	154	3
Income before provision for income taxes	17,097	21,659	14,856
Provision for income taxes	3,609	3,553	2,797
Net income	13,488	18,106	12,059
Net loss attributable to noncontrolling interest	(13)	(2)	(42)
Net income attributable to Gilead	\$ 13,501	\$ 18,108	\$ 12,101
Net income per share attributable to Gilead common stockholders - basic	\$ 10.08	\$ 12.37	\$ 7.95
Shares used in per share calculation - basic	1,339	1,464	1,522
Net income per share attributable to Gilead common stockholders - diluted	\$ 9.94	\$ 11.91	\$ 7.35
Shares used in per share calculation - diluted	1,358	1,521	1,647
Cash dividends declared per share	\$ 1.84	\$ 1.29	\$ —

See accompanying notes.

GILEAD SCIENCES, INC.
Consolidated Statements of Comprehensive Income
(in millions)

	Year Ended December 31,		
	2016	2015	2014
Net income	\$ 13,488	\$ 18,106	\$ 12,059
Other comprehensive income (loss):			
Net foreign currency translation gain (loss), net of tax	177	9	(9)
Available-for-sale securities:			
Net unrealized gain (loss), net of tax impact of \$19, \$(17) and \$0, respectively	7	(29)	1
Reclassifications to net income, net of tax impact of \$0, \$1 and \$0, respectively	(7)	1	(1)
Net change	—	(28)	—
Cash flow hedges:			
Net unrealized gain, net of tax impact of \$0, \$21 and \$16, respectively	5	389	430
Reclassification to net income, net of tax impact of \$(8), \$(19) and \$(4), respectively	8	(583)	4
Net change	13	(194)	434
Other comprehensive income (loss)	190	(213)	425
Comprehensive income	13,678	17,893	12,484
Comprehensive loss attributable to noncontrolling interest	(13)	(2)	(42)
Comprehensive income attributable to Gilead	<u>\$ 13,691</u>	<u>\$ 17,895</u>	<u>\$ 12,526</u>

See accompanying notes.

purchase plan	1	—	84	—	—	—	84
Issuances under equity incentive plans	13	—	128	—	—	—	128
Tax benefits from employee stock plans	—	—	186	—	—	—	186
Stock-based compensation	—	—	381	—	—	—	381
Repurchases of common stock	(126)	—	(302)	—	(10,883)	—	(11,185)
Warrants settlement	—	—	(469)	—	—	—	(469)
Convertible notes settlement	—	—	(95)	—	—	—	(95)
Convertible note hedges settlement	—	—	95	—	—	—	95
Dividends declared	—	—	—	—	(2,465)	—	(2,465)
Reclassification of conversion spread of convertible notes	—	—	(733)	—	—	—	(733)
Reclassification of convertible note hedges	—	—	733	—	—	—	733
Reclassification to equity component of currently redeemable convertible notes	—	—	2	—	—	—	2
Balance at December 31, 2016	<u>1,310</u>	<u>\$ 1</u>	<u>\$ 454</u>	<u>\$ 278</u>	<u>\$ 18,154</u>	<u>\$ 476</u>	<u>\$ 19,363</u>

See accompanying notes.

GILEAD SCIENCES, INC.
Consolidated Statements of Cash Flows
(in millions)

	Year Ended December 31,		
	2016	2015	2014
Operating Activities:			
Net income	\$ 13,488	\$ 18,106	\$ 12,059
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation expense	177	161	125
Amortization expense	981	937	925
Stock-based compensation expense	380	382	360
Excess tax benefits from stock-based compensation	(194)	(585)	(482)
Tax benefits from exercise and vesting of stock-based awards	186	586	484
Deferred income taxes	(119)	(393)	(236)
In-process research and development impairment	432	—	—
Other	(24)	(24)	101
Changes in operating assets and liabilities:			
Accounts receivable, net	1,192	(1,397)	(2,578)
Inventories	(488)	(855)	143
Prepaid expenses and other	(520)	(90)	(371)
Accounts payable	47	226	(289)
Income taxes payable	1,010	269	533
Accrued liabilities	425	2,632	2,013
Deferred revenues	(304)	374	31
Net cash provided by operating activities	16,669	20,329	12,818
Investing Activities:			
Purchases of marketable securities	(25,619)	(17,239)	(2,107)
Proceeds from sales of marketable securities	13,039	4,792	807
Proceeds from maturities of marketable securities	1,700	719	52
Other investments	(357)	—	(18)
Capital expenditures	(748)	(747)	(557)
Net cash used in investing activities	(11,985)	(12,475)	(1,823)
Financing Activities:			
Proceeds from debt financing, net of issuance costs	5,293	9,902	7,932
Proceeds from convertible note hedges	956	784	2,543
Purchases of convertible note hedges	—	—	(26)
Proceeds from issuances of common stock	208	319	331
Repurchases of common stock	(11,001)	(10,002)	(5,349)
Repayments of debt and other obligations	(1,981)	(997)	(4,779)
Payments to settle warrants	(469)	(3,865)	(4,093)
Excess tax benefits from stock-based compensation	194	585	482
Payment of contingent consideration	(2)	(3)	(101)
Payment of dividends	(2,455)	(1,874)	—
Contributions from (distribution to) noncontrolling interest	(90)	188	35
Net cash used in financing activities	(9,347)	(4,963)	(3,025)
Effect of exchange rate changes on cash and cash equivalents	41	(67)	(56)
Net change in cash and cash equivalents	(4,622)	2,824	7,914
Cash and cash equivalents at beginning of period	12,851	10,027	2,113
Cash and cash equivalents at end of period	\$ 8,229	\$ 12,851	\$ 10,027

Supplemental disclosure of cash flow information:

Interest paid, net of amounts capitalized	\$	885	\$	529	\$	330
Income taxes paid	\$	2,436	\$	3,137	\$	2,060

See accompanying notes.

GILEAD SCIENCES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Overview

Gilead Sciences, Inc. (Gilead, we or us), incorporated in Delaware on June 22, 1987, is a research-based biopharmaceutical company that discovers, develops and commercializes innovative medicines in areas of unmet medical need. With each new discovery and investigational drug candidate, we strive to transform and simplify care for people with life-threatening illnesses around the world. We have operations in more than 30 countries worldwide, with headquarters in Foster City, California. Gilead's primary areas of focus include human immunodeficiency virus (HIV), liver diseases such as chronic hepatitis C virus (HCV) infection and chronic hepatitis B virus (HBV) infection, hematology/oncology, cardiovascular and inflammation/respiratory diseases. We seek to add to our existing portfolio of products through our internal discovery and clinical development programs and through product acquisition and in-licensing strategies.

Our portfolio of marketed products includes AmBisome[®], Atripla[®], Cayston[®], Complera[®]/Eviplera[®], Descovy[®], Emtriva[®], Epclusa[®], Genvoya[®], Harvoni[®], Hepsera[®], Letairis[®], Odefsey[®], Ranexa[®], Sovaldi[®], Stribild[®], Truvada[®], Tybost[®], Vemlidy[®], Viread[®], Vitekta[®], and Zydelig[®]. We have U.S. and international commercial sales operations, with marketing subsidiaries in over 30 countries. We also sell and distribute certain products through our corporate partners under royalty-paying collaborative agreements.

Basis of Presentation

The accompanying Consolidated Financial Statements include the accounts of Gilead, our wholly-owned subsidiaries and certain variable interest entities for which we are the primary beneficiary. All intercompany transactions have been eliminated. For consolidated entities where we own or are exposed to less than 100% of the economics, we record net income (loss) attributable to noncontrolling interests on our Consolidated Statements of Income equal to the percentage of the economic or ownership interest retained in such entities by the respective noncontrolling parties.

We assess whether we are the primary beneficiary of a variable interest entity (VIE) at the inception of the arrangement and at each reporting date. This assessment is based on our power to direct the activities of the VIE that most significantly impact the VIE's economic performance and our obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. As of December 31, 2016, the only material VIE was our joint venture with Bristol-Myers Squibb (BMS) which is described in Note 10, Collaborative Arrangements.

Significant Accounting Policies, Estimates and Judgments

The preparation of these Consolidated Financial Statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures. On an ongoing basis, we evaluate our significant accounting policies and estimates. We base our estimates on historical experience and on various market specific and other relevant assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

Revenue Recognition

Product Sales

We recognize revenue from product sales when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable and collectability is reasonably assured. Upon recognition of revenue from product sales, provisions are made for government and other rebates such as Medicaid reimbursements, customer incentives such as cash discounts for prompt payment, distributor fees and expected returns of expired products, as appropriate.

Items Deducted from Gross Product Sales

Rebates and Chargebacks

We estimate reductions to our revenues for amounts paid to payers and healthcare providers in the United States, including Medicaid rebates, AIDS Drug Assistance Programs, Veterans Administration and Public Health Service discounts, and other rebates, as well as foreign government rebates. Rebates and chargebacks are based on contractual arrangements or statutory requirements which may vary by product, by payer and individual payer plans. Our estimates are based on products sold, historical utilization rates, and as available, pertinent third-party industry information, estimated patient population, known market events or trends, and for our U.S. product sales, channel inventory data obtained from our major U.S. wholesalers in accordance with our inventory management agreements. We also take into consideration, as available, new information regarding changes in programs' regulations and guidelines that would impact the amount of the actual rebates and/or our expectations regarding future utilization rates for these programs. Government and other chargebacks that are payable to our direct customers are classified as reductions of accounts receivable on our Consolidated Balance Sheets. Government and other rebates that are invoiced directly to us are recorded in Accrued government and other rebates on our Consolidated Balance Sheets.

Cash Discounts

We estimate cash discounts based on contractual terms, historical utilization rates and our expectations regarding future utilization rates.

Distributor Fees

Under our inventory management agreements with our significant U.S. wholesalers, we pay the wholesalers a fee primarily for the compliance of certain contractually determined covenants such as the maintenance of agreed upon inventory levels. These distributor fees are based on a contractually determined fixed percentage of sales.

Product Returns

We do not provide our customers with a general right of product return, but typically permit returns if the product is damaged or defective when received by the customer, or in the case of product sold in the United States and certain countries outside the United States, if the product has expired. We will accept returns for product that will expire within six months or that have expired up to one year after their expiration dates. Our estimates for expected returns of expired products are based primarily on an ongoing analysis of our historical return patterns, historical industry information reporting the return rates for similar products and contractual agreements intended to limit the amount of inventory maintained by our wholesalers.

Royalty, Contract and Other Revenues

Royalty revenue from sales of our other products is generally recognized when received, which is generally in the quarter following the quarter in which the corresponding sales occur or in the month following the month in which the corresponding sales occur.

Revenue from non-refundable up-front license fees and milestone payments, such as under a development collaboration or an obligation to supply product, is recognized as performance occurs and our obligations are completed. In accordance with the specific terms of our obligations under these arrangements, revenue is recognized as the obligation is fulfilled or ratably over the development or manufacturing period. Revenue associated with substantive at-risk milestones is recognized based upon the achievement of the milestones set forth in the respective agreements. Advance payments received in excess of amounts earned are classified as deferred revenue on our Consolidated Balance Sheets.

Research and Development Expenses

Research and development (R&D) expenses consist primarily of personnel costs, including salaries, benefits and stock-based compensation, clinical studies performed by contract research organizations (CROs), materials and supplies, licenses and fees, up-front and milestone payments under collaboration arrangements and overhead allocations consisting of various support and facility-related costs.

We charge R&D costs, including clinical study costs, to expense when incurred. Clinical study costs are a significant component of R&D expenses. Most of our clinical studies are performed by third-party CROs. We monitor levels of performance under each significant contract including the extent of patient enrollment and other activities through communications with our CROs. We accrue costs for clinical studies performed by CROs over the service periods specified in the contracts and adjust our estimates, if required, based upon our ongoing review of the level of effort and costs actually incurred by the CROs. All of our

material CRO contracts are terminable by us upon written notice and we are generally only liable for actual services completed by the CRO and certain non-cancelable expenses incurred at any point of termination.

Advertising Expenses

We expense the costs of advertising, including promotional expenses, as incurred. Advertising expenses were \$618 million in 2016, \$601 million in 2015 and \$393 million in 2014.

Cash and Cash Equivalents

We consider highly liquid investments with insignificant interest rate risk and an original maturity of three months or less on the purchase date to be cash equivalents. Eligible instruments under our investment policy that are included in cash equivalents primarily include commercial paper, money market funds, overnight repurchase agreements (repos) with major banks and authorized dealers and other bank obligations.

Marketable and Nonmarketable Securities

We determine the appropriate classification of our marketable securities, which consist primarily of debt securities, at the time of purchase and reevaluate such designation at each balance sheet date. All of our marketable securities are considered available-for-sale and carried at estimated fair values and reported in cash equivalents, short-term marketable securities or long-term marketable securities. Unrealized gains and losses on available-for-sale securities are excluded from net income and reported in accumulated other comprehensive income (loss) (AOCI) as a separate component of stockholders' equity. Other income (expense), net, includes interest, dividends, amortization of purchase premiums and discounts, realized gains and losses on sales of securities and other-than-temporary declines in the fair value of securities, if any. The cost of securities sold is based on the specific identification method. We regularly review all of our investments for other-than-temporary declines in fair value. Our review includes the consideration of the cause of the impairment, including the creditworthiness of the security issuers, the number of securities in an unrealized loss position, the severity and duration of the unrealized losses, whether we have the intent to sell the securities and whether it is more likely than not that we will be required to sell the securities before the recovery of their amortized cost basis. When we determine that the decline in fair value of an investment is below our accounting basis and the decline is other-than-temporary, we reduce the carrying value of the security we hold and record a loss for the amount of such decline.

As a result of entering into collaborations, from time to time, we may hold investments in public or non-public companies. We record investments in public companies as available-for-sale securities at market value and record investments in non-public companies at cost, less any amounts for other-than-temporary impairment, in other assets on our Consolidated Balance Sheets. Unrealized gains and losses on the available-for-sale securities are excluded from net income and reported in AOCI. We regularly review our securities for indicators of impairment. Investments in non-public companies are not material for the periods presented.

Concentrations of Risk

We are subject to credit risk from our portfolio of cash equivalents and marketable securities. Under our investment policy, we limit amounts invested in such securities by credit rating, maturity, industry group, investment type and issuer, except for securities issued by the U.S. government. We are not exposed to any significant concentrations of credit risk from these financial instruments. The goals of our investment policy, in order of priority, are as follows: safety and preservation of principal and diversification of risk; liquidity of investments sufficient to meet cash flow requirements; and a competitive after-tax rate of return.

We are also subject to credit risk from our accounts receivable related to our product sales. The majority of our trade accounts receivable arises from product sales in the United States, Europe and Japan. As of December 31, 2016, our accounts receivable, net in Southern Europe, specifically Greece, Italy, Portugal and Spain, totaled approximately \$317 million, of which \$110 million were greater than 120 days past due, including \$45 million greater than 365 days past due. To date, we have not experienced significant losses with respect to the collection of our accounts receivable. We believe that our allowance for doubtful accounts was adequate at December 31, 2016.

Certain of the raw materials and components that we utilize in our operations are obtained through single suppliers. Certain of the raw materials that we utilize in our operations are made at only one facility. Since the suppliers of key components and raw materials must be named in a new drug application (NDA) filed with U.S. Food and Drug Administration (FDA) for a product, significant delays can occur if the qualification of a new supplier is required. If delivery of material from our suppliers was interrupted for any reason, we may be unable to ship our commercial products or to supply our product candidates for clinical trials.

Accounts Receivable

Trade accounts receivable are recorded net of allowances for wholesaler chargebacks related to government and other programs, cash discounts for prompt payment and doubtful accounts. Estimates for wholesaler chargebacks for government and other programs and cash discounts are based on contractual terms, historical trends and our expectations regarding the utilization rates for these programs. Estimates of our allowance for doubtful accounts are determined based on existing contractual payment terms, historical payment patterns of our customers and individual customer circumstances, an analysis of days sales outstanding by geographic region and a review of the local economic environment and its potential impact on government funding and reimbursement practices. Historically, the amounts of uncollectible accounts receivable that have been written off have been insignificant.

Inventories

Inventories are recorded at the lower of cost or market, with cost determined on a first-in, first-out basis. We periodically review the composition of our inventories in order to identify obsolete, slow-moving or otherwise unsaleable items. If unsaleable items are observed and there are no alternate uses for the inventory, we will record a write-down to net realizable value in the period that the impairment is first recognized.

When future commercialization is considered probable and the future economic benefit is expected to be realized, based on management's judgment, we capitalize pre-launch inventory costs prior to regulatory approval. A number of factors are taken into consideration, including the current status in the regulatory approval process, potential impediments to the approval process such as safety or efficacy, anticipated R&D initiatives that could impact the indication in which the compound will be used, viability of commercialization and marketplace trends. As of December 31, 2016 and 2015, the amount of pre-launch inventory on our Consolidated Balance Sheets was not significant.

Property, Plant and Equipment

Property, plant and equipment is stated at cost less accumulated depreciation and amortization. Depreciation and amortization are recognized using the straight-line method. Repairs and maintenance costs are expensed as incurred. Estimated useful lives in years are generally as follows:

<u>Description</u>	<u>Estimated Useful Life</u>
Buildings and improvements	20-35
Laboratory and manufacturing equipment	4-10
Office and computer equipment	3-7
Leasehold improvements	Shorter of useful life or lease term

Office and computer equipment includes capitalized software. We had unamortized capitalized software costs on our Consolidated Balance Sheets of \$141 million as of December 31, 2016 and \$115 million as of December 31, 2015. Capitalized interest on construction in-progress is included in property, plant and equipment. Interest capitalized in 2016, 2015 and 2014 was not significant.

Goodwill and Intangible Assets

Goodwill represents the excess of the consideration transferred over the estimated fair value of assets acquired and liabilities assumed in a business combination. Intangible assets with indefinite useful lives are related to purchased in-process research and development (IPR&D) projects and are measured at their respective fair values as of the acquisition date. We do not amortize goodwill and intangible assets with indefinite useful lives. Intangible assets related to IPR&D projects are considered to be indefinite-lived until the completion or abandonment of the associated R&D efforts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets are deemed finite-lived and are amortized based on their respective estimated useful lives at that point in time. We test goodwill and other indefinite-lived intangible assets for impairment on an annual basis and in between annual tests if we become aware of any events or changes that would indicate the fair values of the assets are below their carrying amounts.

Intangible assets with finite useful lives are amortized over their estimated useful lives, primarily on a straight-line basis, and are reviewed for impairment when facts or circumstances suggest that the carrying value of these assets may not be recoverable.

Impairment of Long-Lived Assets

Long-lived assets, including property, plant and equipment and finite-lived intangible assets, are reviewed for impairment whenever facts or circumstances either internally or externally may suggest that the carrying value of an asset or asset group may not be recoverable. Should there be an indication of impairment, we test for recoverability by comparing the estimated undiscounted future cash flows expected to result from the use of the asset or asset group and its eventual disposition to the carrying amount of the asset or asset group. Any excess of the carrying value of the asset or asset group over its estimated fair value is recognized as an impairment loss.

Foreign Currency Translation, Transaction Gains and Losses, and Hedging Contracts

Non-U.S. entity operations are recorded in the functional currency of each entity. Results of operations for non-U.S. dollar functional currency entities are translated into U.S. dollars using average currency rates. Assets and liabilities are translated using currency rates at period end. Foreign currency translation adjustments are recorded as a component of AOCI within stockholders' equity. Foreign currency transaction gains and losses are recorded in Other income (expense), net on our Consolidated Statements of Income. Net foreign currency transaction gains and losses were immaterial for the years ended December 31, 2016, 2015 and 2014.

We hedge a portion of our foreign currency exposures related to outstanding monetary assets and liabilities as well as forecasted product sales using foreign currency exchange forward and option contracts. In general, the market risk related to these contracts is offset by corresponding gains and losses on the hedged transactions. The credit risk associated with these contracts is driven by changes in interest and currency exchange rates and, as a result, varies over time. By working only with major banks and closely monitoring current market conditions, we seek to limit the risk that counterparties to these contracts may be unable to perform. We also seek to limit our risk of loss by entering into contracts that permit net settlement at maturity. Therefore, our overall risk of loss in the event of a counterparty default is limited to the amount of any unrecognized gains on outstanding contracts (i.e., those contracts that have a positive fair value) at the date of default. We do not enter into derivative contracts for trading purposes, nor do we hedge our net investment in any of our foreign subsidiaries.

Fair Value of Financial Instruments

We apply fair value accounting for all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. We define fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities which are required to be recorded at fair value, we consider the principal or most advantageous market in which we would transact and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as risks inherent in valuation techniques, transfer restrictions and credit risks.

Derivative Financial Instruments

We recognize all derivative instruments as either assets or liabilities at fair value on our Consolidated Balance Sheets. Changes in the fair value of derivatives are recorded each period in current earnings or AOCI, depending on whether a derivative is designated as part of a hedge transaction and, if it is, the type of hedge transaction. We classify the cash flows from these instruments in the same category as the cash flows from the hedged items. We do not hold or issue derivative instruments for trading or speculative purposes.

We assess, both at inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting the changes in cash flows or fair values of the hedged items. We also assess hedge ineffectiveness on a quarterly basis and record the gain or loss related to the ineffective portion to current earnings to the extent significant. If we determine that a forecasted transaction is probable of not occurring, we discontinue hedge accounting for the affected portion of the hedge instrument, and any related unrealized gain or loss on the contract is recognized in Other income (expense), net on our Consolidated Statements of Income.

Income Taxes

Our income tax provision is computed under the liability method. 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 provision for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations.

We record liabilities related to uncertain tax positions in accordance with the guidance that clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements by prescribing a minimum recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken

in a tax return. An adverse resolution of one or more of these uncertain tax positions in any period could have a material impact on the results of operations for that period.

Branded Prescription Drug (BPD) Fee

We, along with other pharmaceutical manufacturers of branded drug products, are required to pay a portion of the BPD fee, which is estimated based on select government sales during each calendar year as a percentage of total industry government sales and is accrued upon receipt of invoices from the Internal Revenue Service (IRS). In 2014, the IRS issued final regulations related to the BPD fee which accelerated the expense recognition criteria for the fee obligation from the year in which the fee is paid, to the year in which the related sales and market share used to allocate the fee is determined. Our BPD fee expenses were \$270 million in 2016, \$414 million in 2015 and \$590 million in 2014 and are recorded as Selling, general and administrative (SG&A) expense on our Consolidated Statements of Income. Our BPD fee accrual totaled \$536 million as of December 31, 2016 and \$780 million as of December 31, 2015 on our Consolidated Balance Sheets.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update No. 2014-09 (ASU 2014-09) "Revenue from Contracts with Customers." The standard's core principle is that a reporting entity will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard will become effective for us beginning in the first quarter of 2018. Early adoption is permitted in 2017. Entities have the option of using either a full retrospective or a modified retrospective approach to adopt this new guidance. The FASB issued supplemental adoption guidance and clarification to ASU 2014-09 in March 2016, April 2016, May 2016, and December 2016 within ASU 2016-08 "Revenue from Contracts with Customers: Principal vs. Agent Considerations," ASU 2016-10 "Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing," ASU 2016-12 "Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients," and ASU 2016-20 "Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers," respectively. We expect to adopt the accounting standard update using the modified retrospective approach. The cumulative effect of adopting the accounting standard update will be recorded to retained earnings on January 1, 2018. We have completed our initial assessment of the effect of adoption. Based on this assessment, we expect changes in our revenue recognition policy relating to royalty revenues and certain other revenues that are currently recognized on a cash basis or sell through method. Upon adoption of the accounting standard updates, these revenues will be recognized in the periods in which the sales occur, subject to the constraint on variable consideration. We currently do not expect that these accounting standard updates will have a material impact on our Consolidated Financial Statements.

In November 2015, the FASB issued Accounting Standard Update No. 2015-17 (ASU 2015-17) "Balance Sheet Classification of Deferred Taxes." ASU 2015-17 requires that deferred tax liabilities and assets be classified as noncurrent on the balance sheet. Previous guidance required deferred tax liabilities and assets to be separated into current and noncurrent amounts on the balance sheet. We plan to adopt the guidance in the first quarter of 2017 on a retrospective basis and will reclassify current deferred tax amounts on our Consolidated Balance Sheets as noncurrent.

In January 2016, the FASB issued Accounting Standard Update No. 2016-01 (ASU 2016-01) "Recognition and Measurement of Financial Assets and Financial Liabilities." ASU 2016-01 changes accounting for equity investments, financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. In addition, it clarified guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. The guidance will become effective for us beginning in the first quarter of 2018 and must be adopted using a modified retrospective approach, with certain exceptions. Early adoption is permitted for certain provisions. We are evaluating the impact of the adoption of this standard on our Consolidated Financial Statements.

In February 2016, the FASB issued Accounting Standard Update No. 2016-02 (ASU 2016-02) "Leases." ASU 2016-02 amends a number of aspects of lease accounting, including requiring lessees to recognize almost all leases with a term greater than one year as a right-of-use asset and corresponding liability, measured at the present value of the lease payments. The guidance will become effective for us beginning in the first quarter of 2019 and is required to be adopted using a modified retrospective approach. Early adoption is permitted. We are evaluating the impact of the adoption of this standard on our Consolidated Financial Statements, however, we anticipate recognition of additional assets and corresponding liabilities related to leases on our Consolidated Balance Sheets.

In March 2016, the FASB issued Accounting Standard Update No. 2016-09 (ASU 2016-09) "Improvements to Employee Share-Based Payment Accounting." The new guidance requires that excess tax benefits and deficiencies that arise upon vesting or exercise of share-based payments be recognized in the income statement, whereas under the current guidance the tax effects are recorded to additional paid-in-capital. The guidance also amends the presentation of certain share-based payment items in the statement of cash flows. We will adopt the guidance in the first quarter of 2017. We will adopt the aspects of the new guidance affecting the cash flow presentation retrospectively. We have elected to continue to estimate potential forfeitures. We anticipate that the adoption of the guidance will result in an increase in the shares used in the calculation of diluted earnings per share.

depending primarily on the timing of when employees exercise stock options and our stock price at that time. We do not anticipate a cumulative-effect adjustment to be recorded in retained earnings upon adoption related to any of the amendments that require modified retrospective transition. We currently do not expect that adopting this guidance will have a material impact on our Consolidated Financial Statements.

In June 2016, the FASB issued Accounting Standard Update No. 2016-13 (ASU 2016-13) "Measurement of Credit Losses on Financial Instruments." ASU 2016-13 requires measurement and recognition of expected credit losses for financial assets. This guidance will become effective for us beginning in the first quarter of 2020 and must be adopted using a modified retrospective approach, with certain exceptions. Early adoption is permitted beginning in the first quarter of 2019. We are evaluating the impact of the adoption of this standard on our Consolidated Financial Statements.

In January 2017, FASB issued Accounting Standards Update No. 2017-01 (ASU 2017-01) "Clarifying the Definition of a Business." The new guidance clarifies the definition of a business when evaluating whether transactions should be accounted for as acquisitions or disposals of assets or businesses. This guidance will become effective for us beginning in the first quarter of 2018. Early adoption is permitted. We are evaluating the impact of the adoption of this standard on our Consolidated Financial Statements.

2. FAIR VALUE MEASUREMENTS

We determine the fair value of financial and non-financial assets and liabilities using the fair value hierarchy, which establishes three levels of inputs that may be used to measure fair value, as follows:

- Level 1 inputs which include quoted prices in active markets for identical assets or liabilities;
- Level 2 inputs which include observable inputs other than Level 1 inputs, such as quoted prices for similar assets or liabilities; quoted prices for identical or similar assets or liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability. For our marketable securities, we review trading activity and pricing as of the measurement date. When sufficient quoted pricing for identical securities is not available, we use market pricing and other observable market inputs for similar securities obtained from various third-party data providers. These inputs either represent quoted prices for similar assets in active markets or have been derived from observable market data; and
- Level 3 inputs which include unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the underlying asset or liability. Our Level 3 assets and liabilities include those whose fair value measurements are determined using pricing models, discounted cash flow methodologies or similar valuation techniques and significant management judgment or estimation.

Our financial instruments consist primarily of cash and cash equivalents, marketable securities, accounts receivable, foreign currency exchange contracts, equity securities, accounts payable and short-term and long-term debt. Cash and cash equivalents, marketable securities, foreign currency exchange contracts and equity securities are reported at their respective fair values on our Consolidated Balance Sheets. Short-term and long-term debt are reported at their amortized costs on our Consolidated Balance Sheets. The remaining financial instruments are reported on our Consolidated Balance Sheets at amounts that approximate current fair values. There were no transfers between Level 1, Level 2 and Level 3 in the periods presented.

The following table summarizes the types of assets and liabilities measured at fair value on a recurring basis by level within the fair value hierarchy (in millions):

	December 31, 2016				December 31, 2015			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Corporate debt securities	\$ —	\$ 12,603	\$ —	\$ 12,603	\$ —	\$ 5,773	\$ —	\$ 5,773
U.S. treasury securities	5,529	—	—	5,529	4,389	—	—	4,389
Money market funds	5,464	—	—	5,464	10,161	—	—	10,161
Residential mortgage and asset-backed securities	—	3,602	—	3,602	—	1,695	—	1,695
U.S. government agencies securities	—	975	—	975	—	707	—	707
Certificates of deposit	—	943	—	943	—	448	—	448
Non-U.S. government securities	—	720	—	720	—	313	—	313
Foreign currency derivative contracts	—	336	—	336	—	210	—	210
Deferred compensation plan	84	—	—	84	66	—	—	66
Municipal debt securities	—	27	—	27	—	34	—	34
Equity securities	428	—	—	428	—	—	—	—
Total	\$ 11,505	\$ 19,206	\$ —	\$ 30,711	\$ 14,616	\$ 9,180	\$ —	\$ 23,796
Liabilities:								
Deferred compensation plan	\$ 84	\$ —	\$ —	\$ 84	\$ 66	\$ —	\$ —	\$ 66
Foreign currency derivative contracts	—	37	—	37	—	41	—	41
Contingent consideration	—	—	25	25	—	—	59	59
Total	\$ 84	\$ 37	\$ 25	\$ 146	\$ 66	\$ 41	\$ 59	\$ 166

Level 2 Inputs

We estimate the fair values of Level 2 instruments by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income- and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker/dealer quotes on the same or similar securities; issuer credit spreads; benchmark securities; prepayment/default projections based on historical data; and other observable inputs.

Substantially all of our foreign currency derivative contracts have maturities within an 18 month time horizon and all are with counterparties that have a minimum credit rating of A- or equivalent by Standard & Poor's Ratings Services, Moody's Investors Service, Inc. or Fitch, Inc. We estimate the fair values of these contracts by taking into consideration valuations obtained from a third-party valuation service that utilizes an income-based industry standard valuation model for which all significant inputs are observable, either directly or indirectly. These inputs include foreign currency exchange rates, London Interbank Offered Rates (LIBOR) and swap rates. These inputs, where applicable, are at commonly quoted intervals.

The total estimated fair values of our short-term and long-term debt, determined using Level 2 inputs based on their quoted market values, were approximately \$27.0 billion at December 31, 2016 and \$23.7 billion at December 31, 2015, and the carrying values were \$26.3 billion at December 31, 2016 and \$22.1 billion at December 31, 2015.

Level 3 Inputs

As of December 31, 2016 and 2015, the only assets or liabilities that were measured using Level 3 inputs on a recurring basis were our contingent consideration liabilities, which were immaterial. On a nonrecurring basis, we measure certain assets including intangible assets at fair value when the carrying value of the asset exceeds its fair value. During 2016, the estimated fair value of our IPR&D related to momelotinib and simtuzumab was written down to zero due to termination of clinical developments of such programs, and as a result, we recorded impairment charges of \$432 million. See Note 7, Intangible Assets for additional information.

Our policy is to recognize transfers into or out of Level 3 classification as of the actual date of the event or change in circumstances that caused the transfer.

3. AVAILABLE-FOR-SALE SECURITIES

Estimated fair values of available-for-sale securities are generally based on prices obtained from commercial pricing services. The following table is a summary of available-for-sale securities (in millions):

	December 31, 2016				December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate debt securities	\$ 12,657	\$ 7	\$ (61)	\$ 12,603	\$ 5,795	\$ 1	\$ (23)	\$ 5,773
U.S. treasury securities	5,558	1	(30)	5,529	4,407	—	(18)	4,389
Money market funds	5,464	—	—	5,464	10,161	—	—	10,161
Residential mortgage and asset-backed securities	3,613	2	(13)	3,602	1,701	—	(6)	1,695
U.S. government agencies securities	981	—	(6)	975	709	—	(2)	707
Certificates of deposit	943	—	—	943	448	—	—	448
Non-U.S. government securities	725	—	(5)	720	315	—	(2)	313
Municipal debt securities	27	—	—	27	34	—	—	34
Equity securities	357	71	—	428	—	—	—	—
Total	\$ 30,325	\$ 81	\$ (115)	\$ 30,291	\$ 23,570	\$ 1	\$ (51)	\$ 23,520

The following table summarizes the classification of the available-for-sale securities on our Consolidated Balance Sheets (in millions):

	December 31, 2016	December 31, 2015
Cash and cash equivalents	\$ 5,712	\$ 10,163
Short-term marketable securities	3,666	1,756
Long-term marketable securities	20,485	11,601
Other long-term assets	428	—
Total	\$ 30,291	\$ 23,520

Cash and cash equivalents in the table above excludes cash of \$2.5 billion as of December 31, 2016 and \$2.7 billion as of December 31, 2015.

The following table summarizes our portfolio of available-for-sale debt securities by contractual maturity (in millions):

	December 31, 2016	
	Amortized Cost	Fair Value
Less than one year	\$ 9,379	\$ 9,378
Greater than one year but less than five years	19,853	19,757
Greater than five years but less than ten years	610	603
Greater than ten years	126	125
Total	\$ 29,968	\$ 29,863

The following table summarizes our available-for-sale debt securities that were in a continuous unrealized loss position, but were not deemed to be other-than-temporarily impaired (in millions):

	Less Than 12 Months		12 Months or Greater		Total	
	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value
December 31, 2016						
Corporate debt securities	\$ (60)	\$ 8,685	\$ (1)	\$ 155	\$ (61)	\$ 8,840
U.S. treasury securities	(30)	5,081	—	—	(30)	5,081
Residential mortgage and asset-backed securities	(13)	2,180	—	42	(13)	2,222
U.S. government agencies securities	(6)	897	—	—	(6)	897
Non-U.S. government securities	(5)	714	—	5	(5)	719
Certificates of deposit	—	15	—	—	—	15
Municipal debt securities	—	11	—	—	—	11
Total	\$ (114)	\$ 17,583	\$ (1)	\$ 202	\$ (115)	\$ 17,785
December 31, 2015						
Corporate debt securities	\$ (23)	\$ 4,891	\$ —	\$ 43	\$ (23)	\$ 4,934
U.S. treasury securities	(18)	4,342	—	—	(18)	4,342
Residential mortgage and asset-backed securities	(6)	1,626	—	20	(6)	1,646
U.S. government agencies securities	(2)	707	—	—	(2)	707
Non-U.S. government securities	(2)	313	—	—	(2)	313
Municipal debt securities	—	21	—	—	—	21
Total	\$ (51)	\$ 11,900	\$ —	\$ 63	\$ (51)	\$ 11,963

We held a total of 2,709 positions as of December 31, 2016 and 2,742 positions as of December 31, 2015 related to our debt securities that were in an unrealized loss position.

Based on our review of our available-for-sale securities, we believe we had no other-than-temporary impairments on these securities as of December 31, 2016 and 2015, because we do not intend to sell these securities nor do we believe that we will be required to sell these securities before the recovery of their amortized cost basis. Gross realized gains and gross realized losses were immaterial for the years ended December 31, 2016, 2015 and 2014.

4. DERIVATIVE FINANCIAL INSTRUMENTS

Foreign Currency Exposure

Our operations in foreign countries expose us to market risk associated with foreign currency exchange rate fluctuations between the U.S. dollar and various foreign currencies, the most significant of which are the Euro and Yen. In order to manage this risk, we may hedge a portion of our foreign currency exposures related to outstanding monetary assets and liabilities as well as forecasted product sales using foreign currency exchange forward or option contracts. In general, the market risk related to these contracts is offset by corresponding gains and losses on the hedged transactions. The credit risk associated with these contracts is driven by changes in interest and currency exchange rates and, as a result, varies over time. By working only with major banks and closely monitoring current market conditions, we seek to limit the risk that counterparties to these contracts may be unable to perform. We also seek to limit our risk of loss by entering into contracts that permit net settlement at maturity. Therefore, our overall risk of loss in the event of a counterparty default is limited to the amount of any unrecognized gains on outstanding contracts (i.e., those contracts that have a positive fair value) at the date of default. We do not enter into derivative contracts for trading purposes.

We hedge our exposure to foreign currency exchange rate fluctuations for certain monetary assets and liabilities of our entities that are denominated in a non-functional currency. The derivative instruments we use to hedge this exposure are not designated as hedges, and as a result, changes in their fair value are recorded in Other income (expense), net on our Consolidated Statements of Income.

We hedge our exposure to foreign currency exchange rate fluctuations for forecasted product sales that are denominated in a non-functional currency. The derivative instruments we use to hedge this exposure are designated as cash flow hedges and have maturity dates of 18 months or less. Upon executing a hedging contract and quarterly thereafter, we assess prospective hedge effectiveness using a regression analysis which calculates the change in cash flow as a result of the hedge instrument. On a quarterly basis, we assess retrospective hedge effectiveness using a dollar offset approach. We exclude time value from our effectiveness testing and recognize changes in the time value of the hedge in Other income (expense), net. The effective component of our hedge is recorded as an unrealized gain or loss on the hedging instrument in AOCI within Stockholders' equity and the gains or losses are reclassified into product sales when the hedged transactions affect earnings. The majority of gains and losses related to the hedged forecasted transactions reported in AOCI at December 31, 2016 are expected to be reclassified to product sales within 12 months.

The cash flow effects of our derivative contracts for the three years ended December 31, 2016, 2015 and 2014 are included within net cash provided by operating activities on the Consolidated Statements of Cash Flows.

We had notional amounts on foreign currency exchange contracts outstanding of \$6.2 billion at December 31, 2016 and \$9.1 billion at December 31, 2015.

While all of our derivative contracts allow us the right to offset assets or liabilities, we have presented amounts on a gross basis. Under the International Swap Dealers Association, Inc. master agreements with the respective counterparties of the foreign currency exchange contracts, subject to applicable requirements, we are allowed to net settle transactions of the same currency with a single net amount payable by one party to the other. The following table summarizes the classification and fair values of derivative instruments on our Consolidated Balance Sheets (in millions):

December 31, 2016					
Asset Derivatives			Liability Derivatives		
Classification		Fair Value	Classification		Fair Value
Derivatives designated as hedges:					
Foreign currency exchange contracts	Other current assets	\$ 225	Other accrued liabilities		\$ (1)
Foreign currency exchange contracts	Other long-term assets	20	Other long-term obligations		—
Total derivatives designated as hedges		<u>245</u>			<u>(1)</u>
Derivatives not designated as hedges:					
Foreign currency exchange contracts	Other current assets	81	Other accrued liabilities		(34)
Foreign currency exchange contracts	Other long-term assets	10	Other long-term obligations		(2)
Total derivatives not designated as hedges		<u>91</u>			<u>(36)</u>
Total derivatives		<u>\$ 336</u>			<u>\$ (37)</u>

December 31, 2015					
Asset Derivatives			Liability Derivatives		
Classification		Fair Value	Classification		Fair Value
Derivatives designated as hedges:					
Foreign currency exchange contracts	Other current assets	\$ 200	Other accrued liabilities		\$ (32)
Foreign currency exchange contracts	Other long-term assets	9	Other long-term obligations		(8)
Total derivatives designated as hedges		<u>209</u>			<u>(40)</u>
Derivatives not designated as hedges:					
Foreign currency exchange contracts	Other current assets	1	Other accrued liabilities		(1)
Total derivatives not designated as hedges		<u>1</u>			<u>(1)</u>
Total derivatives		<u>\$ 210</u>			<u>\$ (41)</u>

The following table summarizes the effect of our foreign currency exchange contracts on our Consolidated Financial Statements (in millions):

	Year Ended December 31,		
	2016	2015	2014
Derivatives designated as hedges:			
Gains recognized in AOCI (effective portion)	\$ 5	\$ 410	\$ 446
Gains reclassified from AOCI into product sales (effective portion)	\$ 73	\$ 602	\$ —
Gains (losses) recognized in Other income (expense), net (ineffective portion and amounts excluded from effectiveness testing)	\$ (32)	\$ 13	\$ (7)
Derivatives not designated as hedges:			
Gains recognized in Other income (expense), net	\$ 206	\$ 117	\$ 135

From time to time, we may discontinue cash flow hedges and as a result, record related amounts in Other income (expense), net on our Consolidated Statements of Income. There were no material amounts recorded in Other income (expense), net for the years ended December 31, 2016, 2015 and 2014 as a result of the discontinuance of cash flow hedges.

As of December 31, 2016 and 2015, we held one type of financial instrument, derivative contracts related to foreign currency exchange contracts. The following table summarizes the potential effect of offsetting derivatives by type of financial instrument on our Consolidated Balance Sheets (in millions):

As of December 31, 2016						
Offsetting of Derivative Assets/Liabilities						
Description	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset on the Consolidated Balance Sheets	Amounts of Assets/Liabilities Presented on the Consolidated Balance Sheets	Gross Amounts Not Offset on the Consolidated Balance Sheets		
				Derivative Financial Instruments	Cash Collateral Received/Pledged	Net Amount (Legal Offset)
Derivative assets	\$ 336	\$ —	\$ 336	\$ (37)	\$ —	\$ 299
Derivative liabilities	(37)	—	(37)	37	—	—
As of December 31, 2015						
Offsetting of Derivative Assets/Liabilities						
Description	Gross Amounts of Recognized Assets/Liabilities	Gross Amounts Offset on the Consolidated Balance Sheets	Amounts of Assets/Liabilities Presented on the Consolidated Balance Sheets	Gross Amounts Not Offset on the Consolidated Balance Sheets		
				Derivative Financial Instruments	Cash Collateral Received/Pledged	Net Amount (Legal Offset)
Derivative assets	\$ 210	\$ —	\$ 210	\$ (38)	\$ —	\$ 172
Derivative liabilities	(41)	—	(41)	38	—	(3)

May 2016 Convertible Senior Notes and Convertible Note Hedges

In March 2016, we exercised our option to elect cash for the settlement of the conversion value in excess of the principal amount (the conversion spread) of our remaining convertible senior notes due in May 2016 (the Convertible Notes) and for the related convertible note hedges. Until our cash settlement election, the conversion spread of the Convertible Notes and the convertible note hedges met the applicable criteria for equity classification and were therefore recorded in Stockholders' equity on our Consolidated Balance Sheets. Upon our cash settlement election, we reclassified \$733 million of the fair value of the conversion spread from Stockholders' equity to Current portion of long-term debt and other obligations, net, and reclassified \$733 million of the fair value of the convertible note hedges from Stockholders' equity to Prepaid and other current assets on our Consolidated Balance Sheets. Upon maturity of the Convertible Notes in 2016, we settled the conversion spread and the convertible note hedges in cash at \$861 million, respectively, and recorded a loss of \$128 million on the conversion spread and a gain of \$128 million on the convertible note hedges on our Consolidated Statements of Income.

5. INVENTORIES

Inventories are summarized as follows (in millions):

	December 31,	
	2016	2015
Raw materials	\$ 1,610	\$ 1,332
Work in process	626	542
Finished goods	928	852
Total	<u>\$ 3,164</u>	<u>\$ 2,726</u>
Reported as:		
Inventories	\$ 1,587	\$ 1,955
Other long-term assets	1,577	771
Total	<u>\$ 3,164</u>	<u>\$ 2,726</u>

Amounts reported as other long-term assets primarily consisted of raw materials as of December 31, 2016 and December 31, 2015.

The joint ventures formed by Gilead Sciences, LLC and BMS (See Note 10, Collaborative Arrangements), which are included on our Consolidated Financial Statements, held efavirenz active pharmaceutical ingredient in inventory. This efavirenz inventory was purchased from BMS at BMS's estimated net selling price of efavirenz and totaled \$1.1 billion as of December 31, 2016 and \$1.3 billion as of December 31, 2015.

6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is summarized as follows (in millions):

	December 31,	
	2016	2015
Land	\$ 394	\$ 393
Buildings and improvements (including leasehold improvements)	1,713	1,320
Laboratory and manufacturing equipment	469	377
Office and computer equipment	466	395
Construction in progress	641	554
Subtotal	3,683	3,039
Less accumulated depreciation and amortization	(818)	(763)
Total	<u>\$ 2,865</u>	<u>\$ 2,276</u>

7. INTANGIBLE ASSETS

The following table summarizes the carrying amount of our Intangible assets, net (in millions):

	December 31,	
	2016	2015
Finite-lived intangible assets	\$ 8,971	\$ 9,815
Indefinite-lived intangible assets	—	432
Total	<u>\$ 8,971</u>	<u>\$ 10,247</u>

Finite-Lived Intangible Assets

The following table summarizes our finite-lived intangible assets (in millions):

	December 31, 2016			December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible asset - sofosbuvir	\$ 10,720	\$ 2,156	\$ 8,564	\$ 10,720	\$ 1,456	\$ 9,264
Intangible asset - Ranexa	688	467	221	688	363	325
Other	455	269	186	455	229	226
Total	<u>\$ 11,863</u>	<u>\$ 2,892</u>	<u>\$ 8,971</u>	<u>\$ 11,863</u>	<u>\$ 2,048</u>	<u>\$ 9,815</u>

Amortization expense related to finite-lived intangible assets, included primarily in Cost of goods sold on our Consolidated Statements of Income, totaled \$844 million in 2016, \$826 million in 2015 and \$818 million in 2014. As of December 31, 2016, the estimated future amortization expense associated with our finite-lived intangible assets for each of the five succeeding fiscal years is as follows (in millions):

Fiscal Year	Amount
2017	\$ 839
2018	850
2019	739
2020	713
2021	713
Thereafter	5,117
Total	<u>\$ 8,971</u>

Indefinite-Lived Intangible Assets

The following table summarizes our indefinite-lived intangible assets (in millions):

	December 31,	
	2016	2015
Indefinite-lived intangible asset - momelotinib	\$ —	\$ 315
Indefinite-lived intangible asset - simtuzumab	—	117
Total	<u>\$ —</u>	<u>\$ 432</u>

In 2016, the estimated fair value of our IPR&D related to momelotinib and simtuzumab was written down to zero due to termination of clinical developments of such programs, and as a result, we recorded impairment charges of \$432 million within Research and development expenses on our Consolidated Statements of Income.

8. OTHER FINANCIAL INFORMATION

Prepaid and other current assets

The components of Prepaid and other current assets are summarized as follows (in millions):

	December 31,	
	2016	2015
Prepaid taxes	\$ 299	\$ 773
Prepaid expenses	231	240
Other current assets	1,062	505
Total	<u>\$ 1,592</u>	<u>\$ 1,518</u>

Other accrued liabilities

The components of Other accrued liabilities are summarized as follows (in millions):

	December 31,	
	2016	2015
BPD fee	\$ 481	\$ 649
Compensation and employee benefits	398	380
Accrued interest	290	232
Other accrued expenses	1,621	1,911
Total	\$ 2,790	\$ 3,172

9. ACQUISITION

In May 2016, we acquired Nimbus Apollo, Inc., a privately held company, and its Acetyl-CoA Carboxylase inhibitor program, which is being evaluated for the potential treatment of non-alcoholic steatohepatitis, hepatocellular carcinoma and other diseases. The consideration included a payment of \$400 million and contingent development and regulatory milestone-based payments of up to \$800 million. The transaction did not meet the requirements to be accounted for as a business combination under ASC 805 - Business Combinations and therefore was accounted for as an asset acquisition. As a result, the payment of \$400 million was recorded within Research and development expenses on our Consolidated Statements of Income. During 2016, based on the achievement of certain clinical development milestones, we recorded a \$200 million expense within Research and development expenses on our Consolidated Statements of Income.

10. COLLABORATIVE ARRANGEMENTS

We enter into collaborative arrangements with third parties for the development and commercialization of certain products. Both parties are active participants in the operating activities of the collaboration and are exposed to significant risks and rewards depending on the commercial success of the activities. The following are our significant collaborative arrangements.

Bristol-Myers Squibb Company

North America

In 2004, we entered into a collaboration arrangement with BMS to develop and commercialize a single-tablet regimen containing our Truvada and BMS's Sustiva (efavirenz) in the United States. This combination was approved for use in the United States in 2006 and is sold under the brand name Atripla. We and BMS structured this collaboration as a joint venture that operates as a limited liability company named Bristol-Myers Squibb & Gilead Sciences, LLC, which we consolidate. We and BMS granted royalty-free sublicenses to the joint venture for the use of our respective company owned technologies and, in return, were granted a license by the joint venture to use any intellectual property that results from the collaboration. In 2006, we and BMS amended the joint venture's collaboration agreement to allow the joint venture to sell Atripla in Canada. The economic interests of the joint venture held by us and BMS (including a share of revenues and out-of-pocket expenses) are based on the portion of the net selling price of Atripla attributable to efavirenz and Truvada. Since the net selling price for Truvada may change over time relative to the net selling price of efavirenz, both our and BMS's respective economic interests in the joint venture may vary annually.

We and BMS shared marketing and sales efforts. Starting in the second quarter of 2011, except for a limited number of activities that are jointly managed, the parties no longer coordinate detailing and promotional activities in the United States, and the parties reduced their joint promotional efforts since we launched Complera in August 2011 and Stribild in August 2012. The parties continue to collaborate on activities such as manufacturing, regulatory, compliance and pharmacovigilance. The daily operations of the joint venture are governed by several joint committees formed by both BMS and Gilead. We are responsible for accounting, financial reporting, tax reporting, manufacturing and product distribution for the joint venture. Both parties provide their respective bulk active pharmaceutical ingredients to the joint venture at their approximate market values. The agreement will continue until terminated by the mutual agreement of the parties. In addition, either party may terminate the other party's participation in the collaboration within 30 days after the launch of at least one generic version of such other party's single agent products (or the double agent products). The terminating party then has the right to continue to sell Atripla and become the continuing party, but will be obligated to pay the terminated party certain royalties for a three-year period following the effective date of the termination. The loss of exclusivity in the United States for Sustiva is expected in December 2017.

As of December 31, 2016 and 2015, the joint venture held efavirenz active pharmaceutical ingredient which it purchased from BMS at BMS's estimated net selling price of efavirenz in the U.S. market. These amounts were primarily included in Inventories on our Consolidated Balance Sheets.

Selected financial information for the joint venture was as follows (in millions):

	December 31,	
	2016	2015
Total assets	\$ 1,918	\$ 2,464
Cash and cash equivalents	92	166
Accounts receivable, net	229	269
Inventories	1,579	2,027
Total liabilities	772	1,055
Accounts payable	434	606
Other accrued liabilities	338	449

These asset and liability amounts do not reflect the impact of intercompany eliminations that are included on our Consolidated Balance Sheets. Although we consolidate the joint venture, the legal structure of the joint venture limits the recourse that its creditors will have over our general credit or assets. Similarly, the assets held in the joint venture can be used only to settle obligations of the joint venture.

Europe

In 2007, Gilead Sciences Ireland UC, our wholly-owned subsidiary, and BMS entered into a collaboration agreement which sets forth the terms and conditions under which we and BMS commercialize and distribute Atripla in the European Union, Iceland, Liechtenstein, Norway and Switzerland (collectively, the European Territory). The parties formed a limited liability company which we consolidate, to manufacture Atripla for distribution in the European Territory using efavirenz that it purchases from BMS at BMS's estimated net selling price of efavirenz in the European Territory. We are responsible for manufacturing, product distribution, inventory management and warehousing. Through our local subsidiaries, we have primary responsibility for order fulfillment, collection of receivables, customer relations and handling of sales returns in all the territories where we and BMS promote Atripla. In general, the parties share revenues and out-of-pocket expenses in proportion to the net selling prices of the components of Atripla, Truvada and efavirenz.

Starting in 2012, except for a limited number of activities that are jointly managed, the parties no longer coordinate detailing and promotional activities in the European Territory. We are responsible for accounting, financial reporting and tax reporting for the collaboration. As of December 31, 2016 and 2015, efavirenz purchased from BMS at BMS's estimated net selling price of efavirenz in the European Territory is included in Inventories on our Consolidated Balance Sheets.

The parties also formed a limited liability company to hold the marketing authorization for Atripla in the European Territory. We have primary responsibility for regulatory activities. In the major market countries, both parties have agreed to independently continue to use commercially reasonable efforts to promote Atripla.

The agreement will terminate upon the expiration of the last-to-expire patent which affords market exclusivity to Atripla or one of its components in the European Territory. In addition, since December 31, 2013, either party may terminate the agreement for any reason and such termination will be effective two calendar quarters after notice of termination. The non-terminating party has the right to continue to sell Atripla and become the continuing party, but will be obligated to pay the terminating party certain royalties for a three-year period following the effective date of the termination. In the event the continuing party decides not to sell Atripla, the effective date of the termination will be the date Atripla is withdrawn in each country or the date on which a third party assumes distribution of Atripla, whichever is earlier.

Japan Tobacco Inc.

In 2005, Japan Tobacco Inc. (Japan Tobacco) granted us exclusive rights to develop and commercialize elvitegravir, a novel HIV integrase inhibitor, in all countries of the world, excluding Japan, where Japan Tobacco retained such rights. Under the agreement, we are responsible for seeking regulatory approval in our territories and are required to use diligent efforts to commercialize elvitegravir for the treatment of HIV infection. We bear all costs and expenses associated with such commercialization efforts.

We received approval of Stribild (an elvitegravir-containing product) from FDA in August 2012 and from the European Commission in May 2013. We received approval of Genvoya (an elvitegravir-containing product) from FDA and the European Commission in November 2015.

The agreement and our obligation to pay royalties to Japan Tobacco will terminate on a product-by-product basis as patents providing exclusivity for the product expire or, if later, on the tenth anniversary of commercial launch for such product. We may terminate the agreement for any reason in which case the license granted by Japan Tobacco to us would terminate. Either party may terminate the agreement in response to a material breach by the other party.

Janssen

In 2009, we entered into a license and collaboration agreement with Janssen Sciences Ireland UC (Janssen), formerly Tibotec Pharmaceuticals, to develop and commercialize a fixed-dose combination of our Truvada and Janssen's non-nucleoside reverse transcriptase inhibitor rilpivirine. This combination was approved in the United States and European Union in 2011 and is sold under the brand name Complera in the United States and Eviplera in the European Union. Under this original agreement, Janssen granted us an exclusive license to Complera/Eviplera worldwide excluding certain middle income and developing world countries and Japan.

In 2011 and 2013, we amended the agreement to include distribution of Complera/Eviplera to the rest of the world. In 2014, we amended the agreement to expand the collaboration to include another product containing Janssen's rilpivirine and our emtricitabine and tenofovir alafenamide (Odefsey). Under the amended agreement, Janssen granted us an exclusive license to Complera/Eviplera and Odefsey worldwide, but retained rights to distribute both combination products in 18 countries including Mexico, Russia and Japan. Neither party is restricted from combining its drugs with any other drug products except those which are similar to the components of Complera/Eviplera and Odefsey.

We are responsible for manufacturing Complera/Eviplera and Odefsey and have the lead role in registration, distribution and commercialization of both products except in the countries where Janssen distributes. Janssen has exercised a right to co-detail the combination product in some of the countries where Gilead is the selling party.

Under the initial agreement, the price of Complera/Eviplera was expected to be the sum of the price of Truvada and the price of rilpivirine purchased separately. The cost of rilpivirine purchased by us from Janssen for Complera/Eviplera was approximately the market price of rilpivirine, less a specified percentage of up to 30% in major markets. The 2014 amendment, effective in 2015, enables the selling party to set the price of the combined products and the parties share revenues based on the ratio of the net selling prices of the party's component(s), subject to certain restrictions and adjustments. We will continue to retain a specified percentage of Janssen's share of revenues, up to 30% in major markets.

Either party may terminate the collaboration agreement with respect to a product and a country if the product is withdrawn from the market in such country or with respect to a product in all countries if the other party materially breaches the agreement with respect to a product. The agreement and the parties' obligation to share revenues will expire on a product-by-product and country-by-country basis as Janssen patents providing exclusivity for the product expire or, if later, on the tenth anniversary of commercial launch for such product. We may terminate the agreement without cause with respect to the countries where we sell the products in which case Janssen has the right to become the selling party for such country if the product has launched but has been on the market for fewer than 10 years.

Galapagos NV

In 2016, we closed on a license and collaboration agreement with Galapagos NV (Galapagos), a clinical-stage biotechnology company based in Belgium, for the development and commercialization of filgotinib, a JAK1-selective inhibitor being evaluated for inflammatory disease indications.

Upon closing of the license and collaboration agreement, we made an up-front license fee payment of \$300 million and a \$425 million equity investment in Galapagos by subscribing for new shares at a price of €58 per share, including issuance premium. As a result, we received 6.8 million new shares of Galapagos, representing 14.75% of their outstanding share capital. The license fee payment of \$300 million and the issuance premium on the equity investment of \$68 million were recorded within Research and development expenses on our Consolidated Statements of Income. The equity investment, net of issuance premium, of \$357 million was recorded as an available-for-sale security in Other long-term assets on our Consolidated Balance Sheets. Galapagos is eligible to receive development and regulatory milestone-based payments of up to \$755 million, sales-based milestone payments of up to \$600 million, plus tiered royalties on global sales starting at 20%, with the exception of certain co-promotion territories where profits would be shared equally. During 2016, based on the achievement of certain clinical development milestones, we recorded a \$60 million expense within Research and development expenses on our Consolidated Statements of Income.

Under the terms of the agreement, we have an exclusive, worldwide, royalty-bearing, sublicensable license for filgotinib and products containing filgotinib. We are primarily responsible for development and seeking regulatory approval related to filgotinib. We are responsible for 80% and Galapagos is responsible for 20% of the development costs incurred. We are also responsible for the manufacturing and commercialization activities. Galapagos has the option to co-promote filgotinib in certain territories, in which case, we and Galapagos will share profits equally.

11. DEBT AND CREDIT FACILITY

Financing Arrangements

The following table summarizes the carrying amount of our borrowings under various financing arrangements (in millions):

Type of Borrowing	Issue Date	Due Date	Interest Rate	December 31,	
				2016	2015 ⁽¹⁾
Convertible Notes	July 2010	May 2016	1.625%	\$ —	\$ 283
Senior Unsecured	December 2011	December 2016	3.05%	—	699
Senior Unsecured	September 2015	September 2018	1.85%	998	997
Senior Unsecured	March 2014	April 2019	2.05%	499	498
Senior Unsecured	November 2014	February 2020	2.35%	498	497
Senior Unsecured	September 2015	September 2020	2.55%	1,991	1,989
Senior Unsecured	March 2011	April 2021	4.50%	994	992
Senior Unsecured	December 2011	December 2021	4.40%	1,245	1,244
Senior Unsecured	September 2016	March 2022	1.95%	497	—
Senior Unsecured	September 2015	September 2022	3.25%	995	995
Senior Unsecured	September 2016	September 2023	2.50%	744	—
Senior Unsecured	March 2014	April 2024	3.70%	1,741	1,740
Senior Unsecured	November 2014	February 2025	3.50%	1,743	1,742
Senior Unsecured	September 2015	March 2026	3.65%	2,726	2,724
Senior Unsecured	September 2016	March 2027	2.95%	1,243	—
Senior Unsecured	September 2015	September 2035	4.60%	989	988
Senior Unsecured	September 2016	September 2036	4.00%	739	—
Senior Unsecured	December 2011	December 2041	5.65%	995	995
Senior Unsecured	March 2014	April 2044	4.80%	1,732	1,732
Senior Unsecured	November 2014	February 2045	4.50%	1,729	1,728
Senior Unsecured	September 2015	March 2046	4.75%	2,214	2,212
Senior Unsecured	September 2016	March 2047	4.15%	1,723	—
Floating-rate Borrowings	May 2016	May 2019	Variable	311	—
Total debt, net				26,346	22,055
Less current portion				—	982
Total long-term debt, net				\$ 26,346	\$ 21,073

Note:

⁽¹⁾ In connection with our adoption of the Accounting Standard Update relating to the presentation of debt issuance costs during the first quarter of 2016, debt balances at December 31, 2015 have been retrospectively adjusted by \$123 million to include unamortized debt issuance costs. Prior to our adoption of the ASU, these unamortized debt issuance costs were included in Prepaid and other current assets and Other long-term assets on our Consolidated Balance Sheets.

Senior Unsecured Notes

In 2016, we issued \$5.0 billion aggregate principal amount of senior unsecured notes (the 2016 Notes) in a registered offering. In 2015, we issued \$10.0 billion aggregate principal amount of senior unsecured notes (the 2015 Notes) in a registered offering. The 2016 Notes and 2015 Notes were issued for general corporate purposes, which may include the repayment of debt, working capital, payment of dividends, repurchase of our outstanding common stock pursuant to our authorized share repurchase programs and future acquisitions.

We collectively refer to the 2016 Notes, the 2015 Notes and our senior unsecured notes issued in March and November 2014 (the 2014 Notes) and in March and December 2011 (the 2011 Notes) as our Senior Notes. Our Senior Notes may be redeemed at our option at a redemption price equal to the greater of (i) 100% of the principal amount of the notes to be redeemed and (ii) the sum, as determined by an independent investment banker, of the present value of the remaining scheduled payments of principal and interest on the notes to be redeemed (exclusive of interest accrued to the date of redemption) discounted to the redemption date on a semiannual basis at the Treasury Rate plus a make-whole premium as defined in the indenture. Our Senior Notes maturing

after 2020 also have a call feature, exercisable at our option, to redeem the notes at par in whole or in part one to six months immediately preceding maturity. In each case, accrued and unpaid interest is also required to be redeemed to the date of redemption. In 2016, we repaid at maturity \$700 million of principal balance related to the 2011 Notes.

In the event of the occurrence of a change in control and a downgrade in the rating of our Senior Notes below investment grade by Standard & Poor's Ratings Services and Moody's Investors Service, Inc., the holders may require us to purchase all or a portion of the Senior Notes at a price equal to 101% of the aggregate principal amount of the notes repurchased, plus accrued and unpaid interest to the date of repurchase. We are required to comply with certain covenants under our Senior Notes and as of December 31, 2016 and 2015, we were not in violation of any covenants.

We recognized \$907 million in 2016, \$605 million in 2015, and \$350 million in 2014 of interest expense on our Senior Notes related to the contractual coupon rates and amortization of the debt discount and issuance costs.

Convertible Notes

In July 2010, we issued \$1.3 billion of Convertible Notes due in May 2016 in a private placement pursuant to Rule 144A of the Securities Act of 1933, as amended. In 2016 and 2015, portions of the Convertible Notes were converted and on May 1, 2016, the remainder matured. We repaid an aggregate principal balance of \$285 million and \$213 million during 2016 and 2015, respectively. We also paid in cash \$956 million and \$784 million during 2016 and 2015, respectively, related to the conversion spread of the Convertible Notes, which represents the conversion value in excess of the principal amount. We received \$956 million and \$784 million in cash during 2016 and 2015, respectively, from our convertible note hedges related to the Convertible Notes. During 2015, a portion of the warrants related to the Convertible Notes was modified and settled, and in August 2016, the remainder expired. We paid \$469 million and \$3.9 billion during 2016 and 2015, respectively, to settle the warrants as the average market price of our common stock exceeded the warrants' exercise price.

The Convertible Notes were issued at par and bore an annual interest rate of 1.625%. The initial conversion rate for the Convertible Notes was 44.0428 shares per \$1,000 principal amount (which represented an initial conversion price of approximately \$22.71 per share). The conversion rates were subject to customary anti-dilution adjustments, including quarterly dividend distributions. Upon conversion or maturity, a holder received an amount in cash equal to the lesser of (i) the principal amount of the note or (ii) the conversion value for such note, as measured under the indenture governing the relevant notes. If the conversion value exceeded the principal amount, we delivered, at our option, cash or common stock or a combination of cash and common stock for the conversion value in excess of the principal amount.

Concurrent with the issuance of the Convertible Notes, we purchased convertible note hedges and sold warrants in private transactions. The convertible note hedges covered, subject to customary anti-dilution adjustments, 55 million shares of our common stock at strike price that initially correspond to the initial conversion price of the Convertible Notes and were subject to adjustments similar to those applicable to the conversion price of the related notes, including quarterly dividend distributions. If the market value per share of our common stock at the time of conversion of the Convertible Notes were above the strike price of the applicable convertible note hedges, we would have been entitled to receive from the counterparties in the transactions shares of our common stock or, to the extent we have made a corresponding election with respect to the related convertible notes, cash or a combination of cash and shares of our common stock, at our option, for the excess of the market value of the common stock over the strike price of the convertible note hedges. The convertible note hedges would have terminated upon the maturity of the Convertible Notes or when none of the Convertible Notes remained outstanding due to conversion or otherwise.

There were 55 million shares of our common stock underlying the warrants associated with our Convertible Notes. The warrants had an original exercise price of \$30.05 per share, subject to customary anti-dilution adjustments including quarterly dividend distributions. In 2015, we entered into modified agreements with our warrant counterparties which changed the timing of the expiration for 46 million of the warrants. The modified agreements allowed us to settle the 46 million warrants at our option, in cash or shares. According to the terms of the modified agreements, these warrants expired during a 32 trading-day period which commenced on May 11, 2015 and ended on June 24, 2015. We exercised our option to settle the warrants in cash. In 2016, the remaining 9 million warrants expired during a 40 trading-day period commencing on August 1, 2016 and ending on September 26, 2016. We exercised our option to settle the remaining warrants in cash. Because these warrants could have been settled at our option, in cash or shares of common stock, under both the original and the modified agreements and these contracts met all of the applicable criteria for equity classification, the settlement payments were recorded as a reduction to Stockholders' equity on our Consolidated Balance Sheets.

In March 2016, we exercised our option to elect cash for the settlement of the conversion spread of the remaining Convertible Notes and for the related convertible note hedges. As a result, the Convertible Notes and the related convertible note hedges were accounted for as derivative instruments with fair values classified as liability or asset on our Consolidated Balance Sheets (see Note 4, Derivative Financial Instruments).

Until our cash settlement election, we bifurcated the conversion option of the Convertible Notes from the debt instrument, classified the conversion option in equity and accreted the resulting debt discount as interest expense over the contractual terms of the Convertible Notes. The following table summarizes information about the equity and liability components of the Convertible Notes (in millions):

	Carrying Value of Equity Component		Net Carrying Amount of Liability Component		Unamortized Discount of Liability Component	
	December 31,		December 31,		December 31,	
	2016	2015	2016	2015	2016	2015
Convertible Notes	\$ —	\$ 35	\$ —	\$ 283	\$ —	\$ (2)

We recognized interest expense of \$3 million in 2016, \$16 million in 2015 and \$35 million in 2014 related to the contractual coupon rate and amortization of the debt discount and issuance cost for the Convertible Notes. The effective interest rate on the liability components of Convertible Notes was 4.00%.

Credit Facilities

In 2016, we terminated our five-year \$1.3 billion revolving credit facility and entered into a new \$2.5 billion five-year revolving credit facility agreement maturing in May 2021 (the Five-Year Revolving Credit Agreement). The new revolving credit facility can be used for working capital requirements and for general corporate purposes, including, without limitation, acquisitions. As of December 31, 2016 and 2015, there were no amounts outstanding under these credit facilities.

The Five-Year Revolving Credit Agreement contains customary representations, warranties, affirmative and negative covenants and events of default. At December 31, 2016 we were not in violation of any covenants. Loans under the new credit facility bear interest at either (i) the Eurodollar Rate plus the Applicable Percentage, or (ii) the Base Rate plus the Applicable Percentage, each as defined in the Five-Year Revolving Credit Agreement. We may terminate or reduce the commitments, and may prepay any loans under the new credit facility in whole or in part at any time without premium or penalty.

Contractual Maturities of Financing Obligations

As of December 31, 2016, the aggregate future principal maturities of financing obligations for each of the next five years, based on contractual due dates, are as follows (in millions):

	2017	2018	2019	2020	2021
Contractual Maturities	\$ —	\$ 1,000	\$ 812	\$ 2,500	\$ 2,250

12. COMMITMENTS AND CONTINGENCIES

Lease Arrangements

We lease facilities and equipment related primarily to administrative, R&D, sales and marketing activities under various long-term non-cancelable operating leases in the United States and international markets. Our leases expire on various dates between 2017 and 2068, with many of our leases containing options to renew. Lease expense under our operating leases was approximately \$81 million in 2016, \$78 million in 2015 and \$66 million in 2014.

Aggregate non-cancelable future minimum rental payments under operating leases are as follows (in millions):

2017	\$ 75
2018	67
2019	53
2020	38
2021	34
Thereafter	102
Total	\$ 369

Legal Proceedings

We are a party to various legal actions. The most significant of these are described below. We recognize accruals for such actions to the extent that we conclude that a loss is both probable and reasonably estimable. We accrue for the best estimate of a loss within a range; however, if no estimate in the range is better than any other, then we accrue the minimum amount in the range. If we determine that a loss is reasonably possible and the loss or range of loss can be estimated, we disclose the possible loss.

Unless otherwise noted, it is not possible to determine the outcome of these matters, and we cannot reasonably estimate the maximum potential exposure or the range of possible loss.

We did not recognize any accruals for litigation on our Consolidated Balance Sheets as of December 31, 2016 and 2015 as we did not believe losses were probable.

Litigation Related to Sofosbuvir

In January 2012, we acquired Pharmasset, Inc. (Pharmasset). Through the acquisition, we acquired sofosbuvir, a nucleotide analog that acts to inhibit the replication of the hepatitis C virus (HCV). In December 2013, we received FDA approval of sofosbuvir, now known commercially as Sovaldi. In October 2014, we also received approval of the fixed-dose combination of ledipasvir and sofosbuvir, now known commercially as Harvoni. In June 2016, we received approval of the fixed-dose combination of sofosbuvir and velpatasvir, now known commercially as Epclusa. We have received a number of contractual and intellectual property claims regarding sofosbuvir. While we have carefully considered these claims both prior to and following the acquisition and believe they are without merit, we cannot predict the ultimate outcome of such claims or range of loss, except where stated otherwise herein.

We own patents and patent applications that claim sofosbuvir (Sovaldi) as a chemical entity and its metabolites and the fixed-dose combinations of ledipasvir and sofosbuvir (Harvoni) and sofosbuvir and velpatasvir (Epclusa). Third parties may have, or may obtain rights to, patents that allegedly could be used to prevent or attempt to prevent us from commercializing Epclusa, Harvoni or Sovaldi. For example, we are aware of patents and patent applications owned by other parties that have been or may in the future be alleged by such parties to cover the use of Epclusa, Harvoni and Sovaldi. We cannot predict the ultimate outcome of intellectual property claims related to Epclusa, Harvoni or Sovaldi. We have spent, and will continue to spend, significant resources defending against these claims.

If third parties successfully obtain valid and enforceable patents, and successfully prove infringement of those patents by Epclusa, Harvoni and/or Sovaldi, we could be prevented from selling these products unless we were able to obtain a license under such patents. Such a license may not be available on commercially reasonable terms or at all.

Interference Proceedings and Litigation with Idenix Pharmaceuticals, Inc. (Idenix), Universita Degli Studi di Cagliari (UDSG), Centre National de la Recherche Scientifique and L'Universite Montpellier II

In February 2012, we received notice that the U.S. Patent and Trademark Office (USPTO) had declared Interference No. 105,871 (First Idenix Interference) between our U.S. Patent No. 7,429,572 (the '572 patent) and Idenix's pending U.S. Patent Application No. 12/131,868 to determine who was the first to invent certain nucleoside compounds. In January 2014, the USPTO Patent Trial and Appeal Board (PTAB) determined that Pharmasset and not Idenix was the first to invent the compounds. Idenix has appealed the PTAB's decisions to the U.S. District Court for the District of Delaware, which has stayed that appeal pending the outcome of the appeal of the interference involving Idenix's U.S. Patent No. 7,608,600 (the '600 patent) as described below.

In December 2013, after receiving our request to do so, the USPTO declared Interference No. 105,981 (Second Idenix Interference) between our pending U.S. Patent Application No. 11/854,218 and Idenix's U.S. Patent No. 7,608,600 (the '600 patent). The '600 patent includes claims directed to methods of treating HCV with nucleoside compounds. In March 2015, the PTAB determined that Pharmasset and not Idenix was the first to invent the claimed methods of treating HCV. Idenix appealed this decision in both the U.S. District Court for the District of Delaware and the U.S. Court of Appeal for the Federal Circuit (CAFC). The CAFC heard oral arguments in September 2016, and we are awaiting its decision. We filed a motion to dismiss the appeal in Delaware, and the court has stayed the appeal relating to the Second Idenix Interference.

We believe that the Idenix claims involved in the First and Second Idenix Interferences, and similar U.S. and foreign patents claiming the same compounds, metabolites and uses thereof, are invalid. As a result, we filed an Impeachment Action in the Federal Court of Canada to invalidate Idenix Canadian Patent No. 2,490,191 (the '191 patent), which is the Canadian patent that corresponds to the '600 patent. Idenix asserted that the commercialization of Sovaldi in Canada will infringe its '191 patent and that our Canadian Patent No. 2,527,657, corresponding to our '572 patent, is invalid. In November 2015, the Canadian court held that Idenix's patent is invalid and that our patent is valid. Idenix appealed the decision to the Canadian Federal Court of Appeal in November 2015. The appeal hearing was held in January 2017 and we are awaiting the decision.

We filed a similar legal action in Norway in the Oslo District Court seeking to invalidate Idenix's Norwegian patent corresponding to the '600 patent. In September 2013, Idenix filed an invalidation action in the Norwegian proceedings against our Norwegian Patent No. 333700, which corresponds to the '572 patent. In March 2014, the Norwegian court found all claims in the Idenix Norwegian patent to be invalid and upheld the validity of all claims in our patent. Idenix appealed the decision to the Norwegian Court of Appeal. In April 2016, the Court of Appeal issued its decision invalidating the Idenix patent and upholding our patent. Idenix has not filed a further appeal.

In January 2013, we filed a legal action in the Federal Court of Australia seeking to invalidate Idenix's Australian patent corresponding to the '600 patent. In April 2013, Idenix asserted that the commercialization of Sovaldi in Australia infringes its

Australian patent corresponding to the '600 patent. In March 2016, the Australian court revoked Idenix's Australian patent. Idenix has appealed this decision. The appeal hearing was held in November 2016 and we are awaiting the decision.

In March 2014, the European Patent Office (EPO) granted Idenix European Patent No. 1 523 489 (the '489 patent), which corresponds to the '600 patent. The same day that the '489 patent was granted, we filed an opposition with the EPO seeking to revoke the '489 patent. An opposition hearing was held in February 2016, and the EPO ruled in our favor and revoked the '489 patent. Idenix has appealed. In March 2014, Idenix also initiated infringement proceedings against us in the United Kingdom (UK), Germany and France alleging that the commercialization of Sovaldi would infringe the UK, German and French counterparts of the '489 patent. A trial was held in the UK in October 2014. In December 2014, the High Court of Justice of England and Wales (UK Court) invalidated all challenged claims of the '489 patent on multiple grounds. Idenix appealed. In November 2016, the appeals court affirmed the UK Court's decision invalidating Idenix's patent. In March 2015, the German court in Düsseldorf determined that the Idenix patent was highly likely to be invalid and stayed the infringement proceedings pending the outcome of the opposition hearing held by the EPO in February 2016. Idenix has not appealed this decision of the German court staying the proceedings. Upon Idenix's request, the French proceedings have been stayed. Idenix has not been awarded patents corresponding to the '600 patent in Japan or China.

In December 2013, Idenix, Universita Degli Studi di Cagliari (UDSG), Centre National de la Recherche Scientifique and L'Université Montpellier II sued us in U.S. District Court for the District of Delaware alleging that the commercialization of sofosbuvir will infringe the '600 patent and that an interference exists between the '600 patent and our U.S. Patent No. 8,415,322. Also in December 2013, Idenix and UDSG sued us in the U.S. District Court for the District of Massachusetts alleging that the commercialization of sofosbuvir will infringe U.S. Patent Nos. 6,914,054 (the '054 patent) and 7,608,597 (the '597 patent). In June 2014, the court transferred the Massachusetts litigation to the U.S. District Court for the District of Delaware. Idenix was acquired by Merck & Co. Inc. (Merck) in August 2014.

Prior to trial in December 2016, Idenix committed to give us a covenant not to sue with respect to any claims arising out of the '054 patent related to sofosbuvir and withdrew that patent from the trial. In addition, Idenix declined to litigate the '600 patent infringement action at trial in light of the appeal currently pending at the CAFC. In January 2017, the District Court stayed Idenix's infringement claim on the '600 patent pending the outcome of the appeal of the interference decision on that patent, described above. A jury trial was held in December 2016 on the remaining '597 patent. In December 2016, the jury found that we willfully infringed the asserted claims of the '597 patent and awarded Idenix \$2.54 billion in past damages. The parties will file post-trial motions and briefings during the first quarter of 2017, and we expect the judge to rule in the third or fourth quarter of 2017. Once the judge has issued these rulings, the case will move to the CAFC.

Although we cannot predict with certainty the ultimate outcome of this litigation, we believe the jury verdict to be in error, and also believe that errors were also made by the court with respect to certain rulings made before and during trial. We are confident in the merits of our case and will vigorously pursue this position in post-trial motions and on appeal. We expect that our arguments in the forthcoming post-trial motions and on appeal will focus on one or more of the arguments that we made to the judge and jury, those being (i) when properly construed, Gilead does not infringe the claims of the '597 patent, (ii) the patent is invalid for failure to properly describe the claimed invention and (iii) the patent is invalid because it does not enable one of skill in the art to practice the claimed invention.

In assessing whether we should accrue a liability for this litigation on our consolidated financial statements, we considered various factors, including the legal and factual circumstances of the case, the USPTO's invalidation of an Idenix patent similar to the '597 patent in dispute in this case, the jury's verdict, the Court's post-trial orders, the current status of the proceedings, applicable law, the views of legal counsel and the likelihood that the jury's verdict will be upheld on appeal. As a result of this review, we have determined, in accordance with applicable accounting standards that it is not probable that we will incur a loss as a result of this litigation, and therefore have not recorded a liability for this matter. While we believe a loss is not probable, it is reasonably possible that a loss could occur. If the jury's verdict is not upheld on appeal, the loss will be zero. If the jury's verdict is upheld on appeal, our estimated potential loss as of December 31, 2016 would include (i) the \$2.54 billion determined by the jury, which represents 10% of our adjusted revenues from sofosbuvir containing products from launch through August 2016, (ii) approximately \$230 million, which represents 10% of our adjusted revenues from sofosbuvir containing products from September 2016 through December 31, 2016, (iii) pre-judgment interest, (iv) enhanced damages of up to three times the sum of (i) and (ii) above as a result of the jury's finding of willfulness, and (v) attorney's fees. Therefore, we estimate the range of possible loss through December 31, 2016 to be between zero and \$8.5 billion. This sum excludes (i) an immaterial amount related to pre-judgment sales and interest in January 2017, and (ii) going forward royalties yet to be assessed by the court, which we have estimated would be 10%, but which could be up to three times higher as a result of the jury's finding of willfulness, and which would be payable based on adjusted revenues from sofosbuvir-containing products for the period from January 26, 2017 through expiry of the Idenix patent in May 2021. We expect the judge to rule on the amount of going forward royalties and any enhanced damages in the course of deciding the post-trial motions at a time to be determined by the judge in this case. The court's determination of enhanced damages, if any, can also be appealed.

If the jury's verdict is upheld on appeal, the amount we could be required to pay could be material. The timing and magnitude of the amount of any such payment could have a material adverse impact on our results of operations and stock price.

Litigation with Merck

In August 2013, Merck contacted us requesting that we pay royalties on the sales of sofosbuvir and obtain a license to U.S. Patent No. 7,105,499 (the '499 patent) and U.S. Patent No. 8,481,712 (the '712 patent), which it co-owns with Ionis Pharmaceuticals, Inc. The '499 and '712 patents cover compounds which do not include, but may relate to, sofosbuvir. We filed a lawsuit in August 2013 in the U.S. District Court for the Northern District of California seeking a declaratory judgment that the Merck patents are invalid and not infringed. During patent prosecution, Merck amended its patent application in an attempt to cover compounds related to sofosbuvir. Initially, in March 2016, a jury determined that we had not established that Merck's patents are invalid for lack of written description or lack of enablement and awarded Merck \$200 million in damages. However, in June 2016, the court ruled in Gilead's favor on our defense of unclean hands and determined that Merck may not recover any damages from us for the '499 and '712 patents. The judge has determined that Merck is required to pay our attorney's fees due to the exceptional nature of this case. The amount of fees owed to us by Merck is yet to be determined by the court.

Merck has filed a notice of appeal to the Court of Appeals for the Federal Circuit regarding the court's decision on our defense of unclean hands. We appealed the issue relating to the invalidity of Merck's patent. If the decision on our defense of unclean hands is reversed on appeal and Merck's patent is upheld, we may be required to pay damages and a royalty on sales of sofosbuvir-containing products following the appeal. In that event, the judge has indicated that she will determine the amount of the royalty, if necessary, at the conclusion of any appeal in this case.

Litigation with the University of Minnesota

The University of Minnesota (the University) has obtained Patent No. 8,815,830 (the '830 patent), which purports to broadly cover nucleosides with antiviral and anticancer activity. In August 2016, the University filed a lawsuit against us in the U.S. District Court for the District of Minnesota, alleging that the commercialization of sofosbuvir-containing products infringes the '830 patent. We believe that the '830 patent is invalid and will not be infringed by the continued commercialization of sofosbuvir.

European Patent Claims

In February 2015, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering sofosbuvir that expires in 2028. In October 2016, the EPO upheld the validity of certain claims of our sofosbuvir patent. We anticipate that the challengers will appeal this decision in favor of our patent. The appeal process may take several years.

In January 2016, several parties filed oppositions in the EPO requesting revocation of our granted European patent covering TAF that expires in 2021.

In March 2016, three parties filed oppositions in the EPO requesting revocation of our granted European patent covering cobicistat that expires in 2027. While we are confident in the strength of our patents, we cannot predict the ultimate outcome of these oppositions.

If we are unsuccessful in defending these oppositions, some or all of our patent claims may be narrowed or revoked and the patent protection for sofosbuvir, TAF and cobicistat in Europe could be substantially shortened or eliminated entirely. If our patents are revoked, and no other European patents are granted covering these compounds, our exclusivity may be based entirely on regulatory exclusivity granted by the European Medicines Agency. Sovaldi has been granted regulatory exclusivity that will prevent generic sofosbuvir from entering the European Union for 10 years following approval of Sovaldi, or January 2024. If we lose exclusivity for Sovaldi prior to 2028, our expected revenues and results of operations could be negatively impacted for the years including and succeeding the year in which such exclusivity is lost, which may cause our stock price to decline.

Litigation with Generic Manufacturers

As part of the approval process for some of our products, FDA granted us a New Chemical Entity (NCE) exclusivity period during which other manufacturers' applications for approval of generic versions of our product will not be approved. Generic manufacturers may challenge the patents protecting products that have been granted NCE exclusivity one year prior to the end of the NCE exclusivity period. Generic manufacturers have sought and may continue to seek FDA approval for a similar or identical drug through an abbreviated new drug application (ANDA), the application form typically used by manufacturers seeking approval of a generic drug. The sale of generic versions of our products earlier than their patent expiration would have a significant negative effect on our revenues and results of operations. To seek approval for a generic version of a product having NCE status, a generic company may submit its ANDA to FDA four years after the branded product's approval. For sofosbuvir, this date falls in December 2017. Consequently, it is possible that one or more generics may file an ANDA for Sovaldi in December 2017.

Current legal proceedings of significance with generic manufacturers include:

HIV Products

In November 2011, December 2011 and August 2012, we received notices that Teva submitted an abbreviated new drug submission (ANDS) to the Canadian Minister of Health requesting permission to manufacture and market generic versions of Truvada, Atripla and Viread. In the notices, Teva alleges that the patents associated with Truvada, Atripla and Viread are invalid, unenforceable and/or will not be infringed by Teva's manufacture, use or sale of generic versions of those products. We filed lawsuits against Teva in the Federal Court of Canada seeking an order of prohibition against approval of these applications.

In December 2013, the court issued an order prohibiting the Canadian Minister of Health from approving Teva's generic versions of our Viread, Truvada and Atripla products until expiry of our patents in July 2017. Teva has appealed that decision. The court's decision did not rule on the validity of the patents and accordingly the only issue on appeal is whether the Canadian Minister of Health should be prohibited from approving Teva's products. In November 2016, we and Teva entered into a settlement agreement to resolve the ongoing contested proceedings concerning Teva's ANDS for generic versions of Truvada, Atripla, and Viread as well as Gilead's patents associated with Truvada, Atripla, and Viread.

In June 2014, we received notice that Apotex Inc. (Apotex) submitted an ANDS to the Canadian Minister of Health requesting permission to manufacture and market a generic version of Truvada and a separate ANDS requesting permission to manufacture and market a generic version of Viread. In the notice, Apotex alleges that three of the patents associated with Truvada and two of the patents associated with Viread are invalid, unenforceable and/or will not be infringed by Apotex's manufacture, use or sale of a generic version of Truvada or Viread. In August 2014, we filed lawsuits against Apotex in the Federal Court of Canada seeking orders of prohibition against approval of these ANDS. A hearing in those cases was held in April 2016. In July 2016, the court issued an order prohibiting the Canadian Minister of Health from approving Apotex's generic version of our Viread product until the expiry of our patents in July 2017. The court declined to prohibit approval of Apotex's generic version of our Truvada product. The court's decision did not rule on the validity of the patents. The launch of Apotex's generic version of our Truvada product would be at risk of infringement of our patents, including patents that we were unable to assert in the present lawsuit, and liability for our damages. Apotex has appealed the court's decision.

In February 2016, we received notice that Mylan Pharmaceuticals, Inc. (Mylan) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Tybost (cobicistat). In the notice, Mylan alleges that the patent covering cobicistat is invalid as obvious and that Mylan's generic product cannot infringe an invalid claim. In March 2016, we filed lawsuits against Mylan in the U.S. District Court for the District of Delaware and U.S. District Court for the Northern District of West Virginia. In January 2017, we received a letter from Mylan notifying us that it had submitted a duplicate ANDA to FDA for this same product. We are currently evaluating Mylan's letter. The trial in Delaware is scheduled for January 2018. The patent in suit that covers Tybost is also listed in the Orange Book for Stribild and Genvoya.

Letairis

In February 2015, we received notice that Watson Laboratories, Inc. (Watson) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, Watson alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by Watson's manufacture, use or sale of a generic version of Letairis. In April 2015, we filed a lawsuit against Watson in the U.S. District Court for the District of New Jersey for infringement of our patents. In January 2017, we reached an agreement with Watson to settle the litigation.

In June 2015, we received notice that SigmaPharm Laboratories, LLC (SigmaPharm) submitted an ANDA to FDA requesting permission to manufacture and market a generic version of Letairis. In the notice, SigmaPharm alleges that one of the patents associated with ambrisentan tablets is invalid, unenforceable and/or will not be infringed by SigmaPharm's manufacture, use or sale of a generic version of Letairis. In June 2015, we filed a lawsuit against SigmaPharm in the U.S. District Court for the District of New Jersey for infringement of our patents. The date for trial against SigmaPharm is not yet set but estimated to occur in the second quarter of 2017.

We cannot predict the ultimate outcome of these actions, and we may spend significant resources enforcing and defending these patents. If we are unsuccessful in these lawsuits, some or all of our claims in the patents may be narrowed or invalidated and the patent protection for our products could be substantially shortened. Further, if all of the patents covering one or more products are invalidated, FDA or the Canadian Minister of Health could approve the requests to manufacture a generic version of such products in the United States or Canada, respectively, prior to the expiration date of those patents. The sale of generic versions of these products earlier than their patent expiration could have a significant negative effect on our revenues and results of operations.

TAF Litigation

In January 2016, AIDS Healthcare Foundation, Inc. (AHF) filed a complaint with the U.S. District Court for the Northern District of California against Gilead, Japan Tobacco, Inc. and Japan Tobacco International, U.S.A. (together, JT), and Emory University (Emory). In April 2016, AHF amended its complaint to add Janssen and Johnson & Johnson Inc. (J&J) as defendants. AHF claims that U.S. Patent Nos. 7,390,791; 7,800,788; 8,754,065; 8,148,374; and 8,633,219 are invalid. In addition, AHF claims that Gilead, independently and together with JT, Akros, Janssen and J&J, is violating federal and state antitrust and unfair competition laws in the market for sales of TAF by offering TAF as part of a fixed-dose combination product with elvitegravir, cobicistat and emtricitabine (Genvoya), a fixed-dose combination product with elvitegravir and rilpivirine (Odefsey) and in a fixed-dosed combination product with elvitegravir (Descovy). AHF sought a declaratory judgment of invalidity against each of the patents as well as monetary damages. In May 2016, we, JT, Janssen, and J&J filed motions to dismiss all of AHF's claims, which AHF opposed. In June 2016, a hearing was held on the motions to dismiss. In July 2016, the judge granted our and the other defendants' motions and dismissed all of AHF's claims. AHF has appealed the court's decision dismissing the challenge to the validity of our TAF patents.

Department of Justice Investigations

In June 2011, we received a subpoena from the U.S. Attorney's Office for the Northern District of California requesting documents related to the manufacture, and related quality and distribution practices, of Complera, Atripla, Truvada, Viread, Emtriva, Hepsera and Letairis. We cooperated with the government's inquiry. In April 2014, the United States Department of Justice informed us that, following an investigation, it declined to intervene in a False Claims Act lawsuit filed by two former employees. In April 2014, the former employees served a First Amended Complaint. In January 2015, the federal district court issued an order granting in its entirety, without prejudice, our motion to dismiss the First Amended Complaint. In February 2015, the plaintiffs filed a Second Amended Complaint and in June 2015, the federal district court issued an order granting our motion to dismiss the Second Amended Complaint. In July 2015, the plaintiffs filed a notice of appeal in the U.S. Court of Appeals for Ninth Circuit.

In February 2016, we received a subpoena from the U.S. Attorney's Office for the District of Massachusetts requesting documents related to our support of 501(c)(3) organizations that provide financial assistance to patients, and for our HCV products, documents concerning our provision of financial assistance to patients. Other companies have disclosed similar inquiries. We are cooperating with this inquiry.

Other Matters

We are a party to various legal actions that arose in the ordinary course of our business. We do not believe that these other legal actions will have a material adverse impact on our consolidated business, financial position or results of operations.

Other Commitments

In the normal course of business, we enter into various firm purchase commitments primarily related to active pharmaceutical ingredients and certain inventory related items. As of December 31, 2016, these commitments for the next five years were approximately \$1.1 billion in 2017, \$345 million in 2018, \$59 million in 2019, \$20 million in 2020 and \$20 million in 2021. The amounts related to active pharmaceutical ingredients represent minimum purchase commitments. Actual payments for the purchases related to active pharmaceutical ingredients were \$2.0 billion in 2016, \$2.2 billion in 2015 and \$1.8 billion in 2014.

13. STOCKHOLDERS' EQUITY

Stock Repurchase Programs

In February 2016, our Board of Directors authorized a \$12.0 billion stock repurchase program (2016 Program). Purchases under the 2016 Program may be made in the open market or in privately negotiated transactions. The 2016 Program commenced after the \$15.0 billion stock repurchase program authorized by our Board of Directors in January 2015 was completed in the second quarter of 2016. The \$5.0 billion stock repurchase program authorized by our Board of Directors in May 2014 (2014 Program) was completed in the first quarter of 2015. The \$5.0 billion repurchase program authorized by our Board of Directors in January 2011 (2011 Program) was completed in 2014. As of December 31, 2016, the remaining authorized repurchase amount under the 2016 Program was \$9.0 billion.

In February 2016, we entered into an accelerated stock repurchase program (ASR) to repurchase \$5.0 billion of our common stock under the 2015 Program. We made an upfront payment of \$5.0 billion and received 46 million shares of our common stock. The 46 million shares represented approximately 80% of the total shares calculated based on our common stock closing price of \$86.68 per share on the date we entered into the ASR. In April 2016, the ASR settled, and we received an additional 8 million shares of our common stock based on the average price of our common stock during the ASR purchase period less a predetermined discount. As a result, the average purchase price of our common stock from the ASR was \$92.09 per share.

We accounted for the ASR as two separate transactions: (a) as shares of common stock acquired in a treasury stock transaction recorded on the transaction date and (b) as a forward contract indexed to our own common stock. As such, the up-front payment of \$5.0 billion was accounted for as a reduction to Stockholders' equity on our Consolidated Balance Sheets in the period the payment was made. The ASR met all of the applicable criteria for equity classification and therefore was not accounted for as a derivative instrument. The shares received under the ASR were retired in the periods they were received.

The following table summarizes our stock repurchases under the above-described programs (in millions, except per share data):

	Year ended December 31,		
	2016 ⁽¹⁾	2015 ⁽²⁾	2014 ⁽³⁾
Shares repurchased and retired	123	95	59
Amount	\$ 11,001	\$ 10,002	\$ 5,349
Average price per share	\$ 89.15	\$ 104.91	\$ 90.29

Notes:

- (1) Includes 36 million shares repurchased for \$3.0 billion under the 2016 Program and 87 million shares repurchased for \$8.0 billion under the 2015 Program.
(2) Includes 65 million shares repurchased for \$7.0 billion under the 2015 Program and 30 million shares repurchased for \$3.0 billion under the 2014 Program.
(3) Includes 19 million shares repurchased for \$2.0 billion under the 2014 Program and 40 million shares repurchased for \$3.3 billion under the 2011 Program.

In addition to repurchases from our stock repurchase programs, we repurchased shares of common stock withheld by us from employee restricted stock awards to satisfy our applicable tax withholding obligations, which are immaterial and excluded from the table above.

We use the par value method of accounting for our stock repurchases. Under the par value method, common stock is first charged with the par value of the shares involved. The excess of the cost of shares acquired over the par value is allocated to additional paid-in capital (APIC) based on an estimated average sales price per issued share with the excess amounts charged to retained earnings.

The following table summarizes the reduction of common stock and APIC and the charge to retained earnings as a result of our stock repurchases (in millions):

	Year ended December 31,		
	2016	2015	2014
Reduction of common stock and APIC	\$ 302	\$ 223	\$ 133
Charge to retained earnings	\$ 10,883	\$ 10,115	\$ 5,475

Dividends

The following table summarizes cash dividends declared on our common stock (in millions, except per share data):

	2016		2015	
	Dividend Per Share	Amount	Dividend Per Share	Amount
First quarter	\$ 0.43	\$ 587	\$ —	\$ —
Second quarter	0.47	631	0.43	639
Third quarter	0.47	625	0.43	631
Fourth quarter	0.47	622	0.43	620
Total	\$ 1.84	\$ 2,465	\$ 1.29	\$ 1,890

Our restricted stock and performance-based stock units have dividend equivalent rights entitling holders to dividend equivalents to be paid upon vesting for each share of the underlying units.

On February 7, 2017, we announced that our Board of Directors declared a quarterly cash dividend of \$0.52 per share of our common stock, with a payment date of March 30, 2017 to all stockholders of record as of the close of business on March 16, 2017. Future dividends are subject to declaration by the Board of Directors.

Preferred Stock

We have 5 million shares of authorized preferred stock issuable in series. Our Board is authorized to determine the designation, powers, preferences and rights of any such series. There was no preferred stock outstanding as of December 31, 2016 and 2015.

Accumulated Other Comprehensive Income

The following table summarizes the changes in AOCI by component, net of tax (in millions):

	Foreign Currency Translation	Unrealized Gains and Losses on Available-for- Sale Securities	Unrealized Gains and Losses on Cash Flow Hedges	Total
Balance at December 31, 2014	\$ (54)	\$ 12	\$ 343	\$ 301
Other comprehensive income (loss) before reclassifications	9	(29)	389	369
Amounts reclassified from accumulated other comprehensive income	—	1	(583)	(582)
Net current period other comprehensive income (loss)	9	(28)	(194)	(213)
Balance at December 31, 2015	(45)	(16)	149	88
Other comprehensive income before reclassifications	177	7	5	189
Amounts reclassified from accumulated other comprehensive income	—	(7)	8	1
Net current period other comprehensive income	177	—	13	190
Balance at December 31, 2016	\$ 132	\$ (16)	\$ 162	\$ 278

The amounts reclassified for gains (losses) on cash flow hedges were recorded as part of Product sales on our Consolidated Statements of Income. See Note 4, Derivative Financial Instruments for additional information. Amounts reclassified for gains (losses) on available-for-sale securities were recorded as part of Other income (expense), net on our Consolidated Statements of Income.

14. EMPLOYEE BENEFITS

We utilize share based compensation in the form of various types of equity-based awards, including restricted stock units (RSUs), performance-based restricted stock units (PSUs) and stock options. Compensation expense is recognized on the Consolidated Statements of Income based on the estimated fair value of the award on the grant date. The estimated fair value of RSUs is based on the closing price of our common stock. For PSUs, estimated fair value is based on either the Monte Carlo valuation methodology or the stock price on the date of grant. For stock option awards, estimated fair value is based on the Black-Scholes option valuation model.

2004 Equity Incentive Plan

In May 2004, our stockholders approved and we adopted the Gilead Sciences, Inc. 2004 Equity Incentive Plan (as amended, the 2004 Plan). The 2004 Plan is a broad based incentive plan that provides for the grant of equity-based awards, including stock options, restricted stock units, restricted stock awards and performance awards, to employees, directors and consultants. The 2004 Plan authorizes the issuance of a total of 243 million shares of common stock. As of December 31, 2016, a total of 60 million shares remain available for future grant under the 2004 Plan.

Stock Options

The 2004 Plan provides for option grants designated as either non-qualified or incentive stock options. Prior to January 1, 2006, we granted both non-qualified and incentive stock options, but all stock options granted after January 1, 2006 have been non-qualified stock options. Under the 2004 Plan, employee stock options granted prior to 2011 generally vest over five years and stock options granted starting in 2011 generally vest over four years. All options are exercisable over a period not to exceed the contractual term of ten years from the date the stock options are issued and are granted at prices not less than the fair market value of our common stock on the grant date. Stock option exercises are settled with common stock from the 2004 Plan's previously authorized and available pool of shares.

The following table summarizes activity and related information under our stock option plans. All option grants presented in the table had exercise prices not less than the fair value of the underlying common stock on the grant date:

	Shares (in thousands)	Weighted- Average Exercise Price (in dollars)	Weighted- Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in millions)
Outstanding at December 31, 2015	27,413	\$ 28.56		
Granted	2,927	\$ 82.78		
Forfeited	(244)	\$ 87.86		
Expired	(42)	\$ 92.39		
Exercised	(6,897)	\$ 18.46		
Outstanding at December 31, 2016	23,157	\$ 37.69	4.05	\$ 864
Exercisable at December 31, 2016	19,264	\$ 28.16	3.07	\$ 860
Expected to vest, net of estimated forfeitures at December 31, 2016	3,660	\$ 84.88	8.85	\$ 3

Aggregate intrinsic value represents the value of our closing stock price on the last trading day of the year in excess of the weighted-average exercise price multiplied by the number of options outstanding or exercisable. Total intrinsic value of options exercised was \$452 million for 2016, \$1.1 billion for 2015 and \$1.2 billion for 2014.

The weighted-average grant date fair value of the stock options granted was \$20.04 per share for 2016, \$29.73 per share for 2015 and \$27.63 per share for 2014.

As of December 31, 2016, there was \$72 million of unrecognized compensation cost related to stock options, which is expected to be recognized over an estimated weighted-average period of 2.85 years.

Performance-Based Restricted Stock Units

Under the 2004 Plan, we grant PSUs which vest upon the achievement of specified market or performance goals, which could include achieving a total shareholder return compared to a pre-determined peer group or achieving revenue targets. The actual number of common shares ultimately issued is calculated by multiplying the number of PSUs by a payout percentage ranging from 0% to 200% and these awards generally vest only when a committee (or subcommittee) of our Board has determined that the specified market and performance goals have been achieved. The fair value of each PSU is estimated at the date of grant or when performance objectives are defined for the grants. Depending on the terms of the award, fair value on the date of grant is determined based on either the Monte Carlo valuation methodology or the closing stock price on the date of grant.

In addition, we have also granted other PSUs to certain of our employees under the 2004 Plan. The vesting of these awards is subject to the achievement of specified individual performance goals, typically within a one year period. The fair value of such an award is equal to the closing price of our common stock on the grant date.

The following table summarizes activity and related information for all of our PSUs:

	Shares ⁽¹⁾ (in thousands)	Weighted- Average Grant-Date Fair Value Per Share ⁽¹⁾ (in dollars)
Outstanding at December 31, 2015	487	\$ 85.83
Granted	606	\$ 71.60
Vested	(527)	\$ 62.13
Forfeited	(57)	\$ 95.67
Outstanding at December 31, 2016	509	\$ 92.32

Note:

⁽¹⁾ Weighted-average grant-date fair value per share excludes shares related to grants that currently have no grant-date fair value as the performance objectives have not yet been defined.

The weighted-average grant date fair value of our PSUs granted was \$71.60 per share for 2016, \$61.71 per share for 2015 and \$56.38 per share for 2014. The total grant date fair value of our vested PSUs was \$33 million for 2016, \$76 million for 2015 and \$46 million for 2014, and total fair value as of the respective vesting dates was \$45 million for 2016, \$160 million for 2015 and \$145 million for 2014.

We recognized stock-based compensation expenses of \$20 million in 2016, \$40 million in 2015 and \$57 million in 2014 related to these PSUs. As of December 31, 2016, there was \$19 million of unrecognized compensation costs related to these PSUs, which is expected to be recognized over an estimated weighted-average period of 1.3 years.

Restricted Stock Units

We grant time-based RSUs to certain employees as part of our annual employee equity compensation review program as well as to new hire employees and to non-employee members of our Board. RSUs are share awards that entitle the holder to receive freely tradable shares of our common stock upon vesting. RSUs vest over four years from the date of grant.

The fair value of an RSU is equal to the closing price of our common stock on the grant date. The following table summarizes our RSU activities and related information:

	Shares (in thousands)	Weighted- Average Grant-Date Fair Value Per Share (in dollars)
Outstanding at December 31, 2015	11,028	\$ 73.93
Granted	4,897	\$ 84.51
Vested	(4,826)	\$ 58.77
Forfeited	(1,054)	\$ 83.02
Outstanding at December 31, 2016	<u>10,045</u>	<u>\$ 85.41</u>

The weighted-average grant date fair value of RSUs granted was \$84.51 per share for 2016, \$103.19 per share for 2015, \$86.75 per share for 2014. The total grant date fair value of our vested RSUs was \$284 million for 2016, \$249 million for 2015 and \$182 million for 2014, and total fair value as of the respective vesting dates was \$408 million for 2016, \$666 million for 2015 and \$535 million for 2014.

As of December 31, 2016, there was \$577 million of unrecognized compensation cost related to unvested RSUs which is expected to be recognized over a weighted-average period of 2.4 years.

Employee Stock Purchase Plan

Under our Employee Stock Purchase Plan and the International Employee Stock Purchase Plan (together, as amended, the ESPP), employees can purchase shares of our common stock based on a percentage of their compensation subject to certain limits. The purchase price per share is equal to the lower of 85% of the fair market value of our common stock on the offering date or the purchase date. Prior to 2016, the ESPP offered a two-year look-back feature as well as an automatic reset feature that provides for an offering period to be reset to a new lower-priced offering if the offering price of the new offering period is less than that of the current offering period. Beginning in the first quarter of 2016, the look-back feature for ESPP offering periods became six-months. ESPP purchases are settled with common stock from the ESPP's previously authorized and available pool of shares. During 2016, 1 million shares were issued under the ESPP for \$84 million. A total of 79 million shares of common stock have been authorized for issuance under the ESPP, and there were 13 million shares available for issuance under the ESPP as of December 31, 2016.

As of December 31, 2016, there was \$5 million of unrecognized compensation cost related to the ESPP, which is expected to be recognized over an estimated weighted-average period of 0.1 years.

Stock-Based Compensation

The following table summarizes the stock-based compensation expenses included on our Consolidated Statements of Income (in millions):

	Year Ended December 31,		
	2016	2015	2014
Cost of goods sold	\$ 14	\$ 11	\$ 10
Research and development expenses	176	173	152
Selling, general and administrative expenses	190	198	198
Stock-based compensation expense included in total costs and expenses	380	382	360
Income tax effect	(104)	(131)	(64)
Stock-based compensation expense, net of tax	\$ 276	\$ 251	\$ 296

We capitalized stock-based compensation costs to inventory totaling \$15 million in 2016, \$13 million in 2015 and \$12 million in 2014. The capitalized stock-based compensation costs remaining in inventory were \$9 million as of December 31, 2016, \$8 million as of December 31, 2015 and \$6 million as of December 31, 2014.

Stock-based compensation is recognized as expense over the requisite service periods on our Consolidated Statements of Income using the straight-line expense attribution approach, reduced for estimated forfeitures. We estimate forfeitures based on our historical experience.

Valuation Assumptions

Fair value of options granted under our 2004 Plan and purchases under our ESPP were estimated at grant or purchase dates using a Black-Scholes option valuation model. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options, which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including expected stock price volatility and expected award life. We used the following assumptions to calculate the estimated fair value of the awards:

	Year Ended December 31,		
	2016	2015	2014
Expected volatility:			
Stock options	30%	35%	34%
ESPP	30%	32%	32%
Expected term in years:			
Stock options	5.5	5.7	5.5
ESPP	0.5	1.2	1.2
Risk-free interest rate:			
Stock options	1.4%	1.4%	1.8%
ESPP	1.1%	1.4%	1.5%
Expected dividend yield	1.9%	1.7%	—%

The fair value of stock options granted was calculated using the single option approach. We use a blend of historical volatility along with implied volatility for traded options on our common stock to determine our expected volatility. The expected term of stock-based awards represents the weighted-average period the awards are expected to remain outstanding. We estimate the weighted-average expected term based on historical cancellation and historical exercise data related to our stock options as well as the contractual term and vesting terms of the awards. The risk-free interest rate is based upon observed interest rates appropriate for the term of the stock-based awards. The dividend yield is based on our history and expectation of dividend payouts.

Deferred Compensation

We maintain a retirement saving plan under which eligible U.S. employees may defer compensation for income tax purposes under Section 401(k) of the Internal Revenue Code (the Gilead Sciences 401k Plan). In certain foreign subsidiaries, we maintain defined benefit plans as required by local regulatory requirements. Our total matching contribution expense under the Gilead Sciences 401k Plan and other defined benefit plans was \$69 million during 2016, \$47 million during 2015 and \$40 million during 2014.

We maintain a deferred compensation plan under which our directors and key employees may defer compensation. Amounts deferred by participants are deposited into a rabbi trust. The total assets and liabilities associated with the deferred compensation plan were \$84 million as of December 31, 2016 and \$66 million as of December 31, 2015.

15. NET INCOME PER SHARE ATTRIBUTABLE TO GILEAD COMMON STOCKHOLDERS

Basic net income per share attributable to Gilead common stockholders is calculated based on the weighted-average number of shares of our common stock outstanding during the period. Diluted net income per share attributable to Gilead common stockholders is calculated based on the weighted-average number of shares of our common stock outstanding and other dilutive securities outstanding during the period. The potential dilutive shares of our common stock resulting from the assumed exercise of outstanding stock options and equivalents, the assumed conversion of our outstanding Convertible Notes and the assumed exercise of the 2016 Warrants were determined under the treasury stock method.

In March 2016, we exercised our option to elect cash settlement for the conversion spread of the remaining Convertible Notes. Prior to our cash settlement election, our common stock resulting from the assumed settlement of the conversion spread of the Convertible Notes had a dilutive effect when the average market price of our common stock during the period exceeded the conversion price for the Convertible Notes. As a result, we included their dilutive impact in our net income per share calculations. Additionally, during the third quarter of 2016, our 2016 Warrants expired, and we exercised our option to settle the warrants in cash. Prior to the settlement, our common stock resulting from the assumed settlement of the 2016 Warrants had a dilutive effect when the average market price of our common stock during the period exceeded the warrants' exercise price. As a result, we included their dilutive impact in our net income per share calculations. See Note 11, Debt and Credit Facility for additional information.

Our ASR was reflected as repurchases of our common stock upon the receipt of shares and as forward contracts indexed to our common stock. We excluded the forward contracts from the computation of diluted net income per share attributable to Gilead common stockholders because their effect was antidilutive.

We excluded stock options to purchase approximately 3 million, 1 million and 1 million weighted-average shares of our common stock that were outstanding during 2016, 2015 and 2014, respectively, in the computation of diluted net income per share attributable to Gilead common stockholders because their effect was antidilutive.

The following table shows the calculation of basic and diluted net income per share attributable to Gilead common stockholders (in millions except per share amounts):

	Year Ended December 31,		
	2016	2015	2014
Net income attributable to Gilead	\$ 13,501	\$ 18,108	\$ 12,101
Shares used in per share calculation - basic	1,339	1,464	1,522
Effect of dilutive securities:			
Stock options and equivalents	13	23	33
Conversion spread related to the Convertible Notes	2	14	30
Warrants related to the Convertible Notes	4	20	62
Shares used in per share calculation - diluted	1,358	1,521	1,647
Net income per share attributable to Gilead common stockholders - basic	\$ 10.08	\$ 12.37	\$ 7.95
Net income per share attributable to Gilead common stockholders - diluted	\$ 9.94	\$ 11.91	\$ 7.35

16. SEGMENT INFORMATION

We have one operating segment, which primarily focuses on the discovery, development and commercialization of innovative medicines in areas of unmet medical need. Therefore, our results of operations are reported on a consolidated basis consistent with internal management reporting reviewed by our chief operating decision maker, our chief executive officer. Enterprise-wide disclosures about product sales, revenues and long-lived assets by geographic area, and revenues from major customers are presented below.

Product Sales

Our product sales consist of the following (in millions):

	Year Ended December 31,		
	2016	2015	2014
Antiviral products:			
Harvoni	\$ 9,081	\$ 13,864	\$ 2,127
Sovaldi	4,001	5,276	10,283
Truvada	3,566	3,459	3,340
Atripla	2,605	3,134	3,470
Stribild	1,914	1,825	1,197
Epclusa	1,752	—	—
Genvoya	1,484	45	—
Complera/Eviplera	1,457	1,427	1,228
Viread	1,186	1,108	1,058
Odefsey	329	—	—
Descovy	298	—	—
Other antiviral	72	69	88
Total antiviral products	27,745	30,207	22,791
Other products:			
Letairis	819	700	595
Ranexa	677	588	510
AmBisome	356	350	388
Zydelig	168	132	23
Other products	188	174	167
Total product sales	\$ 29,953	\$ 32,151	\$ 24,474

Revenues by Geographic Region

The following table summarizes total revenues from external customers and collaboration partners by geographic region (in millions). Product sales and product-related contract revenue are attributed to regions based on ship-to location. Royalty and non-product related contract revenue are attributed to regions based on the location of the collaboration partner.

	Year Ended December 31,		
	2016	2015	2014
Revenues:			
United States	\$ 19,354	\$ 21,234	\$ 18,182
Europe	6,365	7,528	5,442
Japan	2,527	1,935	53
Other countries	2,144	1,942	1,213
Total revenues	\$ 30,390	\$ 32,639	\$ 24,890

Long-lived Assets

The net book value of our property, plant and equipment (less office and computer equipment) in the United States was \$2.2 billion as of December 31, 2016, \$1.8 billion as of December 31, 2015 and \$1.3 billion as of December 31, 2014. The corresponding

amount in international locations was \$430 million as of December 31, 2016, \$334 million as of December 31, 2015 and \$275 million as of December 31, 2014. All individual international locations accounted for less than ten percent of the total balances.

Revenues from Major Customers

The following table summarizes revenues from each of our customers who individually accounted for 10% or more of our total revenues (as a percentage of total revenues):

	Year Ended December 31,		
	2016	2015	2014
McKesson Corp.	22%	24%	24%
AmerisourceBergen Corp.	18%	19%	25%
Cardinal Health, Inc.	16%	15%	14%

17. INCOME TAXES

Income before provision for income taxes consists of the following (in millions):

	Year Ended December 31,		
	2016	2015	2014
Domestic	\$ 7,646	\$ 7,953	\$ 6,678
Foreign	9,451	13,706	8,178
Total income before provision for income taxes	\$ 17,097	\$ 21,659	\$ 14,856

The provision for income taxes consists of the following (in millions):

	Year Ended December 31,		
	2016	2015	2014
Federal:			
Current	\$ 3,351	\$ 3,568	\$ 2,810
Deferred	(85)	(313)	(190)
	3,266	3,255	2,620
State:			
Current	131	158	152
Deferred	28	(21)	(30)
	159	137	122
Foreign:			
Current	261	212	85
Deferred	(77)	(51)	(30)
	184	161	55
Provision for income taxes	\$ 3,609	\$ 3,553	\$ 2,797

The cumulative unremitted foreign earnings that are considered indefinitely reinvested in our foreign subsidiaries and for which no U.S. taxes have been provided, were approximately \$37.6 billion as of December 31, 2016 and \$28.5 billion as of December 31, 2015. The residual U.S. tax liability, if such amounts were remitted, would be approximately \$13.1 billion as of December 31, 2016 and \$9.7 billion as of December 31, 2015.

The reconciliation between the federal statutory tax rate applied to income before taxes and our effective tax rate is summarized as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal statutory rate	35.0 %	35.0 %	35.0 %
State taxes, net of federal benefit	0.7 %	0.5 %	0.6 %
Foreign earnings at different rates	(15.3)%	(18.5)%	(16.9)%
Research and other credits	(0.7)%	(0.7)%	(0.9)%
Net unbenefitted stock compensation	0.2 %	0.1 %	0.2 %
Other	1.2 %	— %	0.8 %
Effective tax rate	21.1 %	16.4 %	18.8 %

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities are as follows (in millions):

	December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards	\$ 175	\$ 199
Stock-based compensation	212	222
Reserves and accruals not currently deductible	617	676
Deferred revenue	56	55
Depreciation related	88	63
Research and other credit carryforwards	147	135
Other, net	221	118
Total deferred tax assets before valuation allowance	1,516	1,468
Valuation allowance	(126)	(6)
Total deferred tax assets	1,390	1,462
Deferred tax liabilities:		
Intangibles	(104)	(280)
Unremitted foreign earnings	—	—
Other	(31)	(50)
Total deferred tax liabilities	(135)	(330)
Net deferred tax assets	\$ 1,255	\$ 1,132

The valuation allowance was \$126 million as of December 31, 2016, \$6 million as of December 31, 2015 and \$9 million as of December 31, 2014. The increase of our valuation allowance from December 31, 2015 to December 31, 2016 was primarily due to write down of the IPR&D value of momelotinib during 2016.

At December 31, 2016, we had U.S. federal net operating loss carryforwards of approximately \$315 million. The federal net operating loss carryforwards will start to expire in 2021, if not utilized. We also had federal tax credit carryforwards of approximately \$7 million which will start to expire in 2018, if not utilized. In addition, we had state net operating loss and tax credit carryforwards of approximately \$269 million and \$306 million, respectively. The state net operating loss and tax credit carryforwards will start to expire in 2017 if not utilized.

Utilization of net operating losses and tax credits may be subject to an annual limitation due to ownership change limitations provided in the Internal Revenue Code of 1986, as amended, and similar state provisions. This annual limitation may result in the expiration of the net operating losses and credits before utilization.

We file federal, state and foreign income tax returns in the United States and in many jurisdictions abroad. For federal income tax purposes, the statute of limitations is open for 2010 and onwards. For certain acquired entities, the statute of limitations is open

for all years from inception due to our utilization of their net operating losses and credits carried over from prior years. For California income tax purposes, the statute of limitations is open for 2010 and onwards.

Our income tax returns are subject to audit by federal, state and foreign tax authorities. We are currently under examination by the IRS for the 2010, 2011, 2012, 2013 and 2014 tax years and by various state and foreign jurisdictions. There are differing interpretations of tax laws and regulations, and as a result, significant disputes may arise with these tax authorities involving issues of the timing and amount of deductions and allocations of income among various tax jurisdictions. We periodically evaluate our exposures associated with our tax filing positions.

We have total federal, state and foreign unrecognized tax benefits of \$1.9 billion as of December 31, 2016 and \$1.4 billion as of December 31, 2015. Of the total unrecognized tax benefits, \$1.8 billion and \$1.3 billion at December 31, 2016 and 2015, respectively, if recognized, would reduce our effective tax rate in the period of recognition. We have continued to classify interest and penalties related to unrecognized tax benefits as part of our income tax provision on our Consolidated Statements of Income. We had accrued interest and penalties related to unrecognized tax benefits of \$50 million as of December 31, 2016 and \$24 million as of December 31, 2015.

As of December 31, 2016, we do not believe our unrecognized tax benefits will significantly change in the next 12 months. Due to the high degree of uncertainty on the timing of clarification from the IRS and other tax authorities regarding our uncertain tax positions, we are unable to reasonably estimate the period of cash settlement, if any, with the respective tax authorities.

The following is a rollforward of our total gross unrecognized tax benefit liabilities (in millions):

	December 31,		
	2016	2015	2014
Balance, beginning of period	\$ 1,350	\$ 661	\$ 237
Tax positions related to current year:			
Additions	522	675	430
Reductions	—	—	—
Tax positions related to prior years:			
Additions	33	45	21
Reductions	(3)	—	(20)
Settlements	(49)	(24)	(5)
Lapse of statute of limitations	(1)	(7)	(2)
Balance, end of period	<u>\$ 1,852</u>	<u>\$ 1,350</u>	<u>\$ 661</u>

SELECTED QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The following amounts are in millions, except per share amounts:

	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>3rd Quarter</u>	<u>4th Quarter</u>
2016				
Total revenues	\$ 7,794	\$ 7,776	\$ 7,500	\$ 7,320
Gross profit on product sales	\$ 6,488	\$ 6,787	\$ 6,276	\$ 6,141
Net income	\$ 3,567	\$ 3,497	\$ 3,325	\$ 3,099
Net income attributable to Gilead	\$ 3,566	\$ 3,497	\$ 3,330	\$ 3,108
Net income per share attributable to Gilead common stockholders-basic	\$ 2.58	\$ 2.62	\$ 2.52	\$ 2.36
Net income per share attributable to Gilead common stockholders-diluted	\$ 2.53	\$ 2.58	\$ 2.49	\$ 2.34
2015				
Total revenues	\$ 7,594	\$ 8,244	\$ 8,295	\$ 8,506
Gross profit on product sales	\$ 6,523	\$ 7,128	\$ 7,147	\$ 7,347
Net income	\$ 4,332	\$ 4,497	\$ 4,592	\$ 4,685
Net income attributable to Gilead	\$ 4,333	\$ 4,492	\$ 4,600	\$ 4,683
Net income per share attributable to Gilead common stockholders-basic	\$ 2.91	\$ 3.05	\$ 3.14	\$ 3.26
Net income per share attributable to Gilead common stockholders-diluted	\$ 2.76	\$ 2.92	\$ 3.06	\$ 3.18

GILEAD SCIENCES, INC.
Schedule II: Valuation and Qualifying Accounts
(in millions)

	Balance at Beginning of Period	Additions/Charged to Expense	Deductions	Balance at End of Period
Year ended December 31, 2016:				
Accounts receivable allowances ⁽¹⁾	\$ 1,032	\$ 9,287	\$ 9,556	\$ 763
Sales return allowance	\$ 371	\$ (141)	\$ 35	\$ 195
Valuation allowances for deferred tax assets ⁽²⁾	\$ 6	\$ 120	\$ —	\$ 126
Year ended December 31, 2015:				
Accounts receivable allowances ⁽¹⁾	\$ 356	\$ 6,934	\$ 6,258	\$ 1,032
Sales return allowance	\$ 171	\$ 219	\$ 19	\$ 371
Valuation allowances for deferred tax assets ⁽²⁾	\$ 9	\$ —	\$ 3	\$ 6
Year ended December 31, 2014:				
Accounts receivable allowances ⁽¹⁾	\$ 252	\$ 2,867	\$ 2,763	\$ 356
Sales return allowance	\$ 82	\$ 104	\$ 15	\$ 171
Valuation allowances for deferred tax assets ⁽²⁾	\$ 9	\$ —	\$ —	\$ 9

Notes:

⁽¹⁾ Allowances are for doubtful accounts, cash discounts and chargebacks.

⁽²⁾ Valuation allowance for deferred tax assets includes \$4 million, \$4 million and \$6 million as of December 31, 2016, 2015 and 2014, respectively, related to our acquisitions.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

An evaluation as of December 31, 2016 was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our “disclosure controls and procedures,” which are defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act), as controls and other procedures of a company that are designed to ensure that the information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to the company’s management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at December 31, 2016.

(b) Management’s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Our internal control system is designed to provide reasonable assurance regarding the preparation and fair presentation of financial statements for external purposes in accordance with generally accepted accounting principles. All internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance that the objectives of the internal control system are met.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting, based on criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control-Integrated Framework. Based on our evaluation, we concluded that our internal control over financial reporting was effective as of December 31, 2016.

Our independent registered public accounting firm, Ernst & Young LLP, has audited our Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K and have issued a report on our internal control over financial reporting as of December 31, 2016. Their report on the audit of internal control over financial reporting appears below.

(c) Changes in Internal Control over Financial Reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, has evaluated any changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2016, and has concluded that there was no change during such quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Gilead Sciences, Inc.

We have audited Gilead Sciences, Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Gilead Sciences, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, Gilead Sciences, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the 2016 consolidated financial statements of Gilead Sciences, Inc. and our report dated February 27, 2017 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Redwood City, California
February 27, 2017

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item concerning our directors and executive officers is incorporated by reference to the sections of our Definitive Proxy Statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with our 2017 Annual Meeting of Stockholders (the Proxy Statement) under the headings "Nominees," "Board Committees and Meetings," "Executive Officers," and "Section 16(a) Beneficial Ownership Reporting Compliance."

Our written Code of Ethics applies to all of our directors and employees, including our executive officers, including without limitation our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions. The Code of Ethics is available on our website at <http://www.gilead.com> in the Investors section under "Corporate Governance." Changes to or waivers of the Code of Ethics will be disclosed on the same website. We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to, or waiver of, any provision of the Code of Ethics by disclosing such information on the same website.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference to the sections of the Proxy Statement under the headings "Executive Compensation," "Compensation Committee Interlocks and Insider Participation," "Compensation Committee Report," and "Compensation of Non-Employee Board Members."

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

The information required by this Item is incorporated by reference to the sections of the Proxy Statement under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Securities Authorized for Issuance under Equity Compensation Plans."

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

The information required by this Item is incorporated by reference to the sections of the Proxy Statement under the headings "Nominees," and "Certain Relationships and Related Party Transactions."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated by reference to the section of the Proxy Statement under the heading "Principal Accountant Fees and Services."

PART IV**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Index list to Consolidated Financial Statements:

Report of Independent Registered Public Accounting Firm	64
Audited Consolidated Financial Statements:	
Consolidated Balance Sheets	65
Consolidated Statements of Income	66
Consolidated Statements of Comprehensive Income	67
Consolidated Statements of Stockholders' Equity	68
Consolidated Statements of Cash Flows	69
Notes to Consolidated Financial Statements	70

(2) Schedule II is included on page 106 of this report. All other schedules are omitted because they are not required or the required information is included in the financial statements or notes thereto.

(3) Exhibits.

The following exhibits are filed herewith or incorporated by reference:

ITEM 15. EXHIBITS

Exhibit Footnote	Exhibit Number	Description of Document
(1)	1.1	Underwriting Agreement, dated September 15, 2016, among Registrant and Merrill Lynch, Pierce, Fenner & Smith Incorporated and J.P. Morgan Securities LLC, as representatives of the several underwriters listed in Schedule 1 thereto
(2)	3.1	Restated Certificate of Incorporation of Registrant
(3)	3.2	Amended and Restated Bylaws of Registrant
	4.1	Reference is made to Exhibit 3.1 and Exhibit 3.2
(4)	4.2	Indenture related to Senior Notes, dated as of March 30, 2011, between Registrant and Wells Fargo, National Association, as Trustee
(4)	4.3	First Supplemental Indenture related to Senior Notes, dated as of March 30, 2011, between Registrant and Wells Fargo, National Association, as Trustee (including form of Senior Notes)
(5)	4.4	Second Supplemental Indenture related to Senior Notes, dated as of December 13, 2011, between Registrant and Wells Fargo, National Association, as Trustee (including Form of 2014 Note, Form of 2016 Note, Form of 2021 Note, Form of 2041 Note)
(6)	4.5	Third Supplemental Indenture related to Senior Notes, dated as of March 7, 2014, between Registrant and Wells Fargo, National Association, as Trustee (including Form of 2019 Note, Form of 2024 Note, Form of 2044 Note)
(7)	4.6	Fourth Supplemental Indenture related to Senior Notes, dated as of November 17, 2014, between Registrant and Wells Fargo, National Association, as Trustee (including Form of 2020 Note, Form of 2025 Note, Form of 2045 Note)
(8)	4.7	Fifth Supplemental Indenture, dated as of September 14, 2015, between Registrant and Wells Fargo Bank, National Association, as Trustee (including Form of 2018 Note, Form of 2020 Note, Form of 2022 Note, Form of 2026 Note, Form of 2035 Note and Form of 2046 Note)
(1)	4.8	Sixth Supplemental Indenture, dated as of September 20, 2016, between Registrant and Wells Fargo Bank, National Association, as Trustee (including Form of 2022 Note, Form of 2023 Note, Form of 2027 Note, Form of 2036 Note and Form of 2047 Note)
*(2)	10.1	Gilead Sciences, Inc. 2004 Equity Incentive Plan, as amended through May 8, 2013
*(9)	10.2	Form of employee stock option agreement used under 2004 Equity Incentive Plan (for grants prior to February 2008)
*(10)	10.3	Form of employee stock option agreement used under 2004 Equity Incentive Plan (for grants made February 2008 through April 2009)
*(11)	10.4	Form of employee stock option agreement used under 2004 Equity Incentive Plan (for grants commencing in May 2009)
*(12)	10.5	Form of employee stock option agreement used under 2004 Equity Incentive Plan (for grants commencing in February 2010)
*(13)	10.6	Form of employee stock option agreement used under 2004 Equity Incentive Plan (for 2011 and subsequent year grants)
*(10)	10.7	Form of non-employee director stock option agreement used under 2004 Equity Incentive Plan (for grants prior to 2008)
*(10)	10.8	Form of non-employee director option agreement used under 2004 Equity Incentive Plan (for initial grants made in 2008)
*(10)	10.9	Form of non-employee director option agreement used under 2004 Equity Incentive Plan (for annual grants made in May 2008 and through May 2012)
*(11)	10.10	Form of non-employee director option agreement used under 2004 Equity Incentive Plan (for annual grants commencing in May 2009 and through May 2012)
*(14)	10.11	Form of non-employee director option agreement used under 2004 Equity Incentive Plan (for annual grants made in May 2013)
*(14)	10.12	Form of non-employee director option agreement (non-U.S.) used under 2004 Equity Incentive Plan (for annual grants made in May 2013)
*(15)	10.13	Form of non-employee director option agreement used under 2004 Equity Incentive Plan (for annual grants made in and after May 2014)
*(16)	10.14	Form of restricted stock unit issuance agreement used under 2004 Equity Incentive Plan (for annual grants to non-employee directors in May 2012)
*(11)	10.15	Form of restricted stock award agreement used under 2004 Equity Incentive Plan (for annual grants to certain non-employee directors prior to May 2012)
*(14)	10.16	Form of restricted stock unit issuance agreement used under 2004 Equity Incentive Plan (for annual grants to non-employee directors commencing in May 2013)
*(15)	10.17	Form of restricted stock unit issuance agreement used under 2004 Equity Incentive Plan (for annual grants to non-employee directors commencing in and after May 2014)
*(14)	10.18	Form of restricted stock unit issuance agreement (non-U.S.) used under 2004 Equity Incentive Plan (for annual grants to non-employee directors commencing in May 2013)

- * (11) 10.19 Form of performance share award agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers made in 2009)
- * (12) 10.20 Form of performance share award agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers made in 2010)

*(13)	10.21	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers made in 2011)
*(14)	10.22	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers made in 2012)
*(17)	10.23	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for TSR Goals in 2013 and 2014)
*(18)	10.24	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for TSR Goals (US) in 2016)
*(18)	10.25	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for TSR Goals (US) with Director Retirement Provisions in 2016)
*(19)	10.26	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for Revenue Goals in 2013 and 2014)
*(18)	10.27	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for Revenue Goals (US) in 2016)
*(18)	10.28	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for Revenue Goals (US) with Director Retirement Provisions in 2016)
*(20)	10.29	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for TSR Goals - Non-US in 2015)
*(18)	10.30	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for TSR Goals -Non-US in 2016)
*(20)	10.31	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for Revenue Goals - Non-US in 2015)
*(18)	10.32	Form of performance share award agreement used under the 2004 Equity Incentive Plan (for Revenue Goals - Non-US in 2016)
*(21)	10.33	Form of restricted stock unit issuance agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers made prior to May 2009)
*(11)	10.34	Form of restricted stock unit issuance agreement used under the 2004 Equity Incentive Plan (for grants to certain executive officers commencing in May 2009)
*(22)	10.35	Form of restricted stock unit issuance agreement used under the 2004 Equity Incentive Plan (service-based vesting for certain executive officers commencing in November 2009)
*(13)	10.36	Form of restricted stock unit issuance agreement used under the 2004 Equity Incentive Plan (service-based vesting for certain executive officers commencing in 2011)
*(23)	10.37	Gilead Sciences, Inc. Employee Stock Purchase Plan, restated on January 22, 2015
*(24)	10.38	Gilead Sciences, Inc. Deferred Compensation Plan-Basic Plan Document
*(22)	10.39	Gilead Sciences, Inc. Deferred Compensation Plan-Adoption Agreement
*(24)	10.40	Addendum to the Gilead Sciences, Inc. Deferred Compensation Plan
*(25)	10.41	Gilead Sciences, Inc. 2005 Deferred Compensation Plan, as amended and restated on October 23, 2008
*(26)	10.42	Gilead Sciences, Inc. Severance Plan, as amended on March 8, 2016
*(27)	10.43	Gilead Sciences, Inc. Corporate Bonus Plan, amended on November 4, 2015
*(28)	10.44	Amended and Restated Gilead Sciences, Inc. Code Section 162(m) Bonus Plan
*(29)	10.45	2016 Base Salaries for the Named Executive Officers
*(30)	10.46	Offer Letter dated April 16, 2008 between Registrant and Robin Washington
*(31)	10.47	Offer Letter dated May 20, 2016 between Registrant and Kevin Young
*(32)	10.48	Form of Indemnity Agreement entered into between Registrant and its directors and executive officers
*(33)	10.49	Form of Employee Proprietary Information and Invention Agreement entered into between Registrant and certain of its officers and key employees
*(12)	10.50	Form of Employee Proprietary Information and Invention Agreement entered into between Registrant and certain of its officers and key employees (revised in September 2006)
+(34)	10.51	Amendment Agreement, dated October 25, 1993, between Registrant, the Institute of Organic Chemistry and Biochemistry (IOCB) and Rega Stichting v.z.w. (REGA), together with the following exhibits: the License Agreement, dated December 15, 1991, between Registrant, IOCB and REGA (the 1991 License Agreement), the License Agreement, dated October 15, 1992, between Registrant, IOCB and REGA (the October 1992 License Agreement) and the License Agreement, dated December 1, 1992, between Registrant, IOCB and REGA (the December 1992 License Agreement)

+ (35)	10.52	Amendment Agreement between Registrant and IOCB/REGA, dated December 27, 2000 amending the 1991 License Agreement and the December 1992 License Agreement
+(36)	10.53	Sixth Amendment Agreement to the License Agreement, between IOCB/REGA and Registrant, dated August 18, 2006 amending the October 1992 License Agreement and the December 1992 License Agreement
+(37)	10.54	Seventh Amendment Agreement to the License Agreement, between IOCB/REGA and Registrant dated July 1, 2013 amending the October 1992 License Agreement and the December 1992 License Agreement

+ (38)	10.55	Exclusive License Agreement between Registrant (as successor to Triangle Pharmaceuticals, Inc.), Glaxo Group Limited, The Wellcome Foundation Limited, Glaxo Wellcome Inc. and Emory University, dated May 6, 1999
+ (39)	10.56	Royalty Sale Agreement by and among Registrant, Emory University and Investors Trust & Custodial Services (Ireland) Limited, solely in its capacity as Trustee of Royalty Pharma, dated July 18, 2005
+ (39)	10.57	Amended and Restated License Agreement between Registrant, Emory University and Investors Trust & Custodial Services (Ireland) Limited, solely in its capacity as Trustee of Royalty Pharma, dated July 21, 2005
+ (40)	10.58	License Agreement between Japan Tobacco Inc. and Registrant, dated March 22, 2005
+ (41)	10.59	First Amendment to License Agreement between Japan Tobacco Inc. and Registrant, dated May 19, 2005
+ (41)	10.60	Second Amendment to License Agreement between Japan Tobacco Inc. and Registrant, dated May 17, 2010
+ (42)	10.61	Third Amendment (Revised) to License Agreement between Japan Tobacco Inc. and Registrant, dated June 10, 2015
+ (41)	10.62	Fourth Amendment to License Agreement between Japan Tobacco Inc. and Registrant, dated July 5, 2011
+ (43)	10.63	Amendment to License Agreement between Japan Tobacco Inc. and Registrant, dated October 10, 2013
+ (44)	10.64	Fifth Amendment to License Agreement between Japan Tobacco Inc. and Registrant, dated September 29, 2014
+ (45)	10.65	Amended and Restated Collaboration Agreement by and among Registrant, Gilead Sciences Ireland UC (formerly Gilead Sciences Limited) and Janssen R&D Ireland, dated December 23, 2014
+ (46)	10.66	Restated and Amended Toll Manufacturing Agreement between Gilead Sciences Ireland UC (formerly Gilead Sciences Limited), Registrant and Takeda GmbH (formerly Nycomed GmbH and Altana Pharma Oranienburg GmbH), dated November 7, 2005
	21.1	Subsidiaries of Registrant
	23.1	Consent of Independent Registered Public Accounting Firm
	31.1	Certification of Chief Executive Officer, as required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
	31.2	Certification of Chief Financial Officer, as required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended
	32.1**	Certifications of Chief Executive Officer and Chief Financial Officer, as required by Rule 13a-14(b) or Rule 15d-14(b) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350)
	101***	The following materials from Registrant's Annual Report on Form 10-K for the year ended December 31, 2016, formatted in Extensible Business Reporting Language (XBRL) includes: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements.

- (1) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on September 20, 2016, and incorporated herein by reference
- (2) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on May 8, 2014, and incorporated herein by reference.
- (3) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on December 23, 2015, and incorporated herein by reference.
- (4) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on April 1, 2011, and incorporated herein by reference.
- (5) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on December 13, 2011, and incorporated herein by reference.
- (6) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on March 7, 2014, and incorporated herein by reference.
- (7) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on November 17, 2014, and incorporated herein by reference
- (8) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on September 14, 2015, and incorporated herein by reference
- (9) Filed as an exhibit to Registrant's Current Report on Form 8-K/A filed on February 22, 2006, and incorporated herein by reference.
- (10) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, and incorporated herein by reference.
- (11) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, and incorporated herein by reference.
- (12) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2009, and incorporated herein by reference.
- (13) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, and incorporated herein by reference.
- (14) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, and incorporated herein by reference
- (15) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, and incorporated herein by reference.
- (16) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, and incorporated herein by reference.
- (17) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, and incorporated herein by reference.
- (18) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016, and incorporated herein by reference.
- (19) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, and incorporated herein by reference.
- (20) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, and incorporated herein by reference.
- (21) Filed as an exhibit to Registrant's Current Report on Form 8-K first filed on December 19, 2007, and incorporated herein by reference.
- (22) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, and incorporated herein by reference.
- (23) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on May 8, 2015, and incorporated herein by reference.
- (24) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2001, and incorporated herein by reference.
- (25) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, and incorporated herein by reference.
- (26) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on March 8, 2016, and incorporated herein by reference.

- (27) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015, and incorporated herein by reference.
- (28) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on May 17, 2016, and incorporated herein by reference.
- (29) Filed as an exhibit to Registrant's Current Report on Form 8-K filed on February 3, 2016, and incorporated herein by reference.
- (30) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, and incorporated herein by reference.
- (31) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, and incorporated herein by reference.
- (32) Filed as an exhibit to Registrant's Registration Statement on Form S-1 (No. 33-55680), as amended, and incorporated herein by reference.
- (33) Filed as an exhibit to Registrant's Registration Statement on Form S-8 (No. 333-102912) filed on January 31, 2003, and incorporated herein by reference.
- (34) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1994, and incorporated herein by reference.
- (35) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2000, and incorporated herein by reference.
- (36) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, and incorporated herein by reference.
- (37) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, and incorporated herein by reference.
- (38) Filed as an exhibit to Triangle Pharmaceuticals, Inc.'s Quarterly Report on Form 10-Q/A filed on November 3, 1999, and incorporated herein by reference.
- (39) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, and incorporated herein by reference.
- (40) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, and incorporated herein by reference.
- (41) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, and incorporated herein by reference.
- (42) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, and incorporated herein by reference.
- (43) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, and incorporated herein by reference.
- (44) Filed as an exhibit to Registrant's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, and incorporated herein by reference.
- (45) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014, and incorporated herein by reference.
- (46) Filed as an exhibit to Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2005, and incorporated herein by reference.

* Management contract or compensatory plan or arrangement.

** This certification accompanies the Form 10-K to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Registrant 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 the Form 10-K), irrespective of any general incorporation language contained in such filing.

*** XBRL information is filed herewith.

+ Certain confidential portions of this Exhibit were omitted by means of marking such portions with an asterisk (the Mark). This Exhibit has been filed separately with the Secretary of the Securities and Exchange Commission without the Mark pursuant to Registrant's Application Requesting Confidential Treatment under Rule 24b-2 under the Securities Exchange Act of 1934, as amended.

ITEM 16. FORM 10-K SUMMARY

None.

Signature	Title	Date
/s/ JOHN F. MILLIGAN John F. Milligan, Ph.D.	President and Chief Executive Officer, Director <i>(Principal Executive Officer)</i>	February 27, 2017
/s/ ROBIN L. WASHINGTON Robin L. Washington	Executive Vice President and Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	February 27, 2017
/s/ JOHN C. MARTIN John C. Martin, Ph.D.	Executive Chairman	February 27, 2017
/s/ JOHN F. COGAN John F. Cogan	Director	February 27, 2017
/s/ KELLY A. KRAMER Kelly A. Kramer	Director	February 27, 2017
/s/ KEVIN E. LOFTON Kevin E. Lofton	Director	February 27, 2017
/s/ JOHN W. MADIGAN John W. Madigan	Director	February 27, 2017
/s/ NICHOLAS G. MOORE Nicholas G. Moore	Director	February 27, 2017
/s/ RICHARD J. WHITLEY Richard J. Whitley	Director	February 27, 2017
/s/ GAYLE E. WILSON Gayle E. Wilson	Director	February 27, 2017
/s/ PER WOLD-OLSEN Per Wold-Olsen	Director	February 27, 2017