| 2018 ANNUAL REPORT |

Bristol-Myers Squibb

WORKING TOGETHER FOR *Patients*™

Our mission is clear — we discover, develop and deliver innovative medicines that help patients prevail over serious diseases.

Our sense of urgency is real — we work every day to push the boundaries of scientific discovery and to make a meaningful difference in the lives of patients. We are committed to developing a 21st century workforce that is powerfully diverse and broadly inclusive, capable of discovering and developing important new medicines for patients around the world.

It's what we do. It's why we do it.

Bristol-Myers Squibb

The patient stories shared in this Annual Report depict individual patient responses to our medicines or investigational compounds and are not representative of all patient responses. In addition, there is no guarantee that potential drugs or indications still in development will receive regulatory approval.

At Bristol-Myers Squibb, employees like Mina Chaudhry and Austin Thekkumthala are passionate about turning scientific insights into new therapeutic options for many patients in need.

> "At Bristol-Myers Squibb, we are looking forward to an exciting future. We will build on the strong foundation of 2018 to grow our business and to help more patients. We have great medicines. We have great people."
>
> - Giovanni Caforio, M.D.,
> Chairman of the Board and Chief Executive Officer

At Bristol-Myers Squibb we come to work every day with one mission in mind: to discover, develop, and deliver transformational medicines to help patients facing serious diseases. This is what we do. This is who we are.

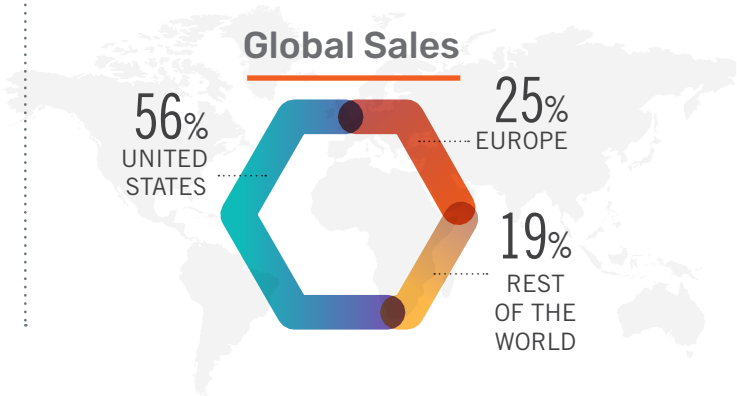
In 2018, performance was strong across the company and created great momentum for our business. We expanded the indications of our oncology portfolio with the important approval of *Opdivo* plus low-dose *Yervoy* for the treatment of renal cell carcinoma (RCC) in the U.S. and Europe. We reached an important milestone with *Eliquis* in the U.S., taking a leadership position in the prevention of stroke for patients with atrial fibrillation. We advanced a broad and deep pipeline in oncology, cardiovascular disease, fibrosis, and immunoscience. And we continued our efforts to be a good global citizen through our green initiatives, by investing in our local communities, and by supporting those in need.

2018 Results

2018 was marked by outstanding commercial execution. We ended the year with $22.6 billion in revenues – a nine percent increase over 2017. This was due to growth in nearly all of our priority medicines. Our results translate directly into more medicines delivered to more patients. Our strong operating performance resulted in 2018 GAAP earnings per share of $3.01 and Non-GAAP earnings per share of $3.98, which represents year-over-year growth of 32 percent.

Transforming cancer care remains a priority for our company as we focus on increasing survival rates for more patients across a greater range of tumor types. Our oncology franchise performed well in highly competitive markets, with *Opdivo* now approved in nine tumor types in 17 indications. In 2018, *Opdivo* revenue grew by 36 percent, ending the year with $6.7 billion in global sales. *Opdivo* continues to maintain and grow its market share in its approved indications while expanding into new tumors and earlier lines of therapy. We saw significant growth from the launch of *Opdivo* in adjuvant treatment in melanoma and the approval of *Opdivo* plus low-dose *Yervoy* for the treatment of first line RCC in the U.S. Additionally, *Opdivo* plus low-dose *Yervoy* were approved by the European Medicines Agency for first line RCC in January 2019, further expanding our Immuno-Oncology (I-O) combination therapy as a treatment option for patients with RCC in markets across Europe.

Opdivo distinguished itself as the first Immuno-Oncology therapy approved in China in 2018. This milestone is a tribute to the focused efforts of our teams in both the U.S. and in China to ensure speed in delivering this important medicine to cancer patients in China.



2018

$22.6 BILLION in revenue

9% REVENUE GROWTH VS. 2017

Opdivo $6.7B

Eliquis $6.4B

GROWTH IN PRIORITY BRANDS ***Orencia Yervoy Empliciti***

DELIVERING MORE MEDICINES TO PATIENTS

Eliquis continued to grow in the U.S. and internationally, with revenues totaling $6.4 billion, representing a 32 percent increase over 2017. In 2018, we achieved a major milestone when new prescriptions for *Eliquis* surpassed warfarin, the previous standard of care for stroke prevention in atrial fibrillation, to become the number one prescribed oral anti-coagulant in the U.S. *Eliquis* continues to be the leading novel oral anti-coagulant globally for stroke prevention in patients with atrial fibrillation.

The *Eliquis* clinical profile is supported through our continued investment in real-world data analysis. In 2018, we published the ACROPOLIS (Apixaban ExperienCe Through Real-WOrld POpuLatIon Studies) study, which now includes more than one million patient records, and is the largest body of real-world evidence in existence for analyzing the effectiveness and safety of anticoagulants, including *Eliquis*, among patients with non-valvular atrial fibrillation and venous thromboembolism.

I am very proud that this medicine was discovered and developed by Bristol-Myers Squibb scientists, three of whom received the prestigious 2018 Sir James Black award from the British Pharmacological Society for their contributions in the discovery of *Eliquis*.

Delivering for Tomorrow

The scientists of Bristol-Myers Squibb understand the urgent needs of patients for new treatment options. They are hard at work on the next generation of transformational medicines for patients as we continue to invest in the research and development of new treatment options to address significant unmet medical needs.

In 2018, we made significant progress in advancing our Innovative Medicines pipeline, which includes clinical programs in immunoscience, fibrosis, and cardiovascular disease. Results from the Phase 2 study of our selective TYK2 inhibitor for the treatment of moderate to severe plaque psoriasis were published in the *New England Journal of Medicine* in September, and registrational trials in this indication are well underway. We continue to advance our fibrosis portfolio with our lead compound in the area, FGF21, for the treatment of nonalcoholic steatohepatitis (NASH), which is currently enrolling a Phase 2b trial. In heart failure research, our nitroxyl donor asset is currently in Phase 2 trials and we look forward to data readouts in the coming year. Additionally, we signed a collaboration agreement with Janssen Pharmaceuticals for the development of our Factor XIa inhibitor for secondary stroke prevention and initiated a Phase 2 trial.

Our broad development program in oncology includes the important and growing body of work in translational medicine, giving us greater insights into which patients can benefit the most from our medicines. In 2018, we opened a new research center in Cambridge, Massachusetts to focus on resistance to treatment with current Immuno-Oncology agents, and we look forward to leveraging the rich scientific ecosystem of the location to drive innovation in this field.

Our clinical programs are focused on expanding the benefits of our Immuno-Oncology portfolio and moving into earlier lines of therapy, including the adjuvant setting which follows surgery to prevent recurrence.

In 2019, we expect to see a number of data readouts from our lung cancer program as well as from studies of *Opdivo* for the treatment

PAGE 4 ▶

of glioblastoma, head & neck, liver and renal cancers. Starting in 2020, we will begin to see results from studies of adjuvant treatment that will bring greater understanding of the role of *Opdivo* in earlier stages of disease. These will include results in adjuvant melanoma, bladder, and esophageal cancers next year with results in other tumors such as renal, liver, and lung cancers coming in subsequent years.

With innovation as our focus, we believe that tomorrow's medicines will come from our own internal efforts as well as the rich ecosystem of scientific innovation that exists outside our company. In 2018, our business development teams were hard at work to find those medicines. This year, we entered into a global strategic collaboration to jointly develop and commercialize Nektar Therapeutics' lead Immuno-Oncology program, NKTR-214, in combination with *Opdivo* and *Opdivo* plus *Yervoy*. The Nektar program provides Bristol-Myers Squibb with a third validated mechanism in Immuno-Oncology, providing us the opportunity to build on our experience with *Opdivo* and *Yervoy*.

In January 2019, we announced a definitive merger agreement for the planned acquisition of Celgene Corporation.[1] The transaction will create a leading focused specialty biopharma company well positioned to address the needs of patients with cancer, inflammatory and immunologic disease and cardiovascular disease through high-value innovative medicines and leading scientific capabilities. With complementary areas of focus, the combined company will operate with global reach and scale, maintaining the speed and agility that is core to each company's strategic approach.

Delivering for Underserved Communities

Throughout the year, the Bristol-Myers Squibb Foundation continued to build capacity and expand access to care for underserved populations by supporting innovative programs to train health care providers and mobilize communities in the fight against disease.

This effort included extensive programs in the U.S. to remove barriers and increase access to specialized care for vulnerable populations, improve lung cancer awareness and care, and support the reintegration of our returning veterans and their families. It also included significant innovations in access to cardiovascular care.

The Bristol-Myers Squibb Foundation is also working to bring quality cancer treatment to African communities, focusing on cervical and lung cancer in southern and east Africa, and pediatric cancers in southern and east Africa and west Africa. Leveraging the extensive learnings from 20 years of its "*SECURE THE FUTURE*" program, the first and largest private initiative to address HIV and AIDS in southern and east Africa, the Foundation is working with community partners to promote cancer screening, train healthcare providers, and change the outcomes for cancer patients. Following the launch of Project ECHO for cancer in the U.S., the Foundation is funding an expansion of the tele-mentoring program to rural hospitals in South Africa.

We recognize that helping to improve access to our medicines is of critical importance to ensure all patients benefit from our innovations. Through the Bristol-Myers Squibb Patient PAGE 6 ▶

[1]The transaction is subject to approval by Bristol-Myers Squibb and Celgene shareholders and the satisfaction of customary closing conditions and regulatory approvals. Bristol-Myers Squibb and Celgene expect to complete the transaction in the third quarter of 2019.

People & Business Resource Groups

Our People and Business Resource Groups (PBRG) leverage the diverse experiences and perspectives of our employees and drive transformative business results.

TOTAL PBRGs
8

MEMBERSHIP
16k
OVER 9,500 UNIQUE MEMBERS

CHAPTERS
127

PRESENT IN
44
COUNTRIES

BOLD
BLACK ORGANIZATION for LEADERSHIP and DEVELOPMENT

B-NOW
Bristol-Myers Squibb Network of Women

CLIMB
Cultivating Leadership and Innovation for Millennials and Beyond

DAWN
Differently-Abled Workplace Network
Empowering Unique Abilities in the Workplace

LGBTA
Lesbian, Gay, Bisexual, Transgender & Allies

OLA
Organization for Latino Achievement

PAN
ASIAN NETWORK

VETERANS COMMUNITY NETWORK
VCN

As she has been regaining strength, Carol has resumed favorite activities such as woodworking, a passion she shares with her uncle Jerry.

PATIENT STORY

Built to Fight

Carol Willis

"I WAS ALWAYS ACTIVE AND HEALTHY, AND NOW I FEEL GREAT, FINALLY LIKE MYSELF."

In April of 2015, Carol Willis, a retired school teacher from Oakdale, La., and the mother of three grown children, developed a nagging cough and discovered a mass on her right side.

Carol noticed that she been losing weight, having difficulty focusing her thoughts, and becoming easily fatigued. After showing the mass to her daughter, a nurse practitioner, she immediately saw a urologist.

"Getting sick changes your priorities," Carol says. "Our family is closer than ever." Four generations, from left: granddaughter Madelyn, mother Vivian, Carol, daughter Mindy.

"I had a CT scan, and the doctor confirmed that it was kidney cancer," she says. "The specialists told me I had Stage IV renal cell carcinoma." She soon had surgery to remove the large tumor.

At her follow-up appointment, her doctor explained that, despite the surgery, Carol's cancer had spread to her lungs and liver. At that point she was referred to an oncologist who was a principal investigator on a clinical trial. "That's when I knew this was really serious," she says.

She entered into a clinical trial investigating *Opdivo* in combination with another I-O treatment, *Yervoy*, for certain patients with advanced renal cell carcinoma (RCC) whose kidney cancer has spread.

"After experiencing a few initial side effects, I had an excellent response to the *Opdivo* and *Yervoy* combination," she recalls. Now in remission, Carol has had clean scans since January 2016.

"I was always active and healthy, and now I feel great, finally like myself," she says.

A self-described "private person," Carol enjoys a quiet life style now and has resumed her hobby of woodworking. She also travels often to spend time with her children and six grandchildren in Texas and Colorado.

"Over the past few years I had the opportunity to meet and speak with a number of Bristol-Myers Squibb employees," Carol says. "I've heard so many of their personal stories. They are so passionate about what they do to help patients. If it weren't for their skill and dedication, I wouldn't be here to enjoy my life."

Assistance Foundation, under- or uninsured patients, or those facing financial hardships, are able to obtain the medicines they need to fight serious disease.

Our commitment to good citizenship extends beyond medicines to communities impacted by natural disasters. This year again brought devastation through wildfires in California, hurricanes in North Carolina and Florida, floods and landslides in Japan, and an earthquake and tsunami in Indonesia. The Bristol-Myers Squibb Foundation responded quickly with cash donations to its disaster relief partners to provide essential supplies, and the company donated much-needed products to help impacted communities.

We continued our work with the United Nations Global Compact, as well as our "Go Green" activities at Bristol-Myers Squibb sites to promote sustainability. Our environmental programs were recognized with an "Energy Star Partner of the Year" Sustained Excellence Award for our four consecutive years of efforts to improve the energy efficiency of facilities worldwide.

Strengthening Our Company Culture

At Bristol-Myers Squibb, we have the best and the brightest people and they fuel our success. It is through their hard work and commitment that we are able to realize our mission to help patients fighting serious disease.

We are committed to creating and sustaining a strong culture of inclusion to foster a highly innovative work environment. Our People and Business Resource Groups (PBRGs) leverage the diverse experiences and perspectives of our employees and drive transformative business results. In 2018, members of our PAN Asian Network partnered with our R&D organization in China to launch a global buddy system designed to mentor colleagues new to clinical development in China, resulting in the accelerated launch of *Opdivo*. Additionally, our LGBTA PBRG introduced a set of transgender guidelines in the U.S. to ensure a respectful and inclusive workplace environment for employees in the process of gender transition.

Embedded throughout our culture is a deep commitment to integrity and uncompromising ethics. We work to ensure that the highest ethics and integrity are at the foundation of all we do and how we do it.

Looking Forward

At Bristol-Myers Squibb, we are looking forward to an exciting future. We will build on the strong foundation of 2018 to grow our business and to help more patients. We have great medicines. We have great people. By focusing on patients and their families, and by demanding the very best from our people, the possibilities are endless. We will continue to create value for our patients, our shareholders, and our employees. This is why I am very excited for our future.

Thank you.

Giovanni Caforio, M.D., Chairman of the Board and Chief Executive Officer

April 1, 2019

Respect, Integrity & Quality – It's How We Work

We take great pride in what we do and how we do it, and we are grateful for the recognition we have received, including:

- For the 11th year, a perfect score of 100% on the 2018 Corporate Equality Index (CEI)
- Ranked 2018 Top-Scoring Company of the Disability Equality Index
- Dow Jones' 2018 North American Index of Leading Sustainable Companies
- For the second year in a row, CareerBliss Top 10 Happiest Companies in America for 2018
- 2018 Working Mother 100 Best Companies – 20th consecutive year
- 2018 Best-of-the-Best Corporations for Inclusion by National Business Inclusion Consortium
- Military Friendly Company – showcasing the most powerful and effective military programs in the workplace
- 100 Best Corporate Citizens – 9th consecutive year
- Forbes and JUST Capital's 100 Most JUST Companies in America
- 2018 Energy Star Partner of the Year – Sustained Excellence Award
- Ranked among the top pharmaceutical companies for innovation and quality of management
- 2018 NAFE Top Companies for Executive Women

| PATIENT STORY |

Experiencing the Benefits

Ken Simpson

"THE BENEFITS I'VE RECEIVED FROM *ELIQUIS* ARE GREATER PEACE OF MIND, AND THE ABILITY TO CONTINUE TO LIVE A FULL LIFE WITH MY LOVED ONES."

Ken Simpson was a nationally ranked high school All American swimmer, which earned him an athletic scholarship to the University of Illinois. But it wasn't until many years after his college graduation that he first experienced heart problems which would come and go over the next 50 or so years.

Ken is grateful for his second chances. He considers himself lucky to have reconnected with his childhood sweetheart Beverly after 40 years apart.

"I spent almost my entire business career with the Wm. Wrigley Jr. Company in Chicago," Ken says. "One day while at work, I felt a strange feeling in my chest I had never had before. I didn't know what it was, but I knew something wasn't quite right."

The Wrigley family separately owned the Chicago Cubs baseball team at that time. Ken was sent to see a team doctor familiar with working with accomplished athletes. He was prescribed a heart monitor to wear for a month, but no irregularities were found.

In his late 20s, Ken began swimming in the national Masters Swimming Program for adults. During one competition, the strange feeling in his chest returned.

"It wasn't a flutter or skipped heartbeat, but more like a thunderous steady heartbeat," he explains. I decided I wasn't going to live my life being afraid of a heart condition which apparently couldn't be diagnosed, so I swam my race, winning it. By the time I got out of the pool, the strange heartbeat was gone."

Another heart monitor again showed no irregularity, but Ken was convinced something was wrong. He began seeing a cardiologist and continued to be checked periodically.

As the years passed, Ken's condition gradually worsened. "In my mid-40s, my cardiologist removed a blood clot at the top of my left anterior descending artery. I was fortunate I survived the procedure."

"Several years later, after a day-long business meeting in Chicago, I found I couldn't walk to the train station without stopping several times. I knew I wasn't going to make it to the station. It was obvious something was very wrong."

An emergency room EKG first identified Ken's condition. He was diagnosed with atrial fibrillation, a type of irregular heartbeat, not caused by a heart valve problem. His cardiologist immediately prescribed *Eliquis* to reduce the increased risk of stroke that patients with Ken's condition face.

"Now I take my *Eliquis* religiously. Every morning and every night. I make sure I don't miss a dose," Ken says.

For this now-retired businessperson, the saying "Sell the benefits, not the product" is more than just advice on how to sell successfully.

"No matter what the product, what's most important are the benefits it provides to the user," Ken says. "The benefits I've received from *Eliquis* are greater peace of mind, and the ability to continue to live a full life with my loved ones."

BRISTOL-MYERS SQUIBB DEVELOPMENT PORTFOLIO BY THERAPEUTIC AREA

ONCOLOGY

PHASE I

***OPDIVO*⁺**
- Solid Tumors & Hematologic Malignancies

***OPDIVO*⁺ + *YERVOY*⁺**
- Solid Tumors

Relatlimab⁺^
- Solid Tumors & Hematologic Malignancies

NLRP3 Agonist^
- Solid Tumors

Anti-TIM-3^
- Solid Tumors

HuMax-IL8^
- Solid Tumors

EP4⁺ Antagonist^
- Solid Tumors

CD80/αCD3 Oncolytic Virus^
- Solid Tumors

Anti-CTLA-4 Probody^
- Solid Tumors

Anti-ICOS^
- Solid Tumors

Anti-CTLA-4 NF^
- Solid Tumors

Anti-TIGIT^
- Solid Tumors

Anti-CD73^
- Solid Tumors

BET Inhibitor
- Solid Tumors

Ulocuplumab
- Hematologic Malignancies

PHASE II

***OPDIVO*⁺**
- 1L CRC
- Non-Hodgkin Lymphoma (Diffuse Large B-cell Lymphoma)
- Non-Hodgkin Lymphoma (Follicular Lymphoma)
- Ovarian#
- Pan Tumor TMB High
- Pediatric
- Primary Testicular Lymphoma

***OPDIVO*⁺ ^**
- Solid Tumors

***OPDIVO*⁺ + *YERVOY*⁺**
- Prostate

***OPDIVO*⁺ + *YERVOY*⁺ ^**
- Solid Tumors

Relatlimab⁺ + *OPDIVO*⁺ ^
- Solid Tumors

IDO + *OPDIVO*⁺ ^
- Solid Tumors

NKTR-214⁺ + *OPDIVO*⁺ ^
- Solid Tumors

CCR2/5 Dual Antagonist^
- Solid Tumors

Cabiralizumab⁺^
- Solid Tumors

PHASE III

***OPDIVO*⁺**
- 1L Glioblastoma
- 1L HCC
- 1L Head & Neck
- 1L Head & Neck Locally Advanced
- 2L Esophageal
- Adjuvant Bladder
- Adjuvant Esophageal/ Gastroesophageal
- Adjuvant Gastric
- Adjuvant HCC
- Adjuvant RCC
- NSCLC Neoadjuvant
- Refractory Hodgkin Lymphoma
- Unresectable NSCLC

***OPDIVO*⁺ + *YERVOY*⁺**
- 1L Bladder
- 1L Esophageal
- 1L Gastric
- 1L Head & Neck
- 1L Mesothelioma
- 1L NSCLC
- 1L SCLC
- Adjuvant Melanoma
- Adjuvant RCC
- NSCLC EGFR mutant

***OPDIVO*⁺ + *YERVOY*⁺ + Cabozantinib⁺**
- Metastatic RCC

***OPDIVO*⁺ + *EMPLICITI*⁺**
- Multiple Myeloma

***OPDIVO*⁺ + IDO**
- 1L Metastatic Melanoma
- Neoadjuvant Muscle-Invasive Bladder Cancer

***OPDIVO*⁺ + NKTR-214⁺**
- 1L Melanoma
- 1L RCC#

Relatlimab⁺ + *OPDIVO*⁺
- 1L Melanoma

***EMPLICITI*⁺**
- 1L Multiple Myeloma *Revlimid** Combo

APPROVED INDICATIONS

***OPDIVO*⁺**
- 1L BRAF wild-type Metastatic Melanoma
- Adjuvant Melanoma
- Advanced Hodgkin Lymphoma
- Melanoma across BRAF status
- Mesothelioma
- Previously treated advanced RCC
- Previously treated Gastric cancer (JPN)
- Previously treated HCC
- Previously treated Metastatic Head & Neck
- Previously treated Metastatic Melanoma
- Previously treated Metastatic MSI-High CRC
- Previously treated Metastatic Non-squamous NSCLC
- Previously treated Metastatic Squamous NSCLC
- Previously treated Metastatic SCLC
- Previously treated Metastatic Urothelial

***OPDIVO*⁺ + *YERVOY*⁺**
- 1L RCC
- BRAF wild-type Metastatic Melanoma
- Melanoma across BRAF status
- Previously treated Metastatic MSI-High CRC

***YERVOY*⁺**
- Adjuvant Melanoma
- Adolescent Metastatic Melanoma
- Metastatic Melanoma

***EMPLICITI*⁺**
- Relapsed/Refractory Multiple Myeloma *Pomalyst** Combo
- Relapsed/Refractory Multiple Myeloma *Revlimid** Combo

***SPRYCEL*⁺**
- 1L CML
- Pediatric
- Refractory CML

1L = 1st line
2L = 2nd line
CML = Chronic Myelogenous Leukemia
CRC = Colorectal Cancer
HCC = Hepatocellular Carcinoma
NSCLC = Non-Small Cell Lung Cancer
RCC = Renal Cell Carcinoma
SCLC = Small Cell Lung Cancer

BRISTOL-MYERS SQUIBB DEVELOPMENT PORTFOLIO BY THERAPEUTIC AREA

IMMUNOSCIENCE

PHASE I

RORγT

–Autoimmune Disease

S1P1 Agonist

–Autoimmune Disease

BTK Max

–Rheumatoid Arthritis

TYK2 Inhibitor (2)

–Autoimmune Disease

TLR 7/8 Antagonist

–Autoimmune Disease

PHASE II

TYK2 Inhibitor (1)

–Autoimmune Diseases

BTK Inhibitor

–Rheumatoid Arthritis

PHASE III

ORENCIA

–Idiopathic Inflammatory Myopathy

–Sjögren's Disease

TYK2 Inhibitor (1)

–Psoriasis

NULOJIX

–Switch from Calcineurin Inhibitor Renal Transplant

APPROVED INDICATIONS

ORENCIA

–Early Rheumatoid Arthritis

–Juvenile Idiopathic Arthritis Intravenous

–Juvenile Idiopathic Arthritis Subcutaneous

–Psoriatic Arthritis

–Rheumatoid Arthritis Auto injector

–Rheumatoid Arthritis Intravenous

–Rheumatoid Arthritis Subcutaneous

NULOJIX

–De Novo Renal Transplant

CARDIOVASCULAR

PHASE I

FPR-2 Agonist

–Heart Failure

APJ Agonist

–Heart Failure

PHASE II

Nitroxyl Donor

–Heart Failure

Factor XIa Inhibitor✦

–Thrombosis

ELIQUIS✦

–Pediatric Heart Disease

PHASE III

ELIQUIS✦

–Pediatric Venous Thromboembolism Prevention

APPROVED INDICATIONS

ELIQUIS✦

–Stroke Prevention in Atrial Fibrillation

–Venous Thromboembolism Prevention Orthopedic Surgery

–Venous Thromboembolism Treatment

FIBROTIC DISEASES

PHASE I

LPA1 Antagonist

–Fibrosis

PHASE II

HSP47✦

–Fibrosis

Pegbelfermin (PEG-FGF21)

–Non-alcoholic Steatohepatitis

Note: Above pipeline excludes clinical collaborations

^ Trial(s) exploring various combinations

Partner-run study

✦ Development Partnership: ***OPDIVO, YERVOY,*** **Relatlimab, EP4:** Ono (our collaboration with Ono also includes other early stage compounds); ***EMPLICITI:*** AbbVie; **NKTR-214:** Nektar; **Cabiralizumab:** Five Prime; **Cabozantinib:** Exelixis; ***ELIQUIS:*** Pfizer; **Factor XIa Inhibitor:** Janssen; **HSP47:** Nitto Denko

* *Pomalyst* and *Revlimid* are trademarks of Celgene Corporation.

Listed in the tables above are our investigational compounds that we have in clinical studies as well as the approved and potential indications for our marketed products in the related therapeutic area as of January 1, 2019. Whether any of the listed compounds ultimately becomes a marketed product depends on the results of clinical studies, the competitive landscape of the potential product's market, reimbursement decisions by payers, and the manufacturing processes necessary to produce the potential product on a commercial scale, among other factors. There can be no assurance that we will seek regulatory approval of any of these compounds or that, if such approval is sought, it will be obtained. There is also no assurance that a compound which gets approved will be commercially successful. At this stage of development, we cannot determine all intellectual property issues or all the patent protection that may, or may not, be available for these investigational compounds.

Twenty years ago, as the world prepared to welcome the new millennium, more than 34.3 million people were living with the HIV/AIDS virus. Two thirds of them, about 24.5 million people, were in countries in sub-Saharan Africa, and most of them were women and children.

Transmission rates in sub-Saharan countries were on the rise, access to adequate care was lowest in the world, and resources were extremely limited. HIV/AIDS had become the leading cause of death and was threatening the region's very future.

As a global pharmaceutical company with a strong portfolio of HIV therapies, Bristol-Myers Squibb took on a major role in the fight against the disease. In 1999, together with the Bristol-Myers Squibb Foundation, the company launched *SECURE THE FUTURE*, a groundbreaking commitment that helped transform how healthcare was delivered in the region.

Through collaborations and partnerships with governments, international agencies – including the World Health Organization, UNAIDS and Baylor International Pediatric AIDS Initiative (BIPAI) – as well as non-governmental, community- and faith based organizations, *SECURE THE FUTURE* created a model of care for HIV that was not only sustainable, but that could be replicated and applied to other disease areas.

"When we started *SECURE THE FUTURE*, we not only looked to build local and national capacity and help inform countries' HIV/AIDS plans, but to develop lessons and experiences for addressing health disparities among women and children across various therapeutic areas," says John Damonti, President, Bristol-Myers Squibb Foundation. "Through our partnerships and programs, we helped restore hope for children and families living with HIV/AIDS and gave communities in sub-Saharan Africa the confidence and resources they needed to properly care for patients."

Bristol-Myers Squibb Foundation

SECURE THE FUTURE®

Care and support for Communities Affected by HIV/AIDS in Africa

Since its inception, *SECURE THE FUTURE* oversaw the investment of more than $240 million for more than 250 programs that trained tens of thousands of health care providers, increased capacity for care at hospitals and clinics, raised awareness about HIV and its prevention, and increased community-based support for children and families affected by the disease.

SECURE THE FUTURE's impact on pediatric care was landmark. The initiative brought together the Foundation, BIPAI, and the governments of five sub-Saharan countries: Botswana, Lesotho, eSwatini, Uganda and Tanzania to create the largest pediatric HIV treatment network in the world. To date, BIPAI has treated more than 1 million children and currently has more than 300,000 directly in care, 40 percent of whom are now teenagers and adolescents.

Today, *SECURE THE FUTURE*'s focus has evolved to help address the African continent's next major health challenge: cancer. Many people with HIV are now living longer; they are not dying of the virus but rather of non-communicable diseases, such as hypertension and cancer. *SECURE THE FUTURE* has created partnerships based on years of experience in HIV that can also address lung, cervical, breast, and pediatric cancers and blood disorders.

In 2017, BIPAI, the Texas Children's Hospital Cancer and Hematology Centers and the Bristol-Myers Squibb Foundation launched Global HOPE (Hematology-Oncology Pediatric Excellence), the first comprehensive program to treat children with cancer and blood disorders. As with HIV, disparities in cancer care between Africa and other parts of the world are significant. In the U.S., pediatric cancer has a survival rate of 80 percent, compared to a mortality rate as high as 90 percent in Africa.

"Through *SECURE THE FUTURE*, we innovated models of care delivery, building capacity of our local African health professionals to care and treat children and women with life-threatening disease," says Phangisile Mtshali, Director, Bristol-Myers Squibb Foundation. "Through our lessons learned, we extended our reach in sub-Saharan Africa by creating community-based treatment support programs that helped deliver antiretroviral therapy in rural and hard-to-reach areas. Our partnership with WHO Global TB Programme was influential in shaping the policy and practice around monitoring and reporting community efforts to finding missing tuberculosis cases. We are now taking all of those lessons learned and applying them to address pediatric, lung, and cervical cancers, which are robbing Africa of a brighter future and of gains made from the HIV successes."

A Legacy of Hope

| PATIENT STORY |

Every Day to Live

Jessie Stern

"FAITH, PRAYER, AND STRENGTH. YOU HAVE EVERY DAY TO LIVE."

Jessie Stern was driving home when her car was rear-ended at a stop sign. The following weekend, Jessie, 69, a retired mother and grandmother from Harrisburg, Pa., began feeling pains in her abdomen. She visited her local emergency room and received an examination, which included an M.R.I. and an X-ray.

"It turned out there was nothing physically wrong with me from the car accident," Jessie, a smoker for the past 52 years, says. But doctors noticed an abnormality in one of her lungs while looking at her scans and scheduled a biopsy. "The specialist said that I had Stage III lung cancer," she says.

Jessie's friend Deborah was by her side throughout the fight, providing strength, hope, and even laughter along the way.

Jessie was suffering from non-small cell lung cancer (NSCLC), the most common type of lung cancer, which makes up 80 to 85 percent of cases, according to the National Cancer Institute.

At first, Jessie was treated with chemotherapy and radiation, but the treatments weren't working. So a second chemotherapy was tried, but Jessie didn't like the way the treatments made her feel and asked to stop the treatment. Her oncologist suggested they look for a different option. After more biopsies, her doctor determined that she was a candidate for Immuno-Oncology therapy. Jessie's doctor prescribed *Opdivo*.

After a few months of receiving treatment, Jessie began to see improvement. Her tumors were shrinking.

And the latest set of Jessie's scans have come back clear – no detectable sign of cancer.

A self-described people person, Jessie admits to struggling with depression after learning of her cancer. "I stayed strong and tried to be positive," she says. "That, along with prayer, got me through it."

Today, she exercises at the gym and watches her diet more than in the past. And she shares her story with other cancer patients through a support group at her oncologist's office, believing that "It's better to hear how to deal with cancer from someone who has experienced it."

Now, Jessie is feeling good and looking forward to a future without cancer. "Faith, prayer, and strength," she says. "You have every day to live."

BRISTOL-MYERS SQUIBB
2018 Financial Report

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

EXECUTIVE SUMMARY

Bristol-Myers Squibb Company is a global specialty biopharmaceutical company whose mission is to discover, develop and deliver innovative medicines that help patients prevail over serious diseases. Refer to the Summary of Abbreviated Terms at the end of this 2018 Form 10-K for terms used throughout the document.

In 2018, we received 14 approvals for new medicines and additional indications and formulations of currently marketed medicines in major markets (the U.S., EU, Japan and China) including multiple regulatory milestone achievements for *Opdivo* and *Opdivo+Yervoy* combinations. We are committed to investigating *Opdivo* alone and in combination with *Yervoy* and other anti-cancer agents for a wide array of tumor types, including broad programs in lung, head & neck, liver, kidney, bladder and stomach. We continue to believe that the breadth and depth of our IO portfolio positions us well for the future. We have 17 new IO compounds in clinical development and studies across more than 35 different tumor types. In addition, we advanced certain other non-IO R&D programs in our pipeline, including TYK2 inhibitor for the treatment of psoriasis and other autoimmune diseases, Factor XIa inhibitor for the treatment of thrombosis (in collaboration with Janssen), and Pegbelfermin (PEG-FGF21) for the treatment of NASH.

In 2018, our revenues increased 9% as a result of higher demand for our prioritized brands including *Opdivo* and *Eliquis* partially offset by increased competition for established brands, primarily HIV brands and *Daklinza*. The $2.40 increase in GAAP EPS was primarily due to 2017 tax charges attributed to tax reform and higher revenues. These items were partially offset by higher losses on equity investments. After adjusting for the impact of tax reform, equity investment losses and other specified items, non-GAAP EPS increased $0.97 primarily as a result of higher revenues, higher royalties and licensing income and a lower effective tax rate. Cost savings resulting from our transformation initiatives continue to be redeployed in R&D and other areas of higher priorities.

On January 3, 2019, we announced that we have entered into a definitive merger agreement with Celgene under which we will acquire Celgene. For further discussion on our pending acquisition with Celgene and on our other acquisitions, divestitures and licensing arrangements, refer to "Consolidated Financial Statements—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements" and "—Note 19. Subsequent Event."

In 2017, our revenues increased 7% as a result of higher demand for our prioritized brands including *Opdivo* and *Eliquis* partially offset by increased competition for established brands, primarily *Daklinza*. The $2.04 decrease in GAAP EPS was due to tax charges attributed to tax reform ($1.76 per share) and to a lesser extent higher license, asset acquisition and restructuring related charges and lower divestiture-related income. These items were partially offset by higher revenues, royalties and licensing income and a patent-infringement settlement. After adjusting for the impact of tax reform and other specified items, non-GAAP EPS increased $0.18 primarily as a result of higher revenues partially offset by product mix and higher R&D expenses supporting *Opdivo* and other IO programs.

Highlights

The following table summarizes our financial information:

	Year Ended December 31,		
Dollars in Millions, except per share data	**2018**	2017	2016
Total Revenues	**$ 22,561**	$ 20,776	$ 19,427
Diluted Earnings Per Share			
GAAP	**$ 3.01**	$ 0.61	$ 2.65
Non-GAAP	**3.98**	3.01	2.83

Our non-GAAP financial measures, including non-GAAP earnings and related EPS information, are adjusted to exclude specified items that represent certain costs, expenses, gains and losses and other items impacting the comparability of financial results. For a detailed listing of all specified items and further information and reconciliations of non-GAAP financial measures refer to "—Non-GAAP Financial Measures."

Significant Product and Pipeline Approvals

The following is a summary of the 14 significant approvals received in 2018.

Product	Date	Approval
Opdivo	August 2018	Approval in Japan for patients with MPM which has progressed after chemotherapy.
	August 2018	Approval in Japan for adjuvant treatment of melanoma.
	August 2018	FDA approval as the first and only IO treatment option for patients with metastatic SCLC whose cancer has progressed after platinum-based chemotherapy and at least one other line of therapy.
	July 2018	EC approval for the adjuvant treatment of adult patients with melanoma with involvement of lymph nodes or metastatic disease who have undergone complete resection.
	June 2018	Approval in China for the treatment of locally advanced or metastatic NSCLC after prior platinum-based chemotherapy in adult patients without EGFR or ALK genomic tumor aberrations.
Opdivo+Yervoy	August 2018	Approval in Japan of *Opdivo* plus low-dose *Yervoy* for the treatment of unresectable or metastatic RCC.
	July 2018	FDA approval of *Opdivo* plus low-dose *Yervoy* for the treatment of adult and pediatric patients 12 years and older with MSI-H or dMMR mCRC that has progressed following treatment with fluoropyrimidine, oxaliplatin and irinotecan.
	May 2018	Approval in Japan of *Opdivo+Yervoy* combination for previously untreated patients with unresectable melanoma.
	April 2018	FDA approval of *Opdivo+Yervoy* combination for previously untreated patients with intermediate and poor-risk advanced RCC.
Orencia	February 2018	Approval in Japan for an intravenously administered treatment of moderate to severe polyarticular JIA in patients two years of age and older.
Empliciti	November 2018	FDA approval of *Empliciti* injection for intravenous use in combination with pomalidomide and dexamethasone for the treatment of adult patients with multiple myeloma who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor.
Sprycel	December 2018	FDA expanded the indication for *Sprycel* to include the treatment of pediatric patients one year of age and older with newly diagnosed Philadelphia chromosome-positive ALL in combination with chemotherapy.
	July 2018	EC expanded the indication for *Sprycel* to include the treatment of children and adolescents aged 1 year to 18 years with chronic phase Philadelphia chromosome-positive CML and to include a powder for oral suspension.
Yervoy	January 2018	EC approval of advanced (unresectable or metastatic) melanoma in pediatric patients 12 years of age and older.

Refer to "—Product and Pipeline Developments" for all of the developments in our marketed products and late-stage pipeline in 2018 and in early 2019.

Strategy

Our focus as a specialty biopharmaceutical company is on discovering, developing and delivering transformational medicines that address serious unmet medical needs. Our strategy is to combine the resources, scale and capability of a pharmaceutical company with the speed and focus on innovation of the biotech industry. Our four strategic priorities are to drive business performance, continue to build a leading franchise in IO, maintain a diversified portfolio both within and outside of IO, and continue our disciplined approach to capital allocation, including establishing partnerships, collaborations and in-licensing or acquiring investigational compounds as an essential component of successfully delivering transformational medicines to patients.

We are developing new medicines in the following core therapeutic areas: (1) oncology with a priority in certain tumor types; (2) immunoscience with priorities in psoriasis, lupus, RA and inflammatory bowel disease; (3) cardiovascular with a priority in heart disease and; (4) fibrotic disease with priorities in lung and liver. We continue to advance the next wave of innovative medicines by investing significantly in our pipeline both internally and through business development activities. We expect that our planned acquisition of Celgene will further position us as a leading biopharmaceutical company, expanding our oncology and immunoscience portfolios with several near-term assets and additional external partnerships. We continue to invest in our IO portfolio by pursuing both monotherapy and combination approaches, and advancing our next wave of early assets. We entered into several new collaboration agreements across our therapeutic areas of focus and expanded others to research and develop *Opdivo* and other approved or investigational oncology agents in combination regimens. We remain focused and well-resourced in our cancer development programs and seek to broaden the use of *Opdivo* in earlier lines of therapy, expand into new tumors, accelerate next wave IO mechanisms and develop treatment options for refractory IO patients. Beyond cancer, we continue to advance our early stage portfolio in immunoscience, cardiovascular and fibrotic diseases and strengthen our partnerships with a diverse group of companies and academic institutions in new and expanded research activities. We believe our differentiated internal and external focus contributes to the advancing of our pipeline of potentially transformational medicines.

Our commercial model has been evolving and revenues from our prioritized brands continue to grow which demonstrates strong execution of our strategy. We continue to drive growth of *Opdivo* by expanding into additional indications and tumor types both as a monotherapy and in combination with *Yervoy* and other anti-cancer agents. *Eliquis* continues to grow, leveraging its best in class clinical profile and extensive real world data and is now the number one novel oral anticoagulant in total prescriptions in the U.S. We are building on the continued success of our other prioritized brands and remain strongly committed to *Orencia* and *Sprycel*. Through our operating model transformation, our commercial infrastructure is uniquely leveraged for potential growth.

Our operating model continues to evolve and we have been successful in focusing commercial, R&D and manufacturing resources on prioritized brands and markets, strengthening our R&D capabilities in tumor biology, patient selection and new biomarkers, delivering leaner administrative functions and streamlining our manufacturing network to reflect the importance of biologics in our current and future portfolio. The evolution in our operating model, which focuses on maintaining a disciplined approach in marketing, selling and administrative expenses, will enable us to deliver the necessary strategic, financial and operational flexibility to invest in the highest priority opportunities within our portfolio.

Looking ahead, we will continue to implement our biopharma strategy by driving the growth of prioritized brands, executing product launches, investing in our diverse and innovative pipeline, aided by strategic business development, focusing on prioritized markets, increasing investments in our biologics manufacturing capabilities and maintaining a culture of continuous improvement.

Acquisitions, Divestitures, Licensing and Collaboration Arrangements

Acquisitions, divestitures, licensing and collaboration arrangements allow us to focus our resources behind our growth opportunities that drive the greatest long-term value. We are focused on the following core therapeutic areas: oncology, including IO, immunoscience, cardiovascular and fibrosis. Significant acquisitions, divestitures and licensing and collaboration arrangements during the past three years are summarized below. Refer to "Consolidated Financial Statements—Note 3. Alliances" and "—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements" for further information.

2018 Arrangements

Nektar: BMS and Nektar commenced a worldwide license and collaboration for the development and commercialization of NKTR-214, Nektar's investigational immuno-stimulatory therapy.

Janssen: BMS and Janssen commenced a worldwide collaboration for the development and commercialization of a Factor XIa program including BMS's Factor XIa inhibitor, BMS-986177, an investigational anticoagulant compound being studied for the prevention and treatment of major thrombotic conditions.

Promedior: BMS notified Promedior that the Company would not be exercising a warrant obtained in 2015 to purchase all outstanding shares of Promedior.

Rigel: BMS notified Rigel Pharmaceuticals, Inc., that the Company would discontinue its participation in the preclinical collaboration of cancer immunotherapies based on Rigel's small molecule TGF beta receptor kinase inhibitors originally commenced in 2015.

Bavarian Nordic: BMS notified Bavarian Nordic A/S that the Company will not be exercising its option to globally license and commercialize *Prostvac**, Bavarian Nordic's investigational PSA-targeting cancer immunotherapy.

2017 Arrangements

Ono: BMS acquired an exclusive license to develop and commercialize ONO-4578, Ono's Prostaglandin E2 receptor 4 antagonist for the treatment of cancer. BMS acquired worldwide rights except in Japan, South Korea, and Taiwan where it was added to the existing collaboration and in China and ASEAN countries where Ono retained exclusive rights.

Halozyme: BMS and Halozyme entered into a global collaboration and license agreement to develop subcutaneously administered BMS IO medicines using Halozyme's *ENHANZE** drug-delivery technology which may allow for more rapid delivery of large volume injectable medications.

IFM: BMS acquired all of the outstanding shares of IFM providing BMS with full rights to IFM's preclinical STING and NLRP3 agonist programs focused on enhancing the innate immune response for treating cancer.

Biogen: BMS out-licensed to Biogen exclusive rights to develop and commercialize BMS-986168, an anti-eTau compound in development for Progressive Supranuclear Palsy.

Roche: BMS out-licensed to Roche exclusive rights to develop and commercialize BMS-986089, an anti-myostatin adnectin in development for Duchenne Muscular Dystrophy.

CytomX: BMS and CytomX expanded their initial 2014 strategic collaboration to discover novel cancer treatment therapies that will include up to eight additional targets using CytomX's proprietary Probody platform for the treatment of cancer.

2016 Arrangements

PsiOxus: BMS acquired exclusive worldwide rights to PsiOxus's NG-348, a pre-clinical stage, "armed" oncolytic virus with the goal of addressing solid tumors.

Padlock: BMS acquired all of the outstanding shares of Padlock providing BMS with full rights to Padlock's PAD inhibitor discovery program focused on the development of treatment approaches for patients with RA.

Cormorant: BMS acquired all of the outstanding shares of Cormorant providing BMS with full rights to Cormorant's lead candidate HuMax-IL8, a monoclonal antibody that represents a potentially complementary IO mechanism of action to T-cell directed antibodies and co-stimulatory molecules.

Nitto Denko: BMS acquired an exclusive worldwide license to develop and commercialize Nitto Denko's investigational siRNA molecules targeting heat shock protein 47 (HSP47) in vitamin A containing formulations including Nitto Denko's lead asset ND-L02-s0201, currently in development for the treatment of advanced liver fibrosis, and the option to receive exclusive licenses for HSP47 siRNAs in vitamin A containing formulations for the treatment of lung and other organ fibrosis.

RESULTS OF OPERATIONS

Regional Revenues

The composition of the changes in revenues was as follows:

	Year Ended December 31,			2018 vs. 2017		2017 vs. 2016	
	Total Revenues			Analysis of % Change		Analysis of % Change	
Dollars in Millions	2018	2017	2016	Total Change	Foreign Exchange[(b)]	Total Change	Foreign Exchange[(b)]
United States	**$ 12,586**	$ 11,358	$ 10,720	11 %	—	6 %	—
Europe	**5,658**	4,988	4,215	13 %	3 %	18 %	1%
Rest of the World	**3,733**	3,877	3,964	(4)%	(2)%	(2)%	—
Other[(a)]	**584**	553	528	6 %	N/A	5 %	N/A
Total	**$ 22,561**	$ 20,776	$ 19,427	9 %	1 %	7 %	—

(a) Other revenues include royalties and alliance-related revenues for products not sold by our regional commercial organizations.
(b) Foreign exchange impacts were derived by applying the prior period average currency rates to the current period sales.

U.S. revenues in 2018 were impacted by higher demand for *Opdivo* and *Eliquis* partially offset by lower demand for established brands due to increased competition, primarily HIV brands and *Daklinza*. The higher growth rate in the U.S. was due to additional indication approvals for *Opdivo*. Average U.S. net selling prices in 2018 were unchanged after charge-backs, rebates and discounts. Refer to "—Product Revenues Commentary" for additional information.

Europe revenues in 2018 were impacted by higher demand for *Eliquis* and *Opdivo* and foreign exchange, partially offset by lower demand for established brands due to increased competition and lower average net selling prices.

Rest of the World revenues in 2018 were impacted by lower demand for established brands due to increased competition, lower average net selling prices and foreign exchange, partially offset by higher demand for *Opdivo* and *Eliquis*.

U.S. revenues in 2017 were impacted by higher demand for *Eliquis* and *Opdivo* partially offset by lower demand for established brands due to increased competition, primarily *Daklinza* and HIV brands. Average U.S. net selling prices were approximately 2% higher after charge-backs, rebates and discounts. Refer to "—Product Revenues Commentary" for additional information.

Europe revenues in 2017 were impacted by higher demand for *Opdivo* and *Eliquis* partially offset by lower demand for *Daklinza* due to increased competition and lower average net selling prices.

Rest of the World revenues in 2017 were impacted by lower demand for established brands, including *Daklinza*, due to increased competition and out-licensing of a mature brand product, partially offset by higher demand for *Opdivo* and *Eliquis* and lower average net selling prices.

No single country outside the U.S. contributed more than 10% of total revenues in 2018, 2017 and 2016.

GTN Adjustments

We recognize revenue net of GTN adjustments that are further described in "—Critical Accounting Policies."

The activities and ending reserve balances for each significant category of GTN adjustments were as follows:

Dollars in Millions	Charge-Backs and Cash Discounts	Medicaid and Medicare Rebates	Other Rebates, Returns, Discounts and Adjustments	Total
Balance at January 1, 2017	$ 126	$ 520	$ 1,160	$ 1,806
Provision related to sale made in:				
Current period	2,087	2,090	2,135	6,312
Prior period	(3)	(4)	(64)	(71)
Payments and returns	(2,004)	(1,810)	(2,107)	(5,921)
Foreign currency translation and other	3	—	104	107
Balance at December 31, 2017	$ 209	$ 796	$ 1,228	$ 2,233
Provision related to sale made in:				
Current period	**2,738**	**3,258**	**2,693**	**8,689**
Prior period	**(3)**	**(33)**	**(60)**	**(96)**
Payments and returns	**(2,695)**	**(2,960)**	**(2,424)**	**(8,079)**
Assets/related liabilities held-for-sale	**—**	**—**	**(28)**	**(28)**
Foreign currency translation and other	**(4)**	**—**	**(53)**	**(57)**
Balance at December 31, 2018	**$ 245**	**$ 1,061**	**$ 1,356**	**$ 2,662**

The reconciliation of gross product sales to net product sales by each significant category of GTN adjustments was as follows:

	Year Ended December 31,			% Change	
Dollars in Millions	**2018**	2017	2016	2018 vs. 2017	2017 vs. 2016
Gross product sales	**$ 30,174**	$ 25,499	$ 22,364	18%	14%
GTN Adjustments					
Charge-backs and cash discounts	**(2,735)**	(2,084)	(1,582)	31%	32%
Medicaid and Medicare rebates	**(3,225)**	(2,086)	(1,382)	55%	51%
Other rebates, returns, discounts and adjustments	**(2,633)**	(2,071)	(1,698)	27%	22%
Total GTN Adjustments	**(8,593)**	(6,241)	(4,662)	38%	34%
Net product sales	**$ 21,581**	$ 19,258	$ 17,702	12%	9%
GTN adjustments percentage	**28%**	24%	21%	4%	3%
U.S.	**36%**	31%	26%	5%	5%
Non-U.S.	**13%**	13%	13%	—	—

GTN adjustments are primarily a function of product sales volume, regional and payer channel mix, contractual or legislative discounts and rebates. GTN adjustments are increasing at a higher rate than gross product sales due to higher U.S. *Eliquis* gross product sales, which has a relatively high GTN adjustment percentage as a result of competitive pressures to maintain its position on healthcare payer formularies allowing patients continued access through their medical plans.

Product Revenues

Dollars in Millions	Year Ended December 31, 2018	2017	2016	% Change 2018 vs. 2017	% Change 2017 vs. 2016
Prioritized Brands					
Opdivo	**$ 6,735**	$ 4,948	$ 3,774	36 %	31 %
U.S.	**4,239**	3,102	2,664	37 %	16 %
Non-U.S.	**2,496**	1,846	1,110	35 %	66 %
Eliquis	**6,438**	4,872	3,343	32 %	46 %
U.S.	**3,760**	2,887	1,963	30 %	47 %
Non-U.S.	**2,678**	1,985	1,380	35 %	44 %
Orencia	**2,710**	2,479	2,265	9 %	9 %
U.S.	**1,875**	1,704	1,532	10 %	11 %
Non-U.S.	**835**	775	733	8 %	6 %
Sprycel	**2,000**	2,005	1,824	—	10 %
U.S.	**1,091**	1,105	969	(1)%	14 %
Non-U.S.	**909**	900	855	1 %	5 %
Yervoy	**1,330**	1,244	1,053	7 %	18 %
U.S.	**941**	908	802	4 %	13 %
Non-U.S.	**389**	336	251	16 %	34 %
Empliciti	**247**	231	150	7 %	54 %
U.S.	**164**	151	133	9 %	14 %
Non-U.S.	**83**	80	17	4 %	**
Established Brands					
Baraclude	**744**	1,052	1,192	(29)%	(12)%
U.S.	**32**	53	66	(40)%	(20)%
Non-U.S.	**712**	999	1,126	(29)%	(11)%
Reyataz Franchise	**427**	698	912	(39)%	(23)%
U.S.	**157**	327	484	(52)%	(32)%
Non-U.S.	**270**	371	428	(27)%	(13)%
Sustiva Franchise	**283**	729	1,065	(61)%	(32)%
U.S.	**27**	622	901	(96)%	(31)%
Non-U.S.	**256**	107	164	**	(35)%
Hepatitis C Franchise	**17**	406	1,578	(96)%	(74)%
U.S.	**(16)**	109	827	**	(87)%
Non-U.S.	**33**	297	751	(89)%	(60)%
Other Brands	**1,630**	2,112	2,271	(23)%	(7)%
U.S.	**316**	390	379	(19)%	3 %
Non-U.S.	**1,314**	1,722	1,892	(24)%	(9)%
Total Revenues	**22,561**	20,776	19,427	9 %	7 %
U.S.	**12,586**	11,358	10,720	11 %	6 %
Non-U.S.	**9,975**	9,418	8,707	6 %	8 %

** Change in excess of 100%

Opdivo (nivolumab) — a fully human monoclonal antibody that binds to the PD-1 on T and NKT cells that has been approved for several anti-cancer indications including bladder, blood, colon, head and neck, kidney, liver, lung, melanoma and stomach and continues to be investigated across other tumor types and disease areas.

- U.S. revenues increased in both periods due to higher demand. The higher growth rate in 2018 was primarily due to the approvals for the treatment of adjuvant melanoma, liver cancer and the *Opdivo+Yervoy* combination for kidney cancer, which is partially offset by the decline in lung cancer indication.
- International revenues increased in both periods due to higher demand as a result of approvals for additional indications and launches in new countries. The lower growth rate in 2018 was primarily due to additional competition for *Opdivo* in the NSCLC indication.

Eliquis (apixaban) — an oral Factor Xa inhibitor, targeted at stroke prevention in adult patients with NVAF and the prevention and treatment of VTE disorders.

- U.S. revenues increased in both periods due to market share gains partially offset by lower average net selling prices.
- International revenues increased in both periods due to higher demand attributed to market share gains and growth of the novel oral anticoagulants market.

Orencia (abatacept) — a fusion protein indicated for adult patients with moderate to severe active RA and PsA and is also indicated for reducing signs and symptoms in certain pediatric patients with moderately to severely active polyarticular JIA.

- U.S. revenues increased in both periods due to higher demand and higher average net selling prices.
- International revenues increased in both periods due to higher demand. We may experience additional competition in Europe from biosimilars of competitor products in future periods.

Sprycel (dasatinib) — an oral inhibitor of multiple tyrosine kinase indicated for the first-line treatment of adults with Philadelphia chromosome-positive CML in chronic phase and the treatment of adults with chronic, accelerated, or myeloid or lymphoid blast phase CML with resistance or intolerance to prior therapy, including *Gleevec** (imatinib mesylate).

- U.S. revenues decreased in 2018 due to inventory workdown offset by higher average net selling prices. U.S. revenues increased in 2017 due to higher demand and higher average net selling prices.
- International revenues remained unchanged in 2018. International revenues increased in 2017 due to higher demand. We may experience a decline in European revenues in the event that generic datasinib product enters the market.

Yervoy (ipilimumab) — a monoclonal antibody for the treatment of patients with unresectable or metastatic melanoma.

- U.S. revenues increased in both periods due to higher demand. Revenue growth rate in 2018 decreased due to lower demand resulting from other IO products being used in the adjuvant treatment of patients with melanoma, including *Opdivo*.
- International revenues increased in both periods due to higher demand primarily in Europe following the approval of the *Opdivo +Yervoy* combination therapy for melanoma.

Baraclude (entecavir) — an oral antiviral agent for the treatment of chronic hepatitis B.

- International revenues decreased in both periods due to lower demand resulting from increased competition.

Reyataz (atazanavir sulfate) Franchise — Includes *Reyataz* - a protease inhibitor for the treatment of HIV and *Evotaz* (atazanavir 300 mg and cobicistat 150 mg) - a combination therapy containing *Reyataz* and *Tybost** (cobicistat).

- The LOE for *Reyataz* in the U.S. occurred in December 2017, as a result revenues will continue to decline.
- International revenues decreased in both periods due to lower demand resulting from increased competition.

Sustiva (efavirenz) Franchise — a non-nucleoside reverse transcriptase inhibitor for the treatment of HIV, which includes *Sustiva*, an antiretroviral drug, and bulk efavirenz, which is also included in the combination therapy, *Atripla**.

- The LOE for *Sustiva* in the U.S. occurred in December 2017. Gilead terminated BMS's participation in the U.S. and Canada joint venture following the launch of a generic version of *Sustiva* in the U.S. As a result, BMS's share of *Atripla** revenues will further decline during the next two years. Refer to "Consolidated Financial Statements—Note 3. Alliances" for further discussion.
- International revenues for 2018 include $204 million of U.S. *Atripla** royalty revenue.

Hepatitis C Franchise — *Daklinza* (daclatasvir) - an NS5A replication complex inhibitor; *Sunvepra* (asunaprevir) - an NS3 protease inhibitor; and beclabuvir - an NS5B inhibitor.

- U.S. and international revenues decreased in both periods due to lower demand resulting from increased competition.

Other Brands — includes all other brands, including those which have lost exclusivity in major markets, OTC brands and royalty revenue.

- International revenues decreased in 2018 primarily due to lower *Plavix** royalties as a result of the adoption of amended revenue guidance, the expiration of rights to *Abilify** in Canada, lower diabetes product supply sales and continued generic erosion. The revenue decrease in 2017 was due to out-licensing and divestiture of certain other brands and continued generic erosion.

Estimated End-User Demand

Pursuant to the SEC Consent Order described under "—SEC Consent Order", we monitor the level of inventory on hand in the U.S. wholesaler distribution channel and outside of the U.S. in the direct customer distribution channel. We are obligated to disclose products with levels of inventory in excess of one month on hand or expected demand, subject to a de minimis exception. Estimated levels of inventory in the distribution channel in excess of one month on hand for the following products were not material to our results of operations as of the dates indicated. At December 31, 2018, *Daklinza* had 6 months of inventory on hand in the U.S. as a result of minimum required stock levels to support patient demand. We expect inventory on hand levels of *Daklinza* to exceed one month over the near term. Below are international products that had estimated levels of inventory in the distribution channel in excess of one month on hand at September 30, 2018.

Dafalgan, an analgesic product sold principally in Europe, had 1.2 months of inventory on hand internationally at direct customers compared to 1.3 months of inventory on hand at June 30, 2018. The level of inventory on hand was primarily due to the ordering patterns of pharmacists in France.

Efferalgan, an analgesic product sold principally in Europe, had 1.7 months of inventory on hand internationally at direct customers compared to also 1.4 months of inventory on hand at June 30, 2018. The level of inventory on hand was primarily due to the ordering patterns of pharmacists in France.

Fervex, a cold and flu product, had 1.3 months of inventory on hand at direct customers compared to 1.5 months of inventory on hand at June 30, 2018. The level of inventory on hand was primarily due to the ordering patterns of pharmacists in France.

Daklinza, a Hepatitis C product, had 1.2 months of inventory on hand internationally at direct customers compared to 1.4 months of inventory on hand at June 30, 2018. The level of inventory on hand was attributable to low volume in-market sales in Canada.

Perfalgan, an analgesic product, had 1.3 months of inventory on hand internationally at direct customers compared to 1.5 months of inventory on hand at June 30, 2018. The level of inventory on hand was primarily in the Gulf Countries due to extended delivery lead time.

Sustiva, an HIV product, had 1.1 months of inventory on hand internationally at direct customers compared to 1.0 months of inventory on hand at June 30, 2018. The level of inventory on hand was attributable to low volume in-market sales in Canada.

In the U.S., we generally determine our months on hand estimates using inventory levels of product on hand and the amount of out-movement provided by our three largest wholesalers, which account for approximately 97% of total gross sales of U.S. products. Factors that may influence our estimates include generic competition, seasonality of products, wholesaler purchases in light of increases in wholesaler list prices, new product launches, new warehouse openings by wholesalers and new customer stockings by wholesalers. In addition, these estimates are calculated using third-party data, which may be impacted by their recordkeeping processes.

Our non-U.S. businesses have significantly more direct customers. Information on available direct customer product level inventory and corresponding out-movement information and the reliability of third-party demand information varies widely. We limit our direct customer sales channel inventory reporting to where we can influence demand. When this information does not exist or is otherwise not available, we have developed a variety of methodologies to estimate such data, including using historical sales made to direct customers and third-party market research data related to prescription trends and end-user demand. Given the difficulties inherent in estimating third-party demand information, we evaluate our methodologies to estimate direct customer product level inventory and to calculate months on hand on an ongoing basis and make changes as necessary. Factors that may affect our estimates include generic competition, seasonality of products, price increases, new product launches, new warehouse openings by direct customers, new customer stockings by direct customers and expected direct customer purchases for governmental bidding situations. As such, all of the information required to estimate months on hand in the direct customer distribution channel for non-U.S. business for the year ended December 31, 2018 is not available prior to the filing of this 2018 Form 10-K. We will disclose any product with levels of inventory in excess of one month on hand or expected demand, subject to a de minimis exception, in the next quarterly report on Form 10-Q.

Expenses

				% Change	
Dollar in Millions	**2018**	2017	2016	2018 vs. 2017	2017 vs. 2016
Cost of products sold	**$ 6,547**	$ 6,094	$ 4,969	7 %	23 %
Marketing, selling and administrative	**4,551**	4,751	4,979	(4)%	(5)%
Research and development	**6,345**	6,482	5,012	(2)%	29 %
Other income (net)	**(850)**	(1,682)	(1,448)	(49)%	16 %
Total Expenses	**$ 16,593**	$ 15,645	$ 13,512	6 %	16 %

Cost of products sold

Cost of products sold include material, internal labor and overhead costs from our owned manufacturing sites, third-party product supply costs and other supply chain costs managed by our global manufacturing and supply organization. Cost of products sold also includes royalties and profit sharing, certain excise taxes, foreign currency hedge settlement gains and losses and the amortization of acquired developed technology costs. Cost of products sold typically vary between periods as a result of product mix and volume (particularly royalties and profit sharing), and to a lesser extent changes in foreign currency, price, inflation and costs attributed to manufacturing site exits.

- Cost of products sold increased in 2018 due to higher royalties and profit sharing of $905 million resulting primarily from higher *Eliquis* sales partially offset by product cost improvements, a $146 million impairment charge in 2017 to reduce the carrying value of the small molecule active pharmaceutical ingredient manufacturing operations in Swords, Ireland, and lower inventory charges.
- Cost of products sold increased in 2017 due to higher royalties and profit sharing of $753 million resulting primarily from higher *Eliquis* sales and a $146 million impairment charge as discussed above. The remaining increase was primarily due to higher sales volume, inventory charges, manufacturing startup costs and foreign currency.

Marketing, selling and administrative

Marketing, selling and administrative expenses primarily include salary and benefit costs, third-party professional and marketing fees, outsourcing fees, shipping and handling costs, advertising and product promotion. Expenses are managed through regional commercialization organizations or global enabling functions such as finance, legal, information technology and human resources. Certain expenses are shared with alliance partners based upon contractual agreements. Expenses typically vary between periods due to new product launch promotional activities.

- Marketing, selling and administrative expenses decreased in 2018 due to lower advertising, promotion and marketing expenses, lower costs attributed to transformation initiatives and lower branded prescription drug fee, partially offset by higher BMS foundation grants.
- Marketing, selling and administrative expenses decreased in 2017 due to lower advertising, promotion and sales-force expenses supporting *Daklinza* and other established brands and lower BMS foundation grants.

Research and development

Research and development activities include discovery research, preclinical and clinical development, drug formulation and medical support of marketed products. Expenses include salary and benefit costs, third-party grants and fees paid to clinical research organizations, supplies, upfront and contingent milestone payments for licensing and asset acquisitions of investigational compounds, IPRD impairment charges and proportionate allocations of enterprise-wide costs. The allocations include facilities, information technology, employee stock compensation costs and other appropriate costs. Certain expenses are shared with alliance partners based upon contractual agreements. Expenses typically vary between periods for a number of reasons, including the timing of license and asset acquisition charges and IPRD impairment charges.

- Research and development expense decreased in 2018 due to lower site exit costs and IPRD impairment charges, partially offset by expansion of *Opdivo* and other IO development programs, including NKTR-214.
- Research and development expense increased in 2017 due to higher license and asset acquisition charges, site exit charges, IPRD impairment charges and expansion of *Opdivo* and other IO development programs.

Significant charges included in R&D expense were as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Nektar	**$ 1,050** [(a)]	$ —	$ —
Cormorant	**60** [(b)]	—	35 [(a)]
IFM	**25** [(b)]	311 [(a)]	—
CytomX	**—**	200 [(a)]	25 [(a)]
Halozyme	**—**	105 [(a)]	—
Flexus	**—**	324 [(b)]	100 [(b)]
Cardioxyl	**—**	100 [(b)]	—
PsiOxus	**—**	50 [(a)]	—
Ono	**—**	40 [(a)]	—
Padlock	**—**	—	139 [(a)]
Nitto Denko	**—**	—	100 [(a)]
Other	**—**	—	40
License and asset acquisition charges	**1,135**	1,130	439
F-Star	**—**	75	—
Other	**—**	—	13
IPRD impairments	**—**	75	13
Site exit costs	**79**	383	83
Research and development significant charges	**$ 1,214**	$ 1,588	$ 535

(a) Upfront payment
(b) Milestone payment

- License and asset acquisition charges resulted from strategic transactions to acquire or license certain investigational oncology, cardiovascular, immunoscience and fibrotic disease compounds (or options to acquire or license) as disclosed in "—Acquisitions, Divestitures, Licensing and Collaboration Arrangements."
- IPRD impairment charges includes the discontinued development of an investigational compound which was part of our alliance with F-Star in 2017.
- Site exit costs resulted from the expected exit of R&D sites in the U.S. through 2020 primarily due to the reduction in the estimated useful lives of the related assets and an impairment charge in 2017 to reduce the carrying value of an R&D facility in Wallingford, Connecticut.

Other income (net)

- Other income (net) decreased in 2018 primarily due to losses on equity investments related to Nektar and a patent infringement settlement in 2017 partially offset by lower restructuring and debt redemption charges.
- Other income (net) increased in 2017 primarily due to a patent infringement settlement and out-licensing income partially offset by lower divestiture gains and related service fees and higher restructuring and debt redemption charges.

Components of other income (net) were as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Interest expense	**$ 183**	$ 196	$ 167
Investment income	**(173)**	(126)	(97)
Loss/(gain) on equity investments	**512**	(23)	37
Provision for restructuring	**131**	293	109
Litigation and other settlements	**76**	(487)	47
Equity in net income of affiliates	**(93)**	(75)	(77)
Divestiture gains	**(178)**	(164)	(576)
Royalties and licensing income	**(1,353)**	(1,351)	(719)
Transition and other service fees	**(12)**	(37)	(238)
Pension and postretirement	**(27)**	(1)	(72)
Intangible asset impairment	**64**	—	15
Loss on debt redemption	**—**	109	—
Other	**20**	(16)	(44)
Other income (net)	**$ (850)**	$ (1,682)	$ (1,448)

- Loss/(gain) on equity investments includes a fair value adjustment of $534 million related to the Company's equity investment in Nektar in 2018.
- Restructuring charges relate to changes to the Company's operating model to drive continued success in the near- and long-term through a more focused investment in commercial opportunities for key brands and markets, a competitive and more agile R&D organization that can accelerate the pipeline, streamline operations and realign manufacturing capabilities that broaden biologics capabilities to reflect the current and future portfolio as well as streamline and simplify our small-molecule supply network. The new operating model is expected to enable the Company to deliver the strategic, financial and operational flexibility necessary to invest in the highest priorities across the Company. Aggregate restructuring charges of $268 million and $826 million have been incurred in 2018 and 2017, respectively, for all actions including accelerated depreciation and impairment charges resulting from early site exits.
- Litigation and other settlements include $481 million for BMS's share of a patent-infringement settlement related to Merck's PD-1 antibody *Keytruda** in 2017 and $70 million related to intellectual property and product liability settlements in 2018, including $42 million recognized subsequent to the Company's earnings release for the fourth quarter of 2018.
- Divestiture gains includes divestiture of multiple mature global product lines in oncology and infectious therapy in 2018, additional contingent consideration for the diabetes business in 2017 and certain OTC brands and investigational HIV medicines businesses in 2016.
- Royalties and licensing income includes *Keytruda** royalties in 2018 and 2017, upfront licensing fees from Biogen and Roche in connection with the out-licensing of certain investigational genetically defined disease compounds in 2017 and contingent consideration from the *Erbitux** and diabetes business divestitures in 2018, 2017 and 2016, including the transfer of certain royalty rights pertaining to diabetes product sales. A $50 million fee for amending a royalty rate and $25 million sales-based milestone was also included in 2018.
- Transition and other service fees included fees resulting from the divestiture of the diabetes and investigational HIV medicines businesses in 2017 and 2016.
- Pension and postretirement includes the interest cost, expected return on plan assets and amortization components of the net periodic benefit cost (credit) as well as net charges for settlements, curtailments and special termination benefits of $121 million in 2018, $162 million in 2017 and $92 million in 2016.
- Intangible asset impairment includes $64 million in 2018 for an out-licensed asset obtained in the 2010 acquisition of ZymoGenetics, Inc., which did not meet its primary endpoint in a Phase II clinical study.
- A debt redemption loss of $109 million resulted from the early redemption of certain long-term debt obligations in 2017.

Income Taxes

Dollars in Millions	2018	2017	2016
Earnings Before Income Taxes	$ 5,968	$ 5,131	$ 5,915
Provision for Income Taxes	1,021	4,156	1,408
Effective Tax Rate	17.1%	81.0%	23.8%
Impact of Specified Items	—	60.0%	1.8%

Changes in the effective tax rate was primarily due to new U.S. tax reform legislation known as the Tax Cuts and Jobs Act of 2017 (the Act) enacted on December 22, 2017. The Act moved from a worldwide tax system to a quasi-territorial tax system and was comprised of broad and complex changes to the U.S. tax code including, but not limited to, (1) reduced the U.S. tax rate from 35% to 21%; (2) added a deemed repatriation transition tax on certain foreign earnings and profits; (3) generally eliminated U.S. federal income taxes on dividends from foreign subsidiaries; (4) included certain income of controlled foreign companies in U.S. taxable income (GILTI); (5) created a new minimum tax referred to as a base erosion anti-abuse income tax; (6) limited certain research-based credits; and (7) eliminated the domestic manufacturing deduction.

Although many aspects of the Act were not effective until 2018, additional tax expense of $2.9 billion was recognized in the fourth quarter of 2017 upon enactment of the Act. The additional expense increased the effective tax rate by 56.7% and included a $2.6 billion one-time deemed repatriation transition tax on previously untaxed post-1986 foreign earnings and profits (including related tax reserves). Those earnings were effectively taxed at a 15.5% rate to the extent that the specified foreign corporations held cash and certain other assets and an 8.0% rate on the remaining earnings and profits. The remaining $285 million of additional tax expense included an adjustment to measure net deferred tax assets at the new U.S. tax rate of 21%. The accounting for the reduction of deferred tax assets to the 21% tax rate was complete as of December 31, 2017. The provisional tax charge for the deemed repatriation transition tax was reduced by $56 million in 2018 upon completion of the accounting which reduced the effective tax rate by 0.9%.

In addition, the tax impact attributed to specified items, including non-deductible R&D charges, valuation allowances for certain tax assets resulting from equity investment losses and other jurisdiction tax rates increased the effective tax rate by 0.9% in 2018, 3.3% in 2017 and 1.8% in 2016.

After considering the impact of specified items including the transitional impacts of the Act discussed above, the effective tax rate decreased by 3.9% in 2018 primarily due to the on-going impact of the Act and tax reserve releases partially offset by taxes attributed to internal cash repatriations and earnings mix between high and low tax jurisdictions. After considering the impact of specified items, the effective tax rate decreased by 1.0% in 2017 primarily due to the adoption of amended income tax accounting guidance related to share-based payments and the early adoption of intra-entity transfers of assets other than inventory partially offset by earnings mix between high and low tax jurisdictions. Refer to “Consolidated Financial Statements—Note 7. Income Taxes” for further information.

Non-GAAP Financial Measures

Our non-GAAP financial measures, including non-GAAP earnings and related EPS information, are adjusted to exclude certain costs, expenses, gains and losses and other specified items that are evaluated on an individual basis. These items are adjusted after considering their quantitative and qualitative aspects and typically have one or more of the following characteristics, such as being highly variable, difficult to project, unusual in nature, significant to the results of a particular period or not indicative of future operating results. Similar charges or gains were recognized in prior periods and will likely reoccur in future periods including restructuring costs, accelerated depreciation and impairment of property, plant and equipment and intangible assets, R&D charges in connection with the acquisition or licensing of third-party intellectual property rights, divestiture gains or losses, pension, legal and other contractual settlement charges and debt redemption gains or losses, among other items. Deferred and current income taxes attributed to these items are also adjusted for considering their individual impact to the overall tax expense, deductibility and jurisdictional tax rates.

Non-GAAP information is intended to portray the results of our baseline performance, supplement or enhance management, analysts and investors' overall understanding of our underlying financial performance and facilitate comparisons among current, past and future periods. For example, non-GAAP earnings and EPS information is an indication of our baseline performance before items that are considered by us to not be reflective of our ongoing results. In addition, this information is among the primary indicators we use as a basis for evaluating performance, allocating resources, setting incentive compensation targets and planning and forecasting for future periods. This information is not intended to be considered in isolation or as a substitute for net earnings or diluted EPS prepared in accordance with GAAP.

Specified items were as follows:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Impairment charges	$ 17	$ 146	$ —
Accelerated depreciation and other shutdown costs	41	3	21
Cost of products sold	**58**	149	21
Marketing, selling and administrative	**2**	1	—
License and asset acquisition charges	1,135	1,130	439
IPRD impairments	—	75	13
Site exit costs	79	383	83
Research and development	**1,214**	1,588	535
Loss/(gain) on equity investments[(a)]	512	—	—
Provision for restructuring	131	293	109
Litigation and other settlements	70	(481)	40
Divestiture gains	(177)	(126)	(559)
Royalties and licensing income	(75)	(497)	(10)
Pension and postretirement	121	162	91
Intangible asset impairment	64	—	15
Loss on debt redemption	—	109	—
Other income (net)	**646**	(540)	(314)
Increase to pretax income	**1,920**	1,198	242
Income taxes on items above	(268)	(87)	51
Income taxes attributed to U.S. tax reform	(56)	2,911	—
Income taxes	**(324)**	2,824	51
Increase to net earnings	1,596	4,022	293
Noncontrolling interest	—	(59)	—
Increase to net earnings used for Diluted Non-GAAP EPS calculation	**$ 1,596**	$ 3,963	$ 293

(a) Specified items included these amounts upon adoption of amended guidance for the recognition and measurement of financial assets and liabilities in 2018.

The reconciliations from GAAP to Non-GAAP were as follows:

Dollars in Millions, except per share data	Year Ended December 31, 2018	2017	2016
Net Earnings Attributable to BMS used for Diluted EPS Calculation — GAAP	$ 4,920	$ 1,007	$ 4,457
Specified Items	1,596	3,963	293
Net Earnings Attributable to BMS used for Diluted EPS Calculation — Non-GAAP	$ 6,516	$ 4,970	$ 4,750
Average Common Shares Outstanding — Diluted	1,637	1,652	1,680
Diluted EPS Attributable to BMS — GAAP	$ 3.01	$ 0.61	$ 2.65
Diluted EPS Attributable to Specified Items	0.97	2.40	0.18
Diluted EPS Attributable to BMS — Non-GAAP	$ 3.98	$ 3.01	$ 2.83

Financial Position, Liquidity and Capital Resources

Our net cash position was as follows:

Dollars in Millions	2018	2017
Cash and cash equivalents	$ 6,911	$ 5,421
Marketable securities — current	1,973	1,391
Marketable securities — non-current	1,775	2,480
Total cash, cash equivalents and marketable securities	10,659	9,292
Short-term debt obligations	(1,703)	(987)
Long-term debt	(5,646)	(6,975)
Net cash position	$ 3,310	$ 1,330

Cash, cash equivalents and marketable securities held in the U.S. were approximately $9.3 billion at December 31, 2018. Most of the remaining $1.4 billion is held primarily in our international affiliates for local operating needs. We are subject to a one-time deemed repatriation transition tax in which $2.1 billion will be payable over the next eight years as a result of U.S. tax reform. We expect to have more flexibility in accessing cash and future cash that may be generated in foreign subsidiaries. We believe that our existing cash, cash equivalents and marketable securities together with cash generated from operations and issuance of commercial paper in the U.S. will be sufficient to satisfy our normal cash requirements for at least the next few years, including dividends, capital expenditures, milestone payments, working capital, deemed repatriation transition tax and $1.3 billion of debt maturing in 2019.

Management continuously evaluates the Company's capital structure to ensure the Company is financed efficiently, which may result in the repurchase of common stock and debt securities, termination of interest rate swap contracts prior to maturity and issuance of debt securities. The average amount of commercial paper outstanding was $19 million at a weighted-average rate of 1.27% during 2018. The maximum amount of commercial paper outstanding was $300 million with no outstanding borrowings at December 31, 2018.

Dividend payments were $2.6 billion in 2018 and 2017 and $2.5 billion in 2016. Dividend decisions are made on a quarterly basis by our Board of Directors. Annual capital expenditures were approximately $1.0 billion in 2018, $1.1 billion in 2017 and $1.2 billion in 2016 and are expected to be approximately $800 million in 2019 and $600 million in 2020. We continue to expand our biologics manufacturing capabilities and other facility-related activities. For example, we constructed a new large-scale biologics manufacturing facility in Ireland that will produce multiple therapies for our growing biologics portfolio when approved for commercial use in early 2020. We also paid $1.85 billion to Nektar in 2018 for certain collaboration rights and 8.3 million shares of its common stock representing a 4.8% ownership interest.

Our investment portfolio includes non-current marketable securities, which are subject to changes in fair value as a result of interest rate fluctuations and other market factors. Our investment policy establishes limits on the amount and time to maturity of investments with any institution. The policy also requires that investments are only entered into with corporate and financial institutions that meet high credit quality standards. Refer to "Consolidated Financial Statements—Note 9. Financial Instruments and Fair Value Measurements" for further information.

As of December 31, 2018, we had three revolving credit facilities totaling $5.0 billion, which consisted of a 364-day $2.0 billion facility that was scheduled to expire in March 2019 and two five-year $1.5 billion facilities that were extended to September 2022 and July 2023, respectively. All of these facilities provide for customary terms and conditions with no financial covenants and our two $1.5 billion revolving facilities are extendable annually by one year on the anniversary date with the consent of the lenders. No borrowings were outstanding under any of these revolving facilities as of December 31, 2018 or 2017.

In connection with our pending acquisition of Celgene, in January 2019 we entered into a bridge commitment letter that provides for up to $33.5 billion in a 364-day senior unsecured bridge loan facility. We also entered into an $8 billion term loan credit agreement consisting of a $1 billion 364-day tranche, a $4 billion three-year tranche and a $3 billion five-year tranche. The term loan reduced the commitments under the bridge facility to $25.5 billion. If we obtain additional funding by issuing securities or obtaining other loans, the amount of the bridge facility will be correspondingly reduced. The bridge loan and the term loan are subject to customary terms and conditions and do not have any financial covenants. No amounts will be borrowed under either the bridge loan or the term loan prior to the closing of the pending acquisition of Celgene.

In January 2019, we also entered into two new revolving credit facilities totaling $3.0 billion: a 364-day $2.0 billion facility expiring in January 2020 and a three-year $1.0 billion facility expiring in January 2022. The 364-day $2.0 billion facility replaced our existing 364-day $2.0 billion revolving facility, which was terminated concurrently upon the effectiveness of the new 364-day facility, and supports our commercial paper borrowings, if any. Each of these facilities provide for customary terms and conditions with no financial covenants.

No borrowings were outstanding under these two revolving facilities or on our two $1.5 billion revolving facilities as of February 25, 2019.

Following the announcement of our pending acquisition of Celgene, we also entered into forward starting interest rate swap option contracts (swaptions), with a total notional value of $7.6 billion, to hedge future interest rate risk associated with the anticipated issuance of long-term debt to fund the acquisition. The swaptions provide us with the right to enter into forward starting interest rate swap contracts for periods of 10 and 30 years through January 2020.

Additional regulations in the U.S. could be passed in the future including additional healthcare reform initiatives, further changes to tax laws, additional pricing laws and potential importation restrictions which may reduce our results of operations, operating cash flow, liquidity and financial flexibility. We continue to monitor the potential impact of the economic conditions in certain European and other countries and the related impact on prescription trends, pricing discounts and creditworthiness of our customers. We believe these economic conditions will not have a material impact on our liquidity, cash flow or financial flexibility.

The UK voted to depart from the EU during June 2016. Similar to other companies in our industry, certain regulatory, trade, labor and other aspects of our business will likely be affected over time. However, we currently do not believe that these matters and other related financial effects will have a material impact on our consolidated results of operations, financial position or liquidity. Our sales in the UK represent less than 3% of our consolidated revenues.

Credit Ratings

In January 2019, Moody's placed BMS under review for downgrade and Standard & Poor's placed BMS on CreditWatch with negative implications, each following the announcement to acquire Celgene. BMS's current long-term and short-term credit ratings assigned by Moody's Investors Service are A2 and Prime-1, respectively, and BMS's current long-term and short-term credit ratings assigned by Standard & Poor's are A+ and A-1+, respectively. The long-term ratings reflect the agencies' opinion that we have a low default risk but are somewhat susceptible to adverse effects of changes in circumstances and economic conditions. The short-term ratings reflect the agencies' opinion that we have good to extremely strong capacity for timely repayment. Any credit rating downgrade may affect the interest rate of any debt we may incur, the fair market value of existing debt and our ability to access the capital markets generally. The current long-term and short-term ratings do not reflect any impact from the proposed acquisition of Celgene.

Cash Flows

The following is a discussion of cash flow activities:

Dollars in Millions	2018	2017	2016
Cash flow provided by/(used in):			
Operating activities	**$ 5,940**	$ 5,275	$ 3,058
Investing activities	**(874)**	(66)	1,480
Financing activities	**(3,535)**	(4,077)	(2,653)

Operating Activities

Cash flow from operating activities represents the cash receipts and disbursements from all of our activities other than investing and financing activities. Operating cash flow is derived by adjusting net earnings for noncontrolling interest, non-cash operating items, gains and losses attributed to investing and financing activities and changes in operating assets and liabilities resulting from timing differences between the receipts and payments of cash and when the transactions are recognized in our results of operations. As a result, changes in cash from operating activities reflect the timing of cash collections from customers and alliance partners; payments to suppliers, alliance partners and employees; customer discounts and rebates; and tax payments in the ordinary course of business. For example, annual employee bonuses are typically paid in the first quarter of the subsequent year. In addition, cash collections continue to be impacted by longer payment terms for certain biologic products in the U.S., primarily our newer oncology products including *Opdivo*, *Yervoy* and *Empliciti* (90 days to 120 days). The longer payment terms are used to more closely align with the insurance reimbursement timing for physicians and cancer centers following administration to the patients.

The $700 million change in cash flow from operating activities compared to 2017 was primarily attributable to:

- Higher cash collections and timing of payments in the ordinary course of business of approximately $2.2 billion.

Partially offset by:

- Higher R&D licensing and collaboration payments of approximately $600 million primarily due to the Nektar transaction in 2018;
- Lower litigation settlement proceeds of approximately $500 million primarily due to the Merck settlement in 2017; and
- Lower out-license proceeds of approximately $400 million primarily due to the Biogen and Roche transactions in 2017.

The $2.2 billion change in cash flow from operating activities compared to 2016 was primarily attributable to:

- Higher cash collections and timing of payments in the ordinary course of business of approximately $400 million;
- Lower income tax payments of approximately $1.5 billion;
- Litigation settlement proceeds of approximately $500 million primarily due to the Merck settlement; and
- Out-licensing proceeds of $500 million primarily due to the Biogen and Roche transactions.

Partially offset by:

- Higher R&D licensing payments of approximately $400 million primarily due to the CytomX, Halozyme and Nitto Denko transactions; and
- Higher contributions to pension plans of approximately $300 million.

Investing Activities

Cash requirements from investing activities include cash used for acquisitions, manufacturing and facility-related capital expenditures and purchases of marketable securities with original maturities greater than 90 days at the time of purchase reduced by proceeds from business divestitures (including royalties) and the sale and maturity of marketable securities.

The $800 million change in cash flow from investing activities compared to 2017 was primarily attributable to:

- Lower net sales and maturities of marketable securities with maturities greater than 90 days of approximately $900 million; and
- Higher net acquisition and other payments of approximately $500 million primarily due to the purchase of 8.3 million shares of Nektar common stock in 2018.

Partially offset by:

- Higher business divestiture proceeds of approximately $500 million primarily due to the divestiture of manufacturing operations in Swords, Ireland and certain mature brands.

The $1.5 billion change in cash flow from investing activities compared to 2016 was primarily attributable to:

- Lower net sales of marketable securities with maturities greater than 90 days of approximately $700 million;
- Lower business divestiture proceeds of approximately $600 million primarily due to certain OTC brands and investigational HIV medicines businesses in 2016; and
- Higher asset acquisition payments of approximately $300 million primarily due to the acquisition of IFM in 2017.

Financing Activities

Cash requirements from financing activities include cash used to pay dividends, repurchase common stock and repay long-term debt and other borrowings reduced by proceeds from the exercise of stock options and issuance of long-term debt and other borrowings.

The $500 million change in cash flow from financing activities compared to 2017 was primarily attributable to:

- Lower repurchases of common stock of $2.1 billion primarily due to the accelerated share repurchase agreements in 2017.

Partially offset by:

- Lower net borrowings of $1.5 billion primarily due to the issuance of long-term debt used to repurchase common stock in 2017.

The $1.4 billion change in cash flow from financing activities compared to 2016 was primarily attributable to:

- Higher repurchase of common stock of $2.2 billion primarily due to the accelerated share repurchase agreements.

Partially offset by:

- Higher net borrowing activity of $900 million primarily to fund the repurchase of common stock.

Contractual Obligations and Off-Balance Sheet Arrangements

Payments due by period for our contractual obligations at December 31, 2018 were as follows:

	Obligations Expiring by Period						
Dollars in Millions	Total	2019	2020	2021	2022	2023	Later Years
Short-term borrowings	$ 454	$ 454	$ —	$ —	$ —	$ —	$ —
Long-term debt	6,776	1,250	—	—	750	817	3,959
Interest on long-term debt[(a)]	2,832	192	183	183	183	167	1,924
Operating leases	663	122	92	77	69	61	242
Purchase obligations	3,074	1,087	620	430	353	291	293
Uncertain tax positions[(b)]	72	72	—	—	—	—	—
Deemed repatriation transition tax	2,119	79	101	196	196	299	1,248
Total [(c)]	$ 15,990	$ 3,256	$ 996	$ 886	$ 1,551	$ 1,635	$ 7,666

(a) Includes estimated future interest payments and periodic cash settlements of derivatives.
(b) Includes only short-term uncertain tax benefits because of uncertainties regarding the timing of resolution.
(c) Excludes pension and other liabilities because of uncertainties regarding the timing of resolution.

In addition to the above, we are committed to an aggregated $14.0 billion of potential future research and development milestone payments to third parties for in-licensing, asset acquisitions and development programs including early-stage milestones of $5.5 billion (milestones achieved through Phase III clinical studies) and late-stage milestones of $8.5 billion (milestones achieved post Phase III clinical studies). Payments generally are due and payable only upon achievement of certain developmental and regulatory milestones for which the specific timing cannot be predicted. Some of these agreements also provide for sales-based milestones aggregating $4.4 billion that we would be obligated to pay to alliance partners upon achievement of certain sales levels in addition to royalties. We also have certain manufacturing, development and commercialization obligations in connection with alliance arrangements. It is not practicable to estimate the amount of these obligations. Refer to “Consolidated Financial Statements—Note 3. Alliances” for further information regarding our alliances. We do not have any off-balance sheet arrangements that are material or reasonably likely to become material to our financial condition or results of operations.

SEC Consent Order / FCPA Settlement

As previously disclosed, on August 4, 2004, we entered into a final settlement with the SEC, concluding an investigation concerning certain wholesaler inventory and accounting matters. The settlement was reached through a Consent, a copy of which was attached as Exhibit 10 to our quarterly report on Form 10-Q for the period ended September 30, 2004.

Under the terms of the Consent, we agreed, subject to certain defined exceptions, to limit sales of all products sold to our direct customers (including wholesalers, distributors, hospitals, retail outlets, pharmacies and government purchasers) based on expected demand or on amounts that do not exceed approximately one month of inventory on hand, without making a timely public disclosure of any change in practice. We also agreed in the Consent to certain measures that we have implemented including: (a) establishing a formal review and certification process of our annual and quarterly reports filed with the SEC; (b) establishing a business risk and disclosure group; (c) retaining an outside consultant to comprehensively study and help re-engineer our accounting and financial reporting processes; (d) publicly disclosing any sales incentives offered to direct customers for the purpose of inducing them to purchase products in excess of expected demand; and (e) ensuring that our budget process gives appropriate weight to inputs that come from the bottom to the top, and not just from the top to the bottom, and adequately documenting that process.

We have established a company-wide policy to limit our sales to direct customers for the purpose of complying with the Consent. This policy includes the adoption of various procedures to monitor and limit sales to direct customers in accordance with the terms of the Consent. These procedures include a governance process to escalate to appropriate management levels potential questions or concerns regarding compliance with the policy and timely resolution of such questions or concerns. In addition, compliance with the policy is monitored on a regular basis.

We maintain DSAs with our U.S. pharmaceutical wholesalers, which account for nearly 100% of our gross U.S. revenues. Under the current terms of the DSAs, our wholesaler customers provide us with weekly information with respect to months on hand product-level inventories and the amount of out-movement of products. The three largest wholesalers currently account for approximately 97% of our gross U.S. revenues. The inventory information received from our wholesalers, together with our internal information, is used to estimate months on hand product level inventories at these wholesalers. We estimate months on hand product inventory levels for our U.S. business's wholesaler customers other than the three largest wholesalers by extrapolating from the months on hand calculated for the three largest wholesalers. In contrast, our non-U.S. business has significantly more direct customers, limited information on direct customer product level inventory and corresponding out-movement information and the reliability of third-party demand information, where available, varies widely. Accordingly, we rely on a variety of methods to estimate months on hand product level inventories for these business units.

We believe the above-described procedures provide a reasonable basis to ensure compliance with the Consent.

Recently Issued Accounting Standards

For recently issued accounting standards, refer to "Consolidated Financial Statements—Note 1. Accounting Policies and Recently Issued Accounting Standards."

Critical Accounting Policies

The preparation of financial statements requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenue and expenses. Our critical accounting policies are those that significantly impact our financial condition and results of operations and require the most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Because of this uncertainty, actual results may vary from these estimates.

Revenue Recognition

Our accounting policy for revenue recognition has a substantial impact on reported results and relies on certain estimates. Revenue is recognized following a five-step model: (1) identify the customer contract; (2) identify the contract's performance obligation; (3) determine the transaction price; (4) allocate the transaction price to the performance obligation; and (5) recognize revenue when or as a performance obligation is satisfied. Revenue is also reduced for GTN sales adjustments discussed below, all of which involve significant estimates and judgment after considering legal interpretations of applicable laws and regulations, historical experience, payer channel mix (e.g. Medicare or Medicaid), current contract prices under applicable programs, unbilled claims and processing time lags and inventory levels in the distribution channel. Estimates are assessed each period and adjusted as required to revise information or actual experience.

GTN Adjustments

The following categories of GTN adjustments involve significant estimates, judgments and information obtained from external sources. Refer to "Consolidated Financial Statements—Note 2. Revenue." for further discussion and analysis of each significant category of GTN sales adjustments.

Charge-backs and cash discounts

Our U.S. business participates in programs with government entities, the most significant of which are the U.S. Department of Defense and the U.S. Department of Veterans Affairs, and other parties, including covered entities under the 340B Drug Pricing Program, whereby pricing on products is extended below wholesaler list price to participating entities. These entities purchase products through wholesalers at the lower program price and the wholesalers then charge us the difference between their acquisition cost and the lower program price. Accounts receivable is reduced for the estimated amount of unprocessed charge-back claims attributable to a sale (typically within a two to four week time lag).

In the U.S. and certain other countries, cash discounts are offered as an incentive for prompt payment, generally approximating 2% of the sales price. Accounts receivable is reduced for the estimated amount of unprocessed cash discounts (typically within a one month time lag).

Medicaid and Medicare rebates

Our U.S. business participates in state government Medicaid programs and other qualifying Federal and state government programs requiring discounts and rebates to participating state and local government entities. All discounts and rebates provided through these programs are included in our Medicaid rebate accrual. Medicaid rebates have also been extended to drugs used in managed Medicaid plans. The estimated amount of unpaid or unbilled rebates is presented as a liability.

Rebates and discounts are offered to managed healthcare organizations in the U.S. managing prescription drug programs and Medicare Advantage prescription drug plans covering the Medicare Part D drug benefit. We also pay a 50% point of service discount to the CMS when the Medicare Part D beneficiaries are in the coverage gap ("donut hole"). The estimated amount of unpaid or unbilled rebates and discounts is presented as a liability.

Other rebates, returns, discounts and adjustments

Other GTN sales adjustments include sales returns and all other programs based on applicable laws and regulations for individual non-U.S. countries as well as rebates offered to managed healthcare organizations in the U.S. to a lesser extent. The non-U.S. programs include several different pricing schemes such as cost caps, volume discounts, outcome-based pricing schemes and pricing claw-backs that are based on sales of individual companies or an aggregation of all companies participating in a specific market. The estimated amount of unpaid or unbilled rebates and discounts is presented as a liability.

Estimated returns for established products are determined after considering historical experience and other factors including levels of inventory in the distribution channel, estimated shelf life, product recalls, product discontinuances, price changes of competitive products, introductions of generic products, introductions of competitive new products and lower demand following the LOE. Estimated returns for new products are determined after considering historical sales return experience of similar products, such as those within the same product line, similar therapeutic area and/or similar distribution model and estimated levels of inventory in the distribution channel and projected demand. The estimated amount for product returns is presented as a liability.

Use of information from external sources

Information from external sources is used to estimate GTN adjustments. Our estimate of inventory at the wholesalers are based on the projected prescription demand-based sales for our products and historical inventory experience, as well as our analysis of third-party information, including written and oral information obtained from certain wholesalers with respect to their inventory levels and sell-through to customers and third-party market research data, and our internal information. The inventory information received from wholesalers is a product of their recordkeeping process and excludes inventory held by intermediaries to whom they sell, such as retailers and hospitals.

We have also continued the practice of combining retail and mail prescription volume on a retail-equivalent basis. We use this methodology for internal demand forecasts. We also use information from external sources to identify prescription trends, patient demand and average selling prices. Our estimates are subject to inherent limitations of estimates that rely on third-party information, as certain third-party information was itself in the form of estimates, and reflect other limitations including lags between the date as of which third-party information is generated and the date on which we receive third-party information.

Pension Benefits

Accounting for pension and postretirement benefit plans requires actuarial valuations based on significant assumptions for discount rates and expected long-term rates of return on plan assets. In consultation with our actuaries, these significant assumptions and others such as salary growth, retirement, turnover, lump sum election rates, healthcare trends and mortality rates are evaluated and selected based on expectations or actual experience during each remeasurement date. Pension expense could vary within a range of outcomes and have a material effect on reported earnings, projected benefit obligations and future cash funding. Actual results in any given year may differ from those estimated because of economic and other factors.

The yield on high quality corporate bonds that coincides with the cash flows of the plans' estimated payouts is used in determining the discount rate. The Citi Pension Discount curve is used for the U.S. plans. The present value of benefit obligations at December 31, 2018 for the U.S. pension plans was determined using a 4.1% discount rate. If the assumed discount rate used in determining the U.S. pension plans' projected benefit obligation at December 31, 2018 was reduced by an additional 1%, the projected benefit obligation would increase by approximately $500 million.

The expected long-term rate of return on plan assets is estimated considering expected returns for individual asset classes with input from external advisors. We also consider long-term historical returns including actual performance compared to benchmarks for similar investments. The Bristol-Myers Squibb Retirement Income Plan's pension expense for 2018 was determined using an average 6.6% expected long-term rate of return on plan assets. Other U.S. Plans' pension expense was determined using a 7.8% expected long-term rate of return on plan assets. If the expected long-term rate of return on plan assets used in determining the U.S. plans' pension expense for 2018 was reduced by 1%, such expense would increase by $42 million.

For a more detailed discussion on retirement benefits, refer to "Consolidated Financial Statements—Note 16. Retirement Benefits."

Long-lived Assets

Other Intangible Assets

Other intangible assets were $1.1 billion at December 31, 2018, including licenses ($192 million of which $84 million is allocated to unapproved products), developed technology rights ($501 million), capitalized software ($366 million) and IPRD ($32 million). Intangible assets are assessed for impairment whenever current facts or circumstances warrant a review, although IPRD is assessed at least annually. Intangible assets are highly vulnerable to impairment charges, particularly newly acquired assets for recently launched products or IPRD. These assets are initially measured at fair value and therefore any reduction in expectations used in the valuations could potentially lead to impairment. Some of the more common potential risks leading to impairment include competition, earlier than expected LOE, pricing pressures, adverse regulatory changes or clinical study results, delay or failure to obtain regulatory approval and additional development costs, inability to achieve expected synergies, higher operating costs, changes in tax laws and other macro-economic changes. The complexity in estimating the fair value of intangible assets in connection with an impairment test is similar to the initial valuation.

Property, Plant and Equipment

Property, plant and equipment is tested for impairment whenever current facts or circumstances require a review including whether it is more likely than not that the asset will be disposed of prior to its estimated remaining useful life. Additionally, these long-lived assets are periodically reviewed to determine if any change in facts or circumstances would result in a change to the estimated useful life of the asset, possibly resulting in the acceleration of depreciation. If such circumstances exist, an estimate of undiscounted future cash flows generated by the asset, or the appropriate grouping of assets, is compared to the carrying value to determine whether an impairment exists at its lowest level of identifiable cash flows. If an asset is determined to be impaired, the loss is measured based on the difference between the asset's fair value and its carrying value. Expectations of future cash flows are subject to change based upon the near and long-term production volumes and margins generated by the asset as well as any potential alternative future use. Accelerated depreciation, impairment and other related charges for certain manufacturing and R&D facilities were $137 million in 2018, $533 million in 2017 and $104 million in 2016. Additional charges will continue to occur as a result of the Company's restructuring actions announced in 2016.

Assets Held-for-Sale

The following criteria is considered before concluding assets are classified as held-for-sale; (1) management's commitment to a plan to sell, (2) availability for immediate sale in its present condition, (3) initiation of an active program to identify a buyer, (4) probability of a completed sale within one year, (5) actively marketed for sale at a reasonable price in relation to its current fair value, and (6) likelihood of significant changes to the plan will be made or that the plan will be withdrawn. If all of the criteria is met as of the balance sheet date, the assets and liabilities are presented separately in the balance sheet as held-for-sale at the lower of their carrying amount or fair value less costs to sell and are no longer depreciated or amortized while classified as held-for-sale. We have classified $479 million of assets and $152 million of liabilities as held-for-sale at December 31, 2018 which are related to the planned sale of the UPSA consumer health business, a division of BMS which manufactures and markets pain treatment and other OTC products for domestic sale in France and export sales outside of France.

Income Taxes

Valuation allowances are recognized to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. The assessment of whether or not a valuation allowance is required often requires significant judgment including long-range forecasts of future taxable income and evaluation of tax planning initiatives. Adjustments to the deferred tax valuation allowances are made to earnings in the period when such assessments are made. Our deferred tax assets were $2.1 billion at December 31, 2018 (net of valuation allowances of $3.2 billion) and $2.3 billion at December 31, 2017 (net of valuation allowances of $2.8 billion).

The U.S. Federal net operating loss carryforwards were $206 million at December 31, 2018. These carryforwards were acquired as a result of certain acquisitions and are subject to limitations under Section 382 of the Internal Revenue Code. The net operating loss carryforwards expire in varying amounts beginning in 2022. The foreign and state net operating loss carryforwards expired in varying amounts beginning in 2018 (certain amounts have unlimited lives).

As discussed more fully in "Consolidated Financial Statements—Note 7. Income Taxes", a provisional tax charge of $2.6 billion attributable to the one-time deemed repatriation transition tax on certain foreign earnings was recognized in the fourth quarter of 2017. The accounting for the reduction of deferred tax assets to the 21% tax rate was complete as of December 31, 2017, and the tax charge for the deemed repatriation transition tax is complete as of December 31, 2018. The provisional tax charge for the deemed repatriation transition tax was reduced by $56 million in 2018.

Prior to the Mead Johnson split-off in 2009, the following transactions occurred: (i) an internal spin-off of Mead Johnson shares while still owned by us; (ii) conversion of Mead Johnson Class B shares to Class A shares; and (iii) conversion of Mead Johnson & Company to a limited liability company. These transactions as well as the split-off of Mead Johnson through the exchange offer should qualify as tax-exempt transactions under the Internal Revenue Code based upon a private letter ruling received from the Internal Revenue Service related to the conversion of Mead Johnson Class B shares to Class A shares, and outside legal opinions.

Certain assumptions, representations and covenants by Mead Johnson were relied upon regarding the future conduct of its business and other matters which could affect the tax treatment of the exchange. For example, the current tax law generally creates a presumption that the exchange would be taxable to us, if Mead Johnson or its shareholders were to engage in transactions that result in a 50% or greater change in its stock ownership during a four year period beginning two years before the exchange offer, unless it is established that the exchange offer were not part of a plan or series of related transactions to effect such a change in ownership. If the internal spin-off or exchange offer were determined not to qualify as a tax exempt transaction, the transaction could be subject to tax as if the exchange was a taxable sale by us at market value.

In addition, a negative basis or excess loss account (ELA) existed in our investment in stock of Mead Johnson prior to these transactions. We received an opinion from outside legal counsel to the effect that it is more likely than not that we eliminated the ELA as part of these transactions and do not have taxable income with respect to the ELA. The tax law in this area is complex and it is possible that even if the internal spin-off and the exchange offer is tax exempt under the Internal Revenue Code, the IRS could assert that we have additional taxable income for the period with respect to the ELA. We could be exposed to additional taxes if this were to occur. Based upon our understanding of the Internal Revenue Code and opinion from outside legal counsel, a tax reserve of $244 million was established reducing the gain on disposal of Mead Johnson included in discontinued operations in 2009.

We agreed to certain tax related indemnities with Mead Johnson as set forth in the tax sharing agreement, including certain taxes related to its business prior to the completion of the IPO and created as part of the restructuring to facilitate the IPO. Mead Johnson has also agreed to indemnify us for potential tax effects resulting from the breach of certain representations discussed above as well as certain transactions related to the acquisition of Mead Johnson's stock or assets.

Liabilities are established for possible assessments by tax authorities resulting from known tax exposures including, but not limited to, transfer pricing matters, tax credits and deductibility of certain expenses. Such liabilities represent a reasonable provision for taxes ultimately expected to be paid and may need to be adjusted over time as more information becomes known.

For discussions on income taxes, refer to "Consolidated Financial Statements—Note 1. Accounting Policies and Recently Issued Accounting Standards—Income Taxes" and "—Note 7. Income Taxes."

Contingencies

In the normal course of business, we are subject to contingencies, such as legal proceedings and claims arising out of our business, that cover a wide range of matters, including, among others, government investigations, shareholder lawsuits, product and environmental liability, contractual claims and tax matters. We recognize accruals for such contingencies when it is probable that a liability will be incurred and the amount of the loss can be reasonably estimated. These estimates are subject to uncertainties that are difficult to predict and, as such, actual results could vary from these estimates.

For discussions on contingencies, refer to "Consolidated Financial Statements—Note 1. Accounting Policies and Recently Issued Accounting Standards—Contingencies," "—Note 7. Income Taxes" and "—Note 18. Legal Proceedings and Contingencies."

Product and Pipeline Developments

Our R&D programs are managed on a portfolio basis from early discovery through late-stage development and include a balance of early-stage and late-stage programs to support future growth. Our late stage R&D programs in Phase III development include both investigational compounds for initial indications and additional indications or formulations for marketed products. Spending on these programs represent approximately 35-45% of our annual R&D expenses in the last three years. *Opdivo* was the only investigational compound or marketed product that represented greater than 10% of our R&D expenses in the last three years. Our late-stage development programs could potentially have an impact on our revenue and earnings within the next few years if regulatory approvals are obtained and products are successfully commercialized. The following are the developments in our marketed products and our late-stage pipeline:

Product	Indication	Date	Developments
Opdivo	Melanoma	August 2018	Approval in Japan for treatment of adjuvant melanoma.
		July 2018	EC approval for the adjuvant treatment of adult patients with involvement of lymph nodes or metastatic disease who have undergone complete resection.
		June 2018	Announced results from the Phase III CheckMate-238 trial evaluating *Opdivo* versus *Yervoy* in patients with stage IIIB/C or stage IV melanoma who are at high risk of recurrence following complete surgical resection demonstrated statistically longer recurrence-free survival for *Opdivo*, the primary endpoint of the study, versus *Yervoy* at a minimum follow-up of 24 months across key subgroups, including disease stages and BRAF mutation status.
	Multiple Myeloma	June/August 2018	Announced in June 2018 that the FDA lifted a partial clinical hold placed on CheckMate-602, a randomized, open-label Phase III study evaluating the addition of *Opdivo* to pomalidomide and dexamethasone in patients with relapsed or refractory multiple myeloma. The decision follows consultation with the FDA and agreement on amendments to the study protocol. In August 2018, the Company discontinued further enrollment of this study following a futility analysis.
	NSCLC	June 2018	Approval in China for the treatment of locally advanced or metastatic NSCLC after prior platinum-based chemotherapy in adult patients without EGFR or ALK genomic tumor aberrations.
		April 2018	Announced that the pivotal, randomized Phase III CheckMate-078 trial evaluating *Opdivo* versus docetaxel in a predominantly Chinese population with previously treated advanced NSCLC demonstrated superior overall survival benefit in the primary endpoint regardless of PD-L1 expression or tumor histology.
	SCCHN	January 2019	Acceptance in China of sBLA filing for patients who had previously been treated for metastatic or recurrent SCCHN.
		April 2018	Announced two-year overall survival data from CheckMate-141, a Phase III study, evaluating *Opdivo* compared with investigator's choice chemotherapy (cetuximab, docetaxel or methotrexate) in patients with recurrent or metastatic SCCHN after failure on platinum-based therapy.
	SCLC	October 2018	Announced topline results from the Phase III CheckMate-331 study did not meet its primary endpoint of overall survival with *Opdivo* versus chemotherapy in patients with previously treated relapsed SCLC.
		August 2018	FDA approval as the first and only IO treatment option for patients with metastatic SCLC whose cancer has progressed after platinum-based chemotherapy and at least one other line of therapy.
	Various	August 2018	Approval in Japan for patients with MPM which has progressed after chemotherapy.
		August 2018	Approval in Japan of an every 2 week/30 minute infusion dose and administration schedule for *Opdivo* in six indications.
		June 2018	Announced preliminary data from the ongoing PIVOT Phase I/II Study, which is evaluating the combination of *Opdivo* with Nektar's investigational medicine, NKTR-214. The preliminary results presented at the 2018 American Society of Clinical Oncology reported safety, efficacy and biomarker data for patients enrolled in the Phase I dose-escalation stage of the study and for the first patients consecutively enrolled in select dose expansion cohorts in Phase II.
		April 2018	EC approval of an every four-week (Q4W) *Opdivo* dosing schedule of 480 mg infused over 60 minutes as an option for patients with advanced melanoma and previously treated RCC as well as the approval of a two-week *Opdivo* dosing option of 240 mg infused over 30 minutes to replace weight-based dosing for all six approved monotherapy indications in the EU.
		March 2018	FDA approval of the Company's sBLA to update *Opdivo* dosing to include 480 mg infused every four weeks for a majority of approved indications as well as a shorter 30 minute infusion across all approved indications.

Product	Indication	Date	Developments
Opdivo+Yervoy	CRC	October 2018	Announced new data from a cohort of the CheckMate-142 study in which *Opdivo* plus low-dose *Yervoy* demonstrated durable clinical benefit as a first-line treatment in patients with MSI-H or dMMR mCRC.
		July 2018	FDA approval of *Opdivo* plus low-dose *Yervoy* for the treatment of adult and pediatric patients 12 years and older with MSI-H or dMMR mCRC that has progressed following treatment with a fluoropyrimidine, oxaliplatin and irinotecan.
	mCRPC	February 2019	Announced results from an interim analysis of the Phase II CheckMate-650 trial evaluating *Opdivo+Yervoy* in patients with mCRPC showed that among 32 asymptomatic or minimally symptomatic patients whose disease had progressed after second-generation hormone therapy and who had not received chemotherapy (cohort 1), with a median follow-up of 11.9 months, the objective response rate was 25%. Additionally, among 30 patients whose disease progressed after taxane-based chemotherapy (cohort 2), with a median follow-up of 13.5 months, the objective response rate was 10%.
	Melanoma	October 2018	Announced four-year data from the Phase III CheckMate-067 clinical trial which continues to demonstrate durable, long-term survival benefits with the first-line combination of *Opdivo +Yervoy*, versus *Yervoy* alone, in patients with advanced melanoma.
		May 2018	Approval in Japan of *Opdivo+Yervoy* combination for chemotherapy-naive patients with unresectable melanoma.
	mUC	October 2018	Announced follow-up data evaluating *Opdivo* monotherapy and *Opdivo* in combination with *Yervoy* in patients with platinum-pretreated mUC. Results from the Phase I/II CheckMate-032 trial showed that patients who received the combination of *Opdivo*1 mg/kg plus *Yervoy* 3 mg/kg experienced a higher objective response rate compared to those who received *Opdivo* 3 mg/kg plus *Yervoy* 1 mg/kg or *Opdivo* alone.
	NSCLC	January 2019	Announced voluntary withdrawal of the Company's sBLA for the *Opdivo* plus low-dose *Yervoy* for treatment of first-line advanced NSCLC in patients with TMB greater than or equal to 10 mutations per megabase as data from CheckMate-227, Part 1a, will not be available within the PDUFA goal date of May 20, 2019.
		October 2018	Announced updates regarding regulatory actions by the CHMP in the EU for the ongoing review of its applications for an indication in metastatic first-line NSCLC with *Opdivo* plus low-dose *Yervoy* in patients with TMB greater than or equal to 10 mutations per megabase. The CHMP requested additional information from CheckMate-227, including an overall survival analysis of *Opdivo+Yervoy* in patients who have TMB less than 10 mutations per megabase.
		June 2018	Announced results from a part of the Phase III CheckMate-227 trial that evaluated *Opdivo* plus low-dose *Yervoy* and *Opdivo* plus chemotherapy versus chemotherapy in patients with first-line NSCLC with PD-L1 expression <1%, across squamous and non-squamous tumor histologies extended progression-free survival.
		May 2018	Announced the EMA validated a type II variation application for treatment in adult patients with first-line metastatic NSCLC who have TMB greater than or equal to 10 mutations per megabase.
	RCC	February 2019	Announced new results from the Phase III CheckMate-214 study, showing that therapy with *Opdivo* plus low-dose *Yervoy* continued to demonstrate long-term survival benefits in patients with previously untreated advanced or metastatic RCC.
		January 2019	Announced the EC approval of *Opdivo* plus low-dose *Yervoy* for previously untreated patients with intermediate and poor-risk advanced RCC.
		August 2018	Approval in Japan of *Opdivo* plus low-dose *Yervoy* for the treatment of unresectable or metastatic RCC.
		June 2018	Announced patient-reported outcomes data from the Phase III CheckMate-214 trial in intermediate- and poor-risk patients with advanced RCC treated with *Opdivo* plus low-dose *Yervoy* versus sunitinib over a two-year follow-up period reported significant and sustained health-related quality of life improvements.
		April 2018	FDA approval of *Opdivo+Yervoy* combination for previously untreated patients with intermediate and poor-risk advanced RCC.
	SCLC	November 2018	Announced patient-reported outcomes from the Phase III CheckMate-451 study did not meet its primary endpoint of overall survival with *Opdivo+Yervoy* versus placebo as a maintenance therapy in patients with extensive-stage SCLC after completion of first-line platinum-based chemotherapy.
Eliquis	NVAF	November 2018	Announced findings from the largest real-world data analysis of NVAF patient populations aged 80 and older receiving direct oral anticoagulants showing that *Eliquis* is associated with lower rates of stroke or systemic embolism and major bleeding than rivaroxaban or dabigatran.

Product	Indication	Date	Developments
Orencia	JIA	January 2019	Received a positive CHMP opinion for polyarticular JIA via subcutaneous injection in pediatric patients down to two years of age.
Empliciti	RRMM	November 2018	FDA approval of *Empliciti* injection for intravenous use in combination with pomalidomide and dexamethasone for the treatment of adult patients with multiple myeloma who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor.
		September 2018	Announced the EMA has validated the Company's type II variation application for *Empliciti* in combination with pomalidomide and low-dose dexamethasone for the treatment of adult patients with multiple myeloma who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor (PI), and have demonstrated disease progression on the last therapy.
Sprycel	ALL	February 2019	Announced EC approval of *Sprycel*, in both tablet and powder for oral suspension formulations, in combination with chemotherapy for the treatment of pediatric patients with newly diagnosed Philadelphia chromosome-positive ALL.
		December 2018	FDA expanded the indication for *Sprycel* to include the treatment of pediatric patients one year of age and older with newly diagnosed Philadelphia chromosome-positive ALL in combination with chemotherapy.
	CML	July 2018	EC expanded the indication for *Sprycel* to include the treatment of children and adolescents aged 1 year to 18 years with chronic phase Philadelphia chromosome positive CML and to include a powder for oral suspension.
Yervoy	Melanoma	January 2018	EC approval of advanced (unresectable or metastatic) melanoma in pediatric patients 12 years of age and older.
TYK2 Inhibitor	Psoriasis	September 2018	Announced results from a Phase II study of BMS-986165, an oral, selective TYK2 inhibitor which delivered significant skin clearance in patients with moderate to severe plaque psoriasis.

Special Note Regarding Forward-Looking Statements

This 2018 Form 10-K (including documents incorporated by reference) and other written and oral statements we make from time to time contain certain "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act. You can identify these forward-looking statements by the fact they use words such as "should," "could," "expect," "anticipate," "estimate," "target," "may," "project," "guidance," "intend," "plan," "believe," "will" and other words and terms of similar meaning and expression in connection with any discussion of future operating or financial performance. One can also identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. Such forward-looking statements are based on historical performance and current expectations and projections about our future financial results, goals, plans and objectives and involve inherent risks, assumptions and uncertainties, including internal or external factors that could delay, divert or change any of them in the next several years, and could cause our future financial results, goals, plans and objectives to differ materially from those expressed in, or implied by, the statements. These statements are likely to relate to, among other things, our goals, plans and objectives regarding our financial position, results of operations, cash flows, market position, product development, product approvals, sales efforts, expenses, performance or results of current and anticipated products, our pending acquisition of Celgene and the outcome of contingencies such as legal proceedings and financial results. No forward-looking statement can be guaranteed. We have included important factors in the cautionary statements included in our most recently filed 2018 Form 10-K, particularly under "Item 1A. Risk Factors," that we believe could cause actual results to differ materially from any forward-looking statement.

Although we believe we have been prudent in our plans and assumptions, no assurance can be given that any goal or plan set forth in forward-looking statements can be achieved and readers are cautioned not to place undue reliance on such statements, which speak only as of the date made. Additional risks that we may currently deem immaterial or that are not presently known to us could also cause the forward-looking events discussed in this 2018 Form 10-K not to occur. Except as otherwise required by federal securities law, we undertake no obligation to release publicly any updates or revisions to any forward-looking statements as a result of new information, future events, changed circumstances or otherwise after the date of this 2018 Form 10-K.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are exposed to market risk resulting from changes in currency exchange rates and interest rates. Certain derivative financial instruments are used when available on a cost-effective basis to hedge our underlying economic exposure. All of our financial instruments, including derivatives, are subject to counterparty credit risk considered as part of the overall fair value measurement. Derivative financial instruments are not used for trading purposes.

Foreign Exchange Risk

Significant amounts of our revenues, earnings and cash flow are exposed to changes in foreign currency rates. Our primary net foreign currency translation exposures are the euro and Japanese yen. Foreign currency forward contracts are used to manage risk primarily arising from certain intercompany purchases and sales transactions; we are also exposed to foreign exchange transaction risk arising from non-functional currency denominated assets and liabilities and earnings denominated in non-U.S. dollar currencies. Foreign currency forward contracts are used to offset these exposures but are not designated as hedges.

We estimate that a 10% appreciation in the underlying currencies being hedged from their levels against the U.S. dollar (with all other variables held constant) would decrease the fair value of foreign exchange forward contracts by $231 million and $175 million at December 31, 2018 and December 31, 2017, respectively, reducing earnings over the remaining life of the contracts.

We are also exposed to translation risk on non-U.S. dollar-denominated net assets. Non-U.S. dollar borrowings are used to hedge the foreign currency exposures of our net investment in certain foreign affiliates and are designated as hedges of net investments. The effective portion of foreign exchange gains or losses on these hedges is included in the foreign currency translation component of Accumulated other comprehensive loss. If our net investment decreases below the equivalent value of the non-U.S. debt borrowings, the change in the remeasurement basis of the debt would be subject to recognition in income as changes occur. For additional information, refer to “Consolidated Financial Statements—Note 9. Financial Instruments and Fair Value Measurements.”

Interest Rate Risk

We use fixed-to-floating interest rate swap contracts designated as fair value hedges to provide an appropriate balance of fixed and floating rate debt. We use cross-currency interest rate swap contracts designated to hedge the Company's net investment in its Japan subsidiary. The fair values of these contracts as well as our marketable debt securities are analyzed at year-end to determine their sensitivity to interest rate changes. In this sensitivity analysis, if there were a 100 basis point increase in short-term or long-term interest rates as of December 31, 2018 and December 31, 2017, the expected adverse impact on our earnings would not be material.

We estimate that an increase of 100 basis points in long-term interest rates at December 31, 2018 and December 31, 2017 would decrease the fair value of long-term debt by $482 million and $569 million, respectively.

Credit Risk

We monitor our investments with counterparties with the objective of minimizing concentrations of credit risk. Our investment policy is to invest only in institutions that meet high credit quality standards and establishes limits on the amount and time to maturity of investments with any individual counterparty. The policy also requires that investments are only entered into with corporate and financial institutions that meet high credit quality standards.

The use of derivative instruments exposes us to credit risk if the counterparty fails to perform when the fair value of a derivative instrument contract is positive. If the counterparty fails to perform, collateral is not required by any party whether derivatives are in an asset or liability position. We have a policy of diversifying derivatives with counterparties to mitigate the overall risk of counterparty defaults. For additional information, refer to “Consolidated Financial Statements—Note 9. Financial Instruments and Fair Value Measurements.”

CONSOLIDATED STATEMENTS OF EARNINGS

Dollars in Millions, Except Per Share Data

	Year Ended December 31,		
EARNINGS	**2018**	2017	2016
Net product sales	**$ 21,581**	$ 19,258	$ 17,702
Alliance and other revenues	**980**	1,518	1,725
Total Revenues	**22,561**	20,776	19,427
Cost of products sold	**6,547**	6,094	4,969
Marketing, selling and administrative	**4,551**	4,751	4,979
Research and development	**6,345**	6,482	5,012
Other income (net)	**(850)**	(1,682)	(1,448)
Total Expenses	**16,593**	15,645	13,512
Earnings Before Income Taxes	**5,968**	5,131	5,915
Provision for Income Taxes	**1,021**	4,156	1,408
Net Earnings	**4,947**	975	4,507
Noncontrolling Interest	**27**	(32)	50
Net Earnings Attributable to BMS	**$ 4,920**	$ 1,007	$ 4,457
Earnings per Common Share			
Basic	**$ 3.01**	$ 0.61	$ 2.67
Diluted	**3.01**	0.61	2.65

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Dollars in Millions

	Year Ended December 31,		
COMPREHENSIVE INCOME	**2018**	2017	2016
Net Earnings	**$ 4,947**	$ 975	$ 4,507
Other Comprehensive (Loss)/Income, net of taxes and reclassifications to earnings:			
Derivatives qualifying as cash flow hedges	**70**	(57)	4
Pension and postretirement benefits	**53**	214	(17)
Available-for-sale securities	**(25)**	39	16
Foreign currency translation	**(254)**	18	(38)
Total Other Comprehensive (Loss)/Income	**(156)**	214	(35)
Comprehensive Income	**4,791**	1,189	4,472
Comprehensive Income/(Loss) Attributable to Noncontrolling Interest	**27**	(32)	50
Comprehensive Income Attributable to BMS	**$ 4,764**	$ 1,221	$ 4,422

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

CONSOLIDATED BALANCE SHEETS

Dollars in Millions, Except Share and Per Share Data

	December 31,	
ASSETS	**2018**	2017
Current Assets:		
Cash and cash equivalents	**$ 6,911**	$ 5,421
Marketable securities	**1,973**	1,391
Receivables	**5,965**	6,300
Inventories	**1,195**	1,166
Prepaid expenses and other	**1,116**	576
Total Current Assets	**17,160**	14,854
Property, plant and equipment	**5,027**	5,001
Goodwill	**6,538**	6,863
Other intangible assets	**1,091**	1,210
Deferred income taxes	**1,371**	1,610
Marketable securities	**1,775**	2,480
Other assets	**2,024**	1,533
Total Assets	**$ 34,986**	$ 33,551
LIABILITIES		
Current Liabilities:		
Short-term debt obligations	**$ 1,703**	$ 987
Accounts payable	**1,892**	2,248
Accrued liabilities	**6,489**	6,014
Deferred income	**172**	83
Income taxes payable	**398**	231
Total Current Liabilities	**10,654**	9,563
Deferred income	**468**	454
Income taxes payable	**3,043**	3,548
Pension and other liabilities	**1,048**	1,164
Long-term debt	**5,646**	6,975
Total Liabilities	**20,859**	21,704
Commitments and contingencies		
EQUITY		
Bristol-Myers Squibb Company Shareholders' Equity:		
Preferred stock, $2 convertible series, par value $1 per share: Authorized 10 million shares; issued and outstanding 3,590 in 2018 and 4,070 in 2017, liquidation value of $50 per share	**—**	—
Common stock, par value of $0.10 per share: Authorized 4.5 billion shares; 2.2 billion issued in both 2018 and 2017	**221**	221
Capital in excess of par value of stock	**2,081**	1,898
Accumulated other comprehensive loss	**(2,762)**	(2,289)
Retained earnings	**34,065**	31,160
Less cost of treasury stock — 576 million common shares in 2018 and 575 million common shares in 2017	**(19,574)**	(19,249)
Total Bristol-Myers Squibb Company Shareholders' Equity	**14,031**	11,741
Noncontrolling interest	**96**	106
Total Equity	**14,127**	11,847
Total Liabilities and Equity	**$ 34,986**	$ 33,551

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

Dollars in Millions

	Year Ended December 31,		
	2018	2017	2016
Cash Flows From Operating Activities:			
Net earnings	$ 4,947	$ 975	$ 4,507
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization, net	637	789	382
Deferred income taxes	86	1,010	(204)
Stock-based compensation	221	199	205
Impairment charges	126	327	63
Pension settlements and amortization	186	236	169
Divestiture gains and royalties	(992)	(706)	(1,187)
Asset acquisition charges	85	760	274
Loss/(gain) on equity investments	512	(23)	37
Other adjustments	(44)	120	(36)
Changes in operating assets and liabilities:			
Receivables	(429)	(431)	(803)
Inventories	(216)	(29)	(152)
Accounts payable	(59)	320	104
Deferred income	84	(642)	(64)
Income taxes payable	162	2,597	(453)
Other	634	(227)	216
Net Cash Provided by Operating Activities	5,940	5,275	3,058
Cash Flows From Investing Activities:			
Sale and maturities of marketable securities	2,379	6,412	4,809
Purchase of marketable securities	(2,305)	(5,437)	(3,089)
Capital expenditures	(951)	(1,055)	(1,215)
Divestiture and other proceeds	1,249	722	1,334
Acquisition and other payments	(1,246)	(708)	(359)
Net Cash (Used in)/Provided by Investing Activities	(874)	(66)	1,480
Cash Flows From Financing Activities:			
Short-term debt obligations, net	(543)	727	125
Issuance of long-term debt	—	1,488	—
Repayment of long-term debt	(5)	(1,224)	(15)
Repurchase of common stock	(320)	(2,469)	(231)
Dividends	(2,613)	(2,577)	(2,547)
Other	(54)	(22)	15
Net Cash Used in Financing Activities	(3,535)	(4,077)	(2,653)
Effect of Exchange Rates on Cash and Cash Equivalents	(41)	52	(33)
Increase in Cash and Cash Equivalents	1,490	1,184	1,852
Cash and Cash Equivalents at Beginning of Year	5,421	4,237	2,385
Cash and Cash Equivalents at End of Year	$ 6,911	$ 5,421	$ 4,237

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

Note 1. ACCOUNTING POLICIES AND RECENTLY ISSUED ACCOUNTING STANDARDS

Basis of Consolidation

The consolidated financial statements are prepared in conformity with U.S. GAAP, including the accounts of Bristol-Myers Squibb Company and all of its controlled majority-owned subsidiaries and certain variable interest entities. All intercompany balances and transactions are eliminated. Material subsequent events are evaluated and disclosed through the report issuance date. Refer to the Summary of Abbreviated Terms at the end of this 2018 Form 10-K for terms used throughout the document.

Alliance and license arrangements are assessed to determine whether the terms provide economic or other control over the entity requiring consolidation of an entity. Entities controlled by means other than a majority voting interest are referred to as variable interest entities and are consolidated when BMS has both the power to direct the activities of the variable interest entity that most significantly impacts its economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the entity.

Business Segment Information

BMS operates in a single segment engaged in the discovery, development, licensing, manufacturing, marketing, distribution and sale of innovative medicines that help patients prevail over serious diseases. A global research and development organization and supply chain organization are responsible for the discovery, development, manufacturing and supply of products. Regional commercial organizations market, distribute and sell the products. The business is also supported by global corporate staff functions. The determination of a single segment is consistent with the financial information regularly reviewed by the chief executive officer for purposes of evaluating performance, allocating resources, setting incentive compensation targets, and planning and forecasting future periods. For further information on product and regional revenue, see "—Note 2. Revenue."

Use of Estimates and Judgments

The preparation of financial statements requires the use of management estimates, judgments and assumptions. The most significant assumptions are estimates in determining the fair value and potential impairment of intangible assets; sales rebate and return accruals; legal contingencies; income taxes; and pension and postretirement benefits. Actual results may differ from estimated results.

Reclassifications

Certain prior period amounts were reclassified to conform to the current period presentation. Loss/(gain) on equity investments previously presented in Impairment charges and Other adjustments in the consolidated statements of cash flows is now presented separately.

Revenue Recognition

Effective January 1, 2018, we adopted ASC 606 using the modified retrospective method. Refer to "—Note 2. Revenue" for a detailed discussion of accounting policies related to revenue recognition, including deferred revenue and royalties. Refer to "—Note 3. Alliances" for further detail regarding alliances.

Income Taxes

The provision for income taxes includes income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax basis of assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recognized to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. The assessment of whether or not a valuation allowance is required often requires significant judgment including the long-range forecast of future taxable income and the evaluation of tax planning initiatives. Adjustments to the deferred tax valuation allowances are made to earnings in the period when such assessments are made.

Tax benefits are recognized from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefit recognized in the financial statements for a particular tax position is based on the largest benefit that is more likely than not to be realized upon settlement.

Cash and Cash Equivalents

Cash and cash equivalents include bank deposits, time deposits, commercial paper and money market funds. Cash equivalents consist of highly liquid investments with original maturities of three months or less at the time of purchase and are recognized at cost, which approximates fair value.

Marketable Debt Securities

Marketable debt securities are classified as “available-for-sale” on the date of purchase and reported at fair value. Fair value is determined based on observable market quotes or valuation models using assessments of counterparty credit worthiness, credit default risk or underlying security and overall capital market liquidity. Marketable debt securities are reviewed for impairment by assessing if the decline in market value of the investment below the carrying value is other than temporary, which considers the intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in market value, the duration and extent that the market value has been less than cost and the investee's financial condition.

Investments in Equity Securities

Investments in equity securities with readily determinable fair values are recorded at fair value with changes in fair value recorded in Other income (net). Investments in equity securities without readily determinable fair values are recorded at cost minus any impairment, plus or minus changes in their estimated fair value resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. Changes in the estimated fair value of investments in equity securities without readily determinable fair values are recorded in Other income (net). Investments in 50% or less owned companies are accounted for using the equity method of accounting when the ability to exercise significant influence over the operating and financial decisions of the investee is maintained. The share of net income or losses of equity investments accounted for using the equity method are included in Other income (net). Investments in equity securities without readily determinable fair values and investments in equity accounted for using the equity method are assessed for potential impairment on a quarterly basis based on qualitative factors.

Inventory Valuation

Inventories are stated at the lower of average cost or market.

Property, Plant and Equipment and Depreciation

Expenditures for additions, renewals and improvements are capitalized at cost. Depreciation is computed on a straight-line method based on the estimated useful lives of the related assets ranging from 20 to 50 years for buildings and 3 to 20 years for machinery, equipment and fixtures.

Current facts or circumstances are periodically evaluated to determine if the carrying value of depreciable assets to be held and used may not be recoverable. If such circumstances exist, an estimate of undiscounted future cash flows generated by the long-lived asset, or appropriate grouping of assets, is compared to the carrying value to determine whether an impairment exists at its lowest level of identifiable cash flows. If an asset is determined to be impaired, the loss is measured based on the difference between the asset’s fair value and its carrying value. An estimate of the asset’s fair value is based on quoted market prices in active markets, if available. If quoted market prices are not available, the estimate of fair value is based on various valuation techniques using unobservable fair value inputs, such as a discounted value of estimated future cash flows.

Capitalized Software

Eligible costs to obtain internal use software are capitalized and amortized over the estimated useful life of the software.

Acquisitions

Businesses acquired are consolidated upon obtaining control. The fair value of assets acquired and liabilities assumed are recognized at the date of acquisition. Any excess of the purchase price over the estimated fair values of the net assets acquired is recognized as goodwill. Business acquisition costs are expensed when incurred. Contingent consideration from potential development, regulatory, approval and sales-based milestones and sales-based royalties are included in the purchase price for business combinations and are excluded for asset acquisitions. Amounts allocated to the lead investigational compounds for asset acquisitions are expensed at the date of acquisition.

Goodwill, Acquired In-Process Research and Development and Other Intangible Assets

The fair value of acquired intangible assets is typically determined using an income-based approach referred to as the excess earnings method utilizing Level 3 fair value inputs. The market participant valuations assume a global view considering all potential jurisdictions and indications based on discounted after-tax cash flow projections, risk adjusted for estimated probability of technical and regulatory success (for IPRD).

Finite-lived intangible assets, including licenses, developed technology rights and IPRD projects that reach commercialization are amortized on a straight-line basis over their estimated useful life. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows.

Goodwill is tested at least annually for impairment by assessing qualitative factors or performing a quantitative analysis in determining whether it is more likely than not that the fair value of net assets are below their carrying amounts. Examples of qualitative factors assessed include our share price, financial performance compared to budgets, long-term financial plans, macroeconomic, industry and market conditions as well as the substantial excess of fair value over the carrying value of net assets from the annual impairment test performed in a prior year. Each relevant factor is assessed both individually and in the aggregate.

IPRD is tested for impairment on an annual basis and more frequently if events occur or circumstances change that would indicate a potential reduction in the fair values of the assets below their carrying value. Impairment charges are recognized to the extent the carrying value of IPRD is determined to exceed its fair value.

Finite-lived intangible assets are tested for impairment when facts or circumstances suggest that the carrying value of the asset may not be recoverable. If the carrying value exceeds the projected undiscounted pretax cash flows of the intangible asset, an impairment loss equal to the excess of the carrying value over the estimated fair value (discounted after-tax cash flows) is recognized.

Restructuring

Restructuring charges are recognized as a result of actions to streamline operations and reduce the number of facilities. Estimating the impact of restructuring plans, including future termination benefits and other exit costs requires judgment. Actual results could vary from these estimates.

Contingencies

Loss contingencies from legal proceedings and claims may occur from government investigations, shareholder lawsuits, product and environmental liability, contractual claims, tax and other matters. Accruals are recognized when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. Gain contingencies (including contingent proceeds related to the divestitures) are not recognized until realized. Legal fees are expensed as incurred.

Advertising and Product Promotion Costs

Advertising and product promotion costs are expensed as incurred. Advertising and product promotion costs are included in Marketing, selling and administrative expenses and were $672 million in 2018, $740 million in 2017 and $789 million in 2016.

Foreign Currency Translation

Foreign subsidiary earnings are translated into U.S. dollars using average exchange rates. The net assets of foreign subsidiaries are translated into U.S. dollars using current exchange rates. The U.S. dollar effects that arise from translating the net assets of these subsidiaries at changing rates are recognized in Other Comprehensive (Loss)/Income.

Research and Development

Research and development costs are expensed as incurred. Clinical study costs are accrued over the service periods specified in the contracts and adjusted as necessary based upon an ongoing review of the level of effort and costs actually incurred. Research and development costs are presented net of reimbursements from alliance partners. Upfront and contingent development milestone payments for asset acquisitions of investigational compounds are also included in research and development expense if there are no alternative future uses.

Cash Flow

Payments for licensing and asset acquisitions of investigational compounds are included in operating activities as well as out-licensing proceeds. Payments for the acquisition of an ownership interest in a legal entity, including acquisitions that do not meet the accounting definition of a business are included in investing activities, as well as divestiture proceeds, royalties and other consideration received subsequent to the related sale of the asset or business. Other adjustments reflected in operating activities include divestiture gains and losses and related royalties, asset acquisition charges, gains and losses on equity investments and gains and losses on debt redemption.

Recently Adopted Accounting Standards

Revenue from Contracts with Customers

Amended guidance for revenue recognition was adopted in the first quarter of 2018 using the modified retrospective method with the cumulative effect of the change recognized in Retained earnings. The new guidance, referred to as ASC 606, requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers and replaces most of the existing revenue recognition standards in U.S. GAAP. A five-step model is utilized to achieve the core principle: (1) identify the customer contract; (2) identify the contract's performance obligation; (3) determine the transaction price; (4) allocate the transaction price to the performance obligation; and (5) recognize revenue when or as a performance obligation is satisfied.

The timing of recognizing revenue for typical net product sales to our customers did not significantly change. However, transaction prices are no longer required to be fixed or determinable and certain variable consideration might be recognized prior to the occurrence or resolution of the contingent event. As a result, certain revenue previously deferred under the prior standard because the transaction price was not fixed or determinable is now accounted for as variable consideration and might be recognized earlier provided such terms are sufficient to reliably estimate the ultimate price expected to be realized.

Estimated future royalties and contingent fees related to certain arrangements are now recognized prior to the third party sale or event occurring to the extent it is probable that a significant reversal in the amount of estimated cumulative revenue will not occur. The new guidance pertaining to the separation of licensing rights and related fee recognition did not significantly change the timing of recognizing revenue in our existing alliance arrangements that are currently generating revenue. The timing of royalties, sales-based milestones and other forms of contingent consideration resulting from the divestiture of businesses as well as royalties and sales-based milestones from licensing arrangements did not change.

The cumulative effect of the accounting change resulted in recognizing contract assets of $214 million and a $168 million increase in Retained earnings net of tax. The cumulative effect was primarily attributed to royalties and licensing rights reacquired by alliance partners that are expected to be received in the future and are not eligible for the licensing exclusion. As a result of the new guidance and cumulative effect adjustment, revenue was approximately $197 million lower in 2018, compared to what would have been reported under the previous guidance. Refer to "—Note 2. Revenue" for further information.

Gains and Losses from the Derecognition of Nonfinancial Assets

Amended guidance for gains and losses from the derecognition of nonfinancial assets (ASC 610) was adopted in the first quarter of 2018 using the modified retrospective method. The amendments clarify the scope of asset derecognition guidance, add guidance for partial sales of nonfinancial assets and clarify recognizing gains and losses from the transfer of nonfinancial assets in contracts with noncustomers. Certain transactions such as the sale or transfer of product rights that do not constitute a business will require accounting similar to ASC 606 including the potential recognition of variable consideration. The amended guidance may result in earlier recognition of variable consideration depending on the facts and circumstances of each transaction.

The cumulative effect of the accounting change resulted in recognizing contract assets of $167 million and a $130 million increase in Retained earnings net of tax. The cumulative effect was primarily attributed to royalties and termination fees for licensing rights reacquired by third parties that are expected to be received in the future and are not eligible for the licensing exclusion. As a result of the new guidance and cumulative effect adjustment, Other income (net) was approximately $140 million lower in 2018, compared to what would have been reported under the previous guidance.

Presentation of Net Periodic Pension and Postretirement Benefits

Amended guidance requiring all net periodic benefit components for defined benefit pension and other postretirement plans other than service costs to be recorded outside of income from operations (other income) was adopted in the first quarter of 2018 on a retrospective basis. Cost of products sold; Marketing, selling and administrative; and Research and development expenses increased in the aggregate with a corresponding offset in Other income (net).

As adjusted amounts upon adoption of the new guidance are as follows:

	Year Ended December 31,			
	2017		2016	
Dollars in Millions	As Reported	As Adjusted	As Reported	As Adjusted
Cost of products sold	$ 6,066	$ 6,094	$ 4,946	$ 4,969
Marketing, selling and administrative	4,687	4,751	4,911	4,979
Research and development	6,411	6,482	4,940	5,012
Other income (net)	(1,519)	(1,682)	(1,285)	(1,448)

Definition of a Business

Amended guidance that revises the definition of a business was adopted prospectively in the first quarter of 2018. The amendments provide an initial screen that when substantially all of the fair value of the gross assets acquired or disposed of is concentrated in a single identifiable asset or a group of similar identifiable assets, an integrated set of assets and activities would not represent a business. If the screen is not met, the set must include an input and a substantive process that together significantly contribute to the ability to create outputs for the set to represent a business. The amendment also narrows the definition of the term "output" and requires the transfer of an organized work force when outputs do not exist. The amended guidance may result in more transactions being accounted for as assets in the future with the impact to our results of operations dependent on the individual facts and circumstances of each transaction.

Recognition and Measurement of Financial Assets and Liabilities

Amended guidance for the recognition, measurement, presentation and disclosures of financial instruments was adopted using the modified retrospective method in the first quarter of 2018. The new guidance requires that fair value adjustments for equity investments with readily determinable fair values be reported through earnings. The new guidance also requires a qualitative impairment assessment for equity investments without a readily determinable fair value based upon observable price changes and a charge through earnings if an impairment exists. The cumulative effect of the accounting change resulted in a $36 million reduction to Other Comprehensive (Loss)/Income and a corresponding $34 million increase to Retained earnings, net of tax. Refer to "—Note 5. Other Income (Net)" for further information and the impact on the results of operations.

Accounting for Hedging Activities

Amended guidance for derivatives and hedging was adopted using the modified retrospective method in the first quarter of 2018. The amended guidance revises and expands items eligible for hedge accounting, simplifies hedge effectiveness testing and changes the timing of recognition and presentation for certain hedged items. Certain disclosure requirements were also modified for hedging activities on a prospective basis. The adoption of the amended standard did not have a material impact on the Company's results of operations.

Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income

Amended guidance for the reclassification of certain tax effects from accumulated other comprehensive income was adopted prospectively in the fourth quarter of 2018. The new guidance permits the reclassification of the income tax effect on amounts recorded within accumulated other comprehensive income impacted by the Tax Cuts and Jobs Act into Retained earnings. The Company recorded a cumulative effect adjustment to increase Accumulated other comprehensive loss by $283 million with a corresponding increase to Retained earnings.

Collaborative Arrangements

Amended guidance clarifying the interaction between ASC 606, *Revenue from Contracts with Customers*, and ASC 808, *Collaborative Arrangements*, was adopted retrospectively to the first quarter of 2018. The amended guidance clarifies when certain transactions between collaborative arrangement participants should be accounted for and presented as revenue under ASC 606. The adoption of the amended guidance did not have an impact on the Company's results of operations.

Recently Issued Accounting Standards Not Yet Adopted

Leases

In February 2016, the FASB issued amended guidance on lease accounting. The amended guidance requires the recognition of a right-of-use asset and a lease liability, initially measured at the present value of future lease payments for leases with a term longer than 12 months. The amended guidance will be adopted on January 1, 2019, on a modified retrospective approach. The Company's assessment of the amended guidance is substantially complete, including our implementation of a leasing software system procured from a third party vendor, our gathering of lease information data, our assessment of the reasonable certainty of exercising renewal and termination options, and our evaluation of changes and enhancements to processes and internal controls. Based on our assessment, we intend to elect the package of practical expedients on adoption, apply the short-term lease recognition exemption for leases with terms of 12 months or less that do not include an option to purchase the underlying asset that we are reasonably certain to exercise, and apply a portfolio approach to discount our real property lease liabilities using the Company's incremental borrowing rate, as most real property leases do not provide an implicit rate. Lease terms vary based on the nature of operations and the market dynamics in each country; however, all leased facilities are classified as operating leases with remaining lease terms between 1 and 20 years, and comprise approximately 90% of our total lease obligation, the discounted value of which is approximately $600 million as of December 31, 2018. The amended guidance is not expected to materially impact the Company’s results of operations other than the recognition of the right-of-use asset and lease liability. Sublease income is not material to the Company's results of operations. The cumulative effect of the accounting change is not expected to be material to the Company's results of operations.

Financial Instruments - Measurement of Credit Losses

In June 2016, the FASB issued amended guidance for the measurement of credit losses on financial instruments. Entities will be required to use a forward-looking estimated loss model. Available-for-sale debt security credit losses will be recognized as allowances rather than a reduction in amortized cost. The guidance is effective January 1, 2020 with early adoption permitted in 2019 on a modified retrospective approach. The amended guidance is not expected to materially impact the Company’s results of operations.

Goodwill Impairment Testing

In January 2017, the FASB issued amended guidance that simplifies the recognition and measurement of a goodwill impairment loss by eliminating Step 2 of the quantitative impairment test. As a result, impairment charges will be required for the amount by which the reporting units carrying amount exceeds its fair value up to the amount of its allocated goodwill. The guidance is effective on a prospective basis on January 1, 2020, with early adoption permitted for interim or annual goodwill impairment tests performed after January 1, 2017. The amended guidance is not expected to materially impact the Company’s results of operations.

Note 2. REVENUE

The following table summarizes the disaggregation of revenue by nature:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Net product sales	$ 21,581	$ 19,258	$ 17,702
Alliance revenues	647	962	1,252
Other revenues	333	556	473
Total Revenues	$ 22,561	$ 20,776	$ 19,427

Net product sales represent more than 90% of the Company's total revenues for the years ended December 31, 2018, 2017 and 2016. Products are sold principally to wholesalers or distributors and to a lesser extent, directly to retailers, hospitals, clinics, government agencies and pharmacies. Customer orders are generally fulfilled within a few days of receipt resulting in minimal order backlog. Contractual performance obligations are usually limited to transfer of control of the product to the customer. The transfer occurs either upon shipment or upon receipt of the product in certain non-U.S. countries after considering when the customer obtains legal title to the product and when the Company obtains a right of payment. At these points, customers are able to direct the use of and obtain substantially all of the remaining benefits of the product. Gross revenue to the three largest pharmaceutical wholesalers in the U.S. as a percentage of global gross revenues were as follows:

	2018	2017	2016
McKesson Corporation	25%	24%	22%
AmerisourceBergen Corporation	20%	18%	18%
Cardinal Health, Inc.	17%	15%	14%

Wholesalers are initially invoiced at contractual list prices. Payment terms are typically 30 to 90 days based on customary practices in each country with the exception of certain biologic products in the U.S., including *Opdivo*, *Yervoy* and *Empliciti* (90 days to 120 days). Revenue is reduced from wholesaler list price at the time of recognition for expected charge-backs, discounts, rebates, sales allowances and product returns, which are referred to as GTN adjustments. These reductions are attributed to various commercial arrangements, managed healthcare organizations and government programs such as Medicare, Medicaid and the 340B Drug Pricing Program containing various pricing implications such as mandatory discounts, pricing protection below wholesaler list price or other discounts when Medicare Part D beneficiaries are in the coverage gap. In addition, non-U.S. government programs include different pricing schemes such as cost caps, volume discounts, outcome-based pricing and pricing claw-backs determined on sales of individual companies or an aggregation of companies participating in a specific market. Charge-backs and cash discounts are reflected as a reduction to receivables and settled through the issuance of credits to the customer, typically within one month. All other rebates, discounts and adjustments, including Medicaid and Medicare, are reflected as a liability and settled through cash payments to the customer, typically within various time periods ranging from a few months to one year.

Significant judgment is required in estimating GTN adjustments considering legal interpretations of applicable laws and regulations, historical experience, payer channel mix, current contract prices under applicable programs, unbilled claims, processing time lags and inventory levels in the distribution channel.

The following table summarizes GTN adjustments:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Gross product sales	$ 30,174	$ 25,499	$ 22,364
GTN adjustments[(a)]			
Charge-backs and cash discounts	(2,735)	(2,084)	(1,582)
Medicaid and Medicare rebates	(3,225)	(2,086)	(1,382)
Other rebates, returns, discounts and adjustments	(2,633)	(2,071)	(1,698)
Total GTN adjustments	(8,593)	(6,241)	(4,662)
Net product sales	$ 21,581	$ 19,258	$ 17,702

(a) Includes adjustments for provisions for product sales made in prior periods resulting from changes in estimates of $96 million, $71 million and $155 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Alliance and other revenues consist primarily of amounts related to collaborations and out-licensing arrangements. Each of these arrangements are evaluated for whether they represent contracts that are within the scope of the revenue recognition guidance in their entirety or contain aspects that are within the scope of the guidance, either directly or by reference based upon the application of the guidance related to the derecognition of nonfinancial assets (ASC 610).

Performance obligations are identified and separated when the other party can benefit directly from the rights, goods or services either on their own or together with other readily available resources and when the rights, goods or services are not highly interdependent or interrelated.

Transaction prices for these arrangements may include fixed up-front amounts as well as variable consideration such as contingent development and regulatory milestones, sales-based milestones and royalties. The most likely amount method is used to estimate contingent development, regulatory and sales-based milestones because the ultimate outcomes are binary in nature. The expected value method is used to estimate royalties because a broad range of potential outcomes exist, except for instances in which such royalties relate to a license. Variable consideration is included in the transaction price only to the extent a significant reversal in the amount of cumulative revenue recognized is not probable of occurring when the uncertainty associated with the variable consideration is subsequently resolved. Significant judgment is required in estimating the amount of variable consideration to recognize when assessing factors outside of BMS's influence such as likelihood of regulatory success, limited availability of third party information, expected duration of time until resolution, lack of relevant past experience, historical practice of offering fee concessions and a large number and broad range of possible amounts. To the extent arrangements include multiple performance obligations that are separable, the transaction price assigned to each distinct performance obligation is reflective of the relative stand-alone selling price and recognized at a point in time upon the transfer of control.

Three types of out-licensing arrangements are typically utilized: (1) arrangements when we out-license intellectual property to another party and have no further performance obligations; (2) arrangements that include a license and an additional performance obligation to supply product upon the request of the third party; and (3) collaboration arrangements, which include transferring a license to a third party to jointly develop and commercialize a product.

Most out-licensing arrangements consist of a single performance obligation that is satisfied upon execution of the agreement when the development and commercialization rights are transferred to a third party. Up-front fees are recognized immediately and included in Other income (net). Although contingent development and regulatory milestone amounts are assessed each period for the likelihood of achievement, they are typically constrained and recognized when the uncertainty is subsequently resolved for the full amount of the milestone and included in Other income (net). Sales-based milestones and royalties are recognized when the milestone is achieved or the subsequent sales occur. Sales-based milestones are included in Other income (net) and royalties are included in Alliance and other revenue.

Certain out-licensing arrangements may also include contingent performance obligations to supply commercial product to the third party upon its request. The license and supply obligations are accounted for as separate performance obligations as they are considered distinct because the third party can benefit from the license either on its own or together with other supply resources readily available to it and the obligations are separately identifiable from other obligations in the contract in accordance with the revenue recognition guidance. After considering the standalone selling prices in these situations, up-front fees, contingent development and regulatory milestone amounts and sales-based milestone and royalties are allocated to the license and recognized in the manner described above. Consideration for the supply obligation is usually based upon stipulated cost-plus margin contractual terms which represent a standalone selling price. The supply consideration is recognized at a point in time upon transfer of control of the product to the third party and included in Alliance and other revenue. The above fee allocation between the license and the supply represents the amount of consideration that the Company expects to be entitled to for the satisfaction of the separate performance obligations.

Although collaboration arrangements are unique in nature, both parties are active participants in the operating activities and are exposed to significant risks and rewards depending on the commercial success of the activities. Performance obligations inherent in these arrangements may include the transfer of certain development or commercialization rights, ongoing development and commercialization services and product supply obligations. Except for certain product supply obligations which are considered distinct and accounted for as separate performance obligations similar to the manner discussed above, all other performance obligations are not considered distinct and are combined into a single performance obligation since the transferred rights are highly integrated and interrelated to our obligation to jointly develop and commercialize the product with the third party. As a result, up-front fees are recognized ratably over time throughout the expected period of the collaboration activities and included in Other income (net) as the license is combined with other development and commercialization obligations. Contingent development and regulatory milestones that are no longer constrained are recognized in a similar manner on a prospective basis. Royalties and profit sharing are recognized when the underlying sales and profits occur and are included in Alliance and other revenue. Refer to "—Note 3. Alliances" for further information.

The following table summarizes the disaggregation of revenue by product and region:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Prioritized Brands			
Opdivo	$ 6,735	$ 4,948	$ 3,774
Eliquis	6,438	4,872	3,343
Orencia	2,710	2,479	2,265
Sprycel	2,000	2,005	1,824
Yervoy	1,330	1,244	1,053
Empliciti	247	231	150
Established Brands			
Baraclude	744	1,052	1,192
Reyataz Franchise	427	698	912
Sustiva Franchise	283	729	1,065
Hepatitis C Franchise	17	406	1,578
Other Brands	1,630	2,112	2,271
Total Revenues	$ 22,561	$ 20,776	$ 19,427
United States	$ 12,586	$ 11,358	$ 10,720
Europe	5,658	4,988	4,215
Rest of World	3,733	3,877	3,964
Other[(a)]	584	553	528
Total Revenues	$ 22,561	$ 20,776	$ 19,427

(a) Other revenues included royalties and alliance-related revenues for products not sold by our regional commercial organizations.

The following table summarizes contract assets as of December 31, 2018 and January 1, 2018:

Dollars in Millions	December 31, 2018	January 1, 2018
Prepaid expenses and other	$ 35	$ 349
Other assets	19	32
Total Contract Assets	$ 54	$ 381

Contract assets are primarily estimated future royalties and termination fees not eligible for the licensing exclusion and therefore recognized upon the adoption of ASC 606 and ASC 610. Contract assets are reduced and receivables are increased in the period the underlying sales occur. Contingent development and regulatory milestones from out-licensing arrangements of $1.3 billion were constrained and not recognized after considering the likelihood of a significant reversal of cumulative amount of revenue occurring. Cumulative catch-up adjustments to revenue affecting contract assets or contract liabilities were not material during the year ended December 31, 2018. Revenue recognized from performance obligation satisfied in prior periods was $495 million for the year ended December 31, 2018, consisting primarily of royalties for out-licensing arrangements and revised estimates for GTN adjustments related to prior period sales.

Sales commissions and other incremental costs of obtaining customer contracts are expensed as incurred as the amortization periods would be less than one year.

Note 3. ALLIANCES

BMS enters into collaboration arrangements with third parties for the development and commercialization of certain products. Although each of these arrangements is unique in nature, both parties are active participants in the operating activities of the collaboration and exposed to significant risks and rewards depending on the commercial success of the activities. BMS may either in-license intellectual property owned by the other party or out-license its intellectual property to the other party. These arrangements also typically include research, development, manufacturing, and/or commercial activities and can cover a single investigational compound or commercial product or multiple compounds and/or products in various life cycle stages. The rights and obligations of the parties can be global or limited to geographic regions. We refer to these collaborations as alliances and our partners as alliance partners.

The most common activities between BMS and its alliance partners are presented in results of operations as follows:

- When BMS is the principal in the end customer sale, 100% of product sales are included in Net product sales. When BMS's alliance partner is the principal in the end customer sale, BMS's contractual share of the third-party sales and/or royalty income are included in Alliance revenues as the sale of commercial products are considered part of BMS's ongoing major or central operations. Refer to "—Note 2. Revenue" for information regarding recognition criteria.
- Amounts payable to BMS by alliance partners (who are the principal in the end customer sale) for supply of commercial products are included in Alliance revenues as the sale of commercial products are considered part of BMS's ongoing major or central operations.
- Profit sharing, royalties and other sales-based fees payable by BMS to alliance partners are included in Cost of products sold as incurred.
- Cost reimbursements between the parties are recognized as incurred and included in Cost of products sold; Marketing, selling and administrative expenses; or Research and development expenses, based on the underlying nature of the related activities subject to reimbursement.
- Upfront and contingent development and approval milestones payable to BMS by alliance partners for investigational compounds and commercial products are deferred and amortized over the expected period of BMS's development and co-promotion obligation through the market exclusivity period or the periods in which the related compounds or products are expected to contribute to future cash flows. The amortization is presented consistent with the nature of the payment under the arrangement. For example, amounts received for investigational compounds are presented in Other income (net) as the activities being performed at that time are not related to the sale of commercial products included in BMS's ongoing major or central operations; amounts received for commercial products are presented in alliance revenue as the sale of commercial products are considered part of BMS's ongoing major or central operations.
- Upfront and contingent approval milestones payable by BMS to alliance partners for commercial products are capitalized and amortized over the shorter of the contractual term or the periods in which the related products are expected to contribute to future cash flows. The amortization is included in Cost of products sold.
- Upfront and contingent milestones payable by BMS to alliance partners prior to regulatory approval are expensed as incurred and included in Research and development expense.
- Royalties and other contingent consideration payable to BMS by alliance partners related to the divestiture of such businesses are included in Other income (net) when earned.
- All payments between BMS and its alliance partners are presented in Cash Flows From Operating Activities, except as otherwise described below.

Selected financial information pertaining to our alliances was as follows, including net product sales when BMS is the principal in the third-party customer sale for products subject to the alliance. Expenses summarized below do not include all amounts attributed to the activities for the products in the alliance, but only the payments between the alliance partners or the related amortization if the payments were deferred or capitalized. Certain prior period amounts included below were revised to exclude amounts for arrangements that no longer meet the criteria for collaboration arrangements.

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from alliances:			
Net product sales	**$ 8,359**	$ 6,917	$ 5,530
Alliance revenues	**647**	962	1,252
Total Revenues	**$ 9,006**	$ 7,879	$ 6,782
Payments to/(from) alliance partners:			
Cost of products sold	**$ 3,439**	$ 2,718	$ 2,126
Marketing, selling and administrative	**(104)**	(62)	(30)
Research and development	**1,044**	(28)	(9)
Other income (net)	**(67)**	(46)	(42)

Selected Alliance Balance Sheet Information:	December 31,	
Dollars in Millions	**2018**	2017
Receivables – from alliance partners	**$ 395**	$ 322
Accounts payable – to alliance partners	**904**	875
Deferred income from alliances[(a)]	**491**	467

(a) Includes unamortized upfront and milestone payments.

Specific information pertaining to each of our significant alliances is discussed below, including their nature and purpose; the significant rights and obligations of the parties; specific accounting policy elections; and the income statement classification of and amounts attributable to payments between the parties.

Pfizer

BMS and Pfizer jointly develop and commercialize *Eliquis*, an anticoagulant discovered by BMS. Pfizer funds between 50% and 60% of all development costs depending on the study. Profits and losses are shared equally on a global basis except in certain countries where Pfizer commercializes *Eliquis* and pays BMS a sales-based fee.

Co-exclusive license rights were granted to Pfizer in exchange for an upfront payment and potential milestone payments. Both parties assumed certain obligations to actively participate in a joint executive committee and various other operating committees and have joint responsibilities for the research, development, distribution, sales and marketing activities of the alliance using resources in their own infrastructures. BMS and Pfizer manufacture the product in the alliance and BMS is the principal in the end customer product sales in the U.S., significant countries in Europe, as well as Canada, Australia, China, Japan and South Korea. In 2015, BMS transferred full commercialization rights to Pfizer in certain smaller countries in order to simplify operations. In the transferred countries, BMS supplies the product to Pfizer at cost plus a percentage of the net sales price to end-customers which is recorded in full upon transfer of control of the product to Pfizer.

The Company did not allocate consideration to the rights transferred to Pfizer as such rights were not sold separately by BMS or any other party, nor could Pfizer receive any benefit for the delivered rights without the fulfillment of other ongoing obligations by BMS under the alliance agreement. As such, the global alliance was treated as a single unit of accounting and upfront proceeds and any subsequent contingent milestone proceeds are amortized over the expected period of BMS's co-promotion obligation through the market exclusivity period. BMS received $884 million in non-refundable upfront, milestone and other licensing payments related to *Eliquis* through December 31, 2018. Amortization of the *Eliquis* deferred income is included in Other income (net) as *Eliquis* was not a commercial product at the commencement of the alliance.

Summarized financial information related to this alliance was as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from Pfizer alliance:			
Net product sales	**$ 6,329**	$ 4,808	$ 3,306
Alliance revenues	**109**	64	37
Total Revenues	**$ 6,438**	$ 4,872	$ 3,343
Payments to/(from) Pfizer:			
Cost of products sold – Profit sharing	**$ 3,078**	$ 2,314	$ 1,595
Other income (net) – Amortization of deferred income	**(55)**	(55)	(55)

Selected Alliance Balance Sheet Information:	December 31,	
Dollars in Millions	**2018**	2017
Receivables	**$ 220**	$ 193
Accounts payable	**786**	625
Deferred income	**410**	466

Otsuka

BMS and Otsuka co-promote *Sprycel* in the U.S. and the EU. Both parties actively participate in various governance committees, however, BMS has control over the decision making. BMS is responsible for the development and manufacture of the product and is also the principal in the end customer product sales. A fee is paid to Otsuka based on net sales levels in the Oncology Territory (U.S., Japan and the EU) that equates to $294 million on the first $1 billion of annual net sales plus 1% of net sales in excess of $1 billion.

Summarized financial information related to this alliance was as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from Otsuka alliances:			
Net product sales – Oncology territory	**$ 1,705**	$ 1,699	$ 1,544
Payments to Otsuka:			
Cost of products sold – Oncology fee	**$ 297**	$ 299	$ 304

BMS also had a worldwide commercialization agreement with Otsuka, to co-develop and co-promote *Abilify**. The U.S. portion of the agreement expired in April 2015 and the EU portion expired in June 2014. In other countries where BMS had the exclusive right to sell *Abilify**, expiration occurred on a country-by-country basis with the last expiration in Canada in January 2018.

Ono

BMS and Ono jointly develop and commercialize *Opdivo*, *Yervoy* and several BMS investigational compounds in Japan, South Korea and Taiwan. BMS is responsible for supply of the products. Profits, losses and development costs are shared equally for all combination therapies involving compounds of both parties. Otherwise, sharing is 80% and 20% for activities involving only one of the party's compounds.

BMS and Ono also jointly develop and commercialize *Orencia* in Japan. BMS is responsible for the order fulfillment and distribution of the intravenous formulation and Ono is responsible for the subcutaneous formulation. Both formulations are jointly promoted by both parties with assigned customer accounts and BMS is responsible for the product supply. A co-promotion fee of 60% is paid when a sale is made to the other party's assigned customer.

In 2017, Ono granted BMS an exclusive license for the development and commercialization of ONO-4578, Ono's Prostaglandin E2 receptor 4 antagonist. BMS acquired worldwide rights except in Japan, South Korea, and Taiwan where it was added to the existing collaboration and in China and ASEAN countries where Ono retained exclusive rights. BMS paid $40 million to Ono, which was included in Research and development expense in 2017. Ono is eligible to receive subsequent clinical, regulatory and sales-based milestone payments of up to $480 million and royalties in countries where BMS has exclusive licensing rights.

In 2018, BMS provided Ono with a right to accept NKTR-214 into their alliance upon completion of a Phase I clinical study of *Opdivo* and NKTR-214 in the Ono Territory. If the right is exercised, Ono will partially reimburse BMS for development costs incurred with the study and share in certain future development costs, contingent milestone payments, profits and losses under the collaboration with Nektar.

Summarized financial information related to this alliance was as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from Ono alliances:			
Net product sales	**$ 165**	$ 145	$ 147
Alliance revenues	**294**	268	280
Total Revenues	**$ 459**	$ 413	$ 427

BMS is the principal in the end customer product sales and has the exclusive right to develop, manufacture and commercialize *Opdivo* worldwide except in Japan, South Korea and Taiwan. Ono is entitled to receive royalties of 4% in North America and 15% in all territories excluding the three countries listed above, subject to customary adjustments.

Gilead

BMS and Gilead operate a joint venture in Europe to develop and commercialize a combination product named *Atripla*®, which combines BMS's *Sustiva* with Gilead's *Truvada*®. The joint venture is consolidated by Gilead, who is the principal in end customer product sales. BMS receives a percentage of end customer sales which is recorded in Alliance revenues. The joint venture will continue until either party terminates the arrangement or the last patent expires that allows market exclusivity to *Atripla*®.

Prior to 2018, BMS and Gilead operated a joint venture in the U.S. and Canada for *Atripla*®, which was terminated following the launch of a generic version of *Sustiva* by a third-party in the U.S. As a result, deferred income and alliance receivables attributed to *Sustiva* product held by the joint venture at December 31, 2017 was reduced by $438 million to reflect the post-termination selling price. BMS is entitled to a fee equal to 55% of *Atripla*® U.S. net sales multiplied by the ratio of the difference in the average net selling prices of *Atripla*® and *Truvada*® to the *Atripla*® average net selling price in 2018. The fee is reduced to 35% in 2019 and 15% in 2020, of *Atripla*® U.S. net sales multiplied by the ratio described above. BMS supplies *Sustiva* at cost plus a markup to Gilead during this three-year period but may terminate the supply agreement after a notice period.

Summarized financial information related to this alliance was as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from Gilead alliances:			
Alliance revenues	**$ 253**	$ 623	$ 934
Equity in net loss of affiliates	**$ 2**	$ 13	$ 12

Nektar

In 2018, BMS and Nektar commenced a worldwide license and collaboration for the development and commercialization of NKTR-214, Nektar's investigational immuno-stimulatory therapy designed to selectively expand specific cancer-fighting T cells and natural killer cells directly in the tumor micro-environment. The *Opdivo* and NKTR-214 combination therapy is currently in Phase II clinical studies for multiple cancer indications and in Phase III clinical studies for melanoma and RCC. A joint development plan agreed by the parties contemplates development in various indications and tumor types with each party responsible for the supply of their own product. BMS's share of the development costs associated with therapies comprising a BMS medicine used in combination with NKTR-214 is 67.5%, subject to certain cost caps for Nektar. The parties will also jointly commercialize the therapies, subject to regulatory approval. BMS's share of global NKTR-214 profits and losses will be 35% subject to certain annual loss caps for Nektar.

BMS paid Nektar $1.85 billion for the rights discussed above and 8.3 million shares of Nektar common stock representing a 4.8% ownership interest. BMS's equity ownership is subject to certain lock-up, standstill and voting provisions for a five-year period. The amount of the up-front payment allocated to the equity investment was $800 million after considering Nektar's stock price on the date of closing and current limitations on trading the securities. The remaining $1.05 billion of the up-front payment was allocated to the rights discussed above and included in Research and development expense in the second quarter of 2018. BMS will also pay up to $1.8 billion upon the achievement of contingent development, regulatory and sales-based milestones over the life of the alliance period. Research and development expense payable under this agreement with Nektar was $59 million for the year ended December 31, 2018.

AbbVie

BMS and AbbVie jointly develop and commercialize *Empliciti,* a humanized monoclonal antibody for the treatment of multiple myeloma. Both parties participate in development and U.S. commercialization committees in which BMS has final decision making authority. AbbVie funds 20% of global development costs and BMS is solely responsible for supply, distribution and sales and marketing activities and is the principal in the end customer product sales. AbbVie shares 30% of all profits and losses in the U.S. and is paid tiered royalties outside of the U.S. AbbVie is also entitled to receive an additional $100 million if certain regulatory events occur and $200 million if certain sales thresholds are achieved. The agreement may be terminated immediately by BMS or by either party for material breaches (subsequent to a notice period).

Summarized financial information related to this alliance was as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Revenues from AbbVie alliance:			
Net product sales	**$ 162**	$ 150	$ 132
Payments to AbbVie:			
Cost of products sold – Profit sharing	**$ 44**	$ 41	$ 34

Note 4. ACQUISITIONS, DIVESTITURES, LICENSING AND OTHER ARRANGEMENTS

Acquisitions

Acquisitions are evaluated to determine whether it is a business, an asset or a group of assets. The following transactions were accounted for as asset acquisitions since they were determined not to be a business as that term is defined in ASC 805 primarily because no significant processes were acquired. As a result, the amounts allocated to the lead investigational compounds were expensed and not capitalized. Consideration for each transaction upon execution for the last 3 years was allocated as follows:

Dollars in Millions	Year	Upfront Payment	R&D Expense	Deferred Tax Assets[a]	Contingent Consideration
IFM[b]	2017	$ 325	$ 311	$ 14	$ 2,020
Cormorant	2016	35	35	—	485
Padlock	2016	150	139	11	453

(a) Relates to net operating loss and tax credit carryforwards.
(b) Includes $25 million for certain negotiation rights to collaborate, license or acquire an NLRP3 antagonist program from a newly formed entity established by the former shareholders of IFM.

IFM

In 2017, BMS acquired all of the outstanding shares of IFM, a private biotechnology company focused on developing therapies that modulate novel targets in the innate immune system to treat cancer, autoimmunity and inflammatory diseases. The acquisition provided BMS with full rights to IFM's preclinical STING and NLRP3 agonist programs focused on enhancing the innate immune response for treating cancer. Contingent consideration includes development, regulatory and sales-based milestone payments, of which $25 million was included in Research and development expense in 2018, following the commencement of a Phase I clinical study. BMS may pay up to $555 million in additional contingent milestones for any subsequent products selected from IFM's preclinical STING and NLRP3 agonist programs which is not included in the contingent consideration amount in the table above.

Cormorant

In 2016, BMS acquired all of the outstanding shares of Cormorant, a private pharmaceutical company focused on developing therapies for cancer and rare diseases. The acquisition provided BMS with full rights to Cormorant's lead candidate HuMax-IL8, a Phase I/II monoclonal antibody that represents a potentially complementary IO mechanism of action to T-cell directed antibodies and co-stimulatory molecules. Contingent consideration includes development and regulatory milestone payments, of which $60 million was included in Research and development expense in 2018, upon conclusion of the 18-month reversion option period.

Padlock

In 2016, BMS acquired all of the outstanding shares of Padlock, a private biotechnology company dedicated to creating new medicines to treat destructive autoimmune diseases. The acquisition provided BMS with full rights to Padlock's PAD inhibitor discovery program focused on the development of potentially transformational treatment approaches for patients with RA. Padlock's PAD discovery program may have additional utility in treating systemic lupus erythematosus and other autoimmune diseases. Contingent consideration includes development and regulatory milestone payments.

Cardioxyl

In 2015, BMS acquired all of the outstanding shares of Cardioxyl, a private biotechnology company focused on the discovery and development of novel therapeutic agents for cardiovascular disease. The acquisition provided BMS with full rights to CXL-1427, a nitroxyl prodrug in Phase II development for acute decompensated heart failure. Contingent consideration includes development, regulatory and sales-based milestone payments, of which $100 million was included in Research and development expense in 2017 following the commencement of a Phase II clinical study.

Flexus

In 2015, BMS acquired all of the outstanding shares of Flexus, a private biotechnology company focused on the discovery and development of novel anti-cancer therapeutics. The acquisition provided BMS with full rights to F001287, a preclinical small molecule IDO1-inhibitor targeted immunotherapy. In addition, BMS acquired Flexus's IDO/TDO discovery program which includes its IDO-selective, IDO/TDO dual and TDO-selective compounds. Contingent consideration includes development and regulatory milestone payments of which $350 million and $100 million were included in Research and development expense in 2017 and 2016, respectively, following the commencement of Phase I, Phase II, and Phase III clinical studies.

Divestitures

The following table summarizes proceeds, gains and royalty income resulting from divestitures. Revenue and pretax earnings related to all divestitures and assets held-for-sale were not material in all periods presented (excluding divestiture gains).

	Proceeds[a]			Divestiture Gains			Royalty Income		
Dollars in Millions	**2018**	2017	2016	**2018**	2017	2016	**2018**	2017	2016
Diabetes Business	**$ 579**	$ 405	$ 333	**$ —**	$ (126)	$ —	**$ (661)**	$ (329)	$ (361)
*Erbitux** Business	**216**	218	252	**—**	—	—	**(145)**	(224)	(246)
Manufacturing Operations	**160**	—	—	**—**	—	—	**—**	—	—
*Plavix** and *Avapro**/*Avalide**	**80**	—	—	**—**	—	—	**—**	—	—
Investigational HIV Business	**—**	—	387	**—**	(11)	(272)	**—**	—	—
OTC Business	**—**	—	317	**—**	—	(277)	**—**	—	—
Mature Brands and Other	**212**	28	28	**(178)**	(24)	(15)	**(8)**	(4)	(11)
	$ 1,247	$ 651	$ 1,317	**$ (178)**	$ (161)	$ (564)	**$ (814)**	$ (557)	$ (618)

(a) Includes royalties received subsequent to the related sale of the asset or business.

Diabetes Business

In February 2014, BMS and AstraZeneca terminated their diabetes business alliance agreements and BMS sold to AstraZeneca substantially all of the diabetes business comprising the alliance. The divestiture included the shares of Amylin and the resulting transfer of its Ohio manufacturing facility; the intellectual property related to *Onglyza** and *Farxiga** (including BMS's interest in the out-licensing agreement for *Onglyza** in Japan); and the purchase of BMS's manufacturing facility located in Mount Vernon, Indiana in 2015.

Consideration for the transaction included a $2.7 billion payment at closing; contingent regulatory and sales-based milestone payments of up to $1.4 billion (including $800 million related to approval milestones and $600 million related to sales-based milestones, payable in 2020); tiered royalty payments ranging from 10% to 25% based on net sales through 2025 and payments up to $225 million if and when certain assets are transferred to AstraZeneca. AstraZeneca will also pay BMS for any required product supply at a price approximating the product cost as well as negotiated transitional service fees.

Consideration allocated to the development and supply agreements was amortized over the applicable service periods. Amortization of deferred income attributed to the development agreement ended in December 2016 and was $113 million in 2016 and included in Other income (net) as the sale of these services was not considered part of BMS's ongoing major or central operations. Amortization of deferred income attributed to the supply agreement ended in December 2017 and was recorded in Alliance revenues. Revenues attributed to the supply agreement were included in Alliance revenues and were not material in 2018, 2017 and 2016. Royalties are presented in Other income (net) and were $457 million in 2018, $229 million in 2017 and $227 million in 2016. Contingent consideration of $100 million was received in 2017 resulting in an additional gain upon achievement of a regulatory approval milestone.

In September 2015, BMS transferred a percentage of its future royalty rights on Amylin net product sales in the U.S. to CPPIB. The transferred rights represent approximately 70% of potential future royalties BMS is entitled to in 2019 to 2025. In exchange for the transfer, BMS received an additional tiered-based royalty on Amylin net product sales in the U.S. from CPPIB in 2016 through 2018. These royalties are presented in Other income (net) and were $45 million in 2018, $100 million in 2017 and $134 million in 2016.

In November 2017, BMS transferred a percentage of its future royalty rights on a portion of *Onglyza** and *Farxiga** net product sales to Royalty Pharma. The transferred rights represent approximately 20% to 25% of potential future royalties BMS is entitled to for those products in 2020 to 2025. In exchange for the transfer, BMS will receive an additional tiered-based royalty on *Onglyza** and *Farxiga** net product sales from Royalty Pharma in 2018 and 2019. These royalties are presented in Other income (net) and were $159 million in 2018.

Erbitux Business*

BMS had a commercialization agreement with Lilly through Lilly's subsidiary ImClone for the co-development and promotion of *Erbitux** in the U.S., Canada and Japan. BMS was the principal in the end customer product sales in North America and paid Lilly a distribution fee for 39% of *Erbitux** net sales in North America plus a share of certain royalties paid by Lilly.

In October 2015, BMS transferred its rights to *Erbitux** in North America to Lilly in exchange for tiered sales-based royalties through September 2018, which were included in Other income (net). Royalties earned were $145 million in 2018, $207 million in 2017 and $227 million in 2016.

BMS transferred its co-commercialization rights in Japan to Merck KGaA in 2015 in exchange for sales-based royalties through 2032 which is included in Other income (net) when earned. Royalties earned were $17 million in 2017 and $19 million in 2016. As a result of the adoption of ASC 610 in the first quarter of 2018, estimated future royalties resulting from the transfer of rights to Merck KGaA were recorded as a cumulative effect adjustment in Retained earnings. Subsequent changes in estimates will be recorded in Other income (net). Refer to "—Note 1. Accounting Policies and Recently Issued Accounting Standards" for further details.

Manufacturing Operations

In 2017, BMS sold its small molecule active pharmaceutical ingredient manufacturing operations in Swords, Ireland to SK Biotek for approximately $165 million, subject to certain adjustments. Initial proceeds of $158 million were received in the first quarter of 2018. The transaction was accounted for as the sale of a business. The divestiture includes the transfer of the facility, the majority of employees at the site, inventories and certain third-party contract manufacturing obligations. The assets were reduced to their estimated relative fair value after considering the purchase price resulting in an impairment charge of $146 million that was included in Cost of products sold. SK Biotek will provide certain manufacturing services for BMS through 2022.

*Plavix** and *Avapro*/Avalide**

Sanofi reacquired BMS's co-development and co-commercialization agreements for *Plavix** and *Avapro*/Avalide** in 2013. Consideration for the transfer of rights included quarterly royalties through December 31, 2018 and a $200 million terminal payment received in 2018 of which $120 million was allocated to opt-out markets and $80 million was allocated to BMS's 49.9% interest in the Europe and Asia territory partnership. Royalties expected to be received in 2018 and the portion of terminal payment allocated to opt-out markets was reflected as a contract asset and cumulative effect adjustment upon adoption of ASC 610 in 2018 as BMS had fulfilled its performance obligation. The $80 million allocated to BMS's partnership interest was deferred as of December 31, 2018 and will be recognized in Other income (net) when transfer to Sanofi in 2019. Refer to "—Note 1. Accounting Policies and Recently Issued Accounting Standards" for further details.

Royalties earned from Sanofi in the territory covering the Americas and Australia and opt-out markets were presented in Alliance revenues and aggregated $26 million in 2018, $200 million in 2017 and $195 million in 2016. Royalties attributed to the territory covering Europe and Asia earned by the territory partnership and paid to BMS were included in equity in net income of affiliates and amounted to $96 million in 2018, $95 million in 2017 and $95 million in 2016.

Investigational HIV Business

In 2016, BMS sold its investigational HIV medicines business consisting of a number of R&D programs at different stages of discovery and development to ViiV Healthcare. BMS received $350 million and is also entitled to receive from ViiV Healthcare contingent development and regulatory milestone payments of up to $1.1 billion, sales-based milestone payments of up to $4.3 billion and future tiered royalties. BMS earned transitional fees of $10 million and $105 million for certain R&D and other services in 2017 and 2016, respectively.

OTC Business

In 2016, BMS sold to Reckitt an OTC business containing brands sold primarily in Mexico and Brazil for $317 million for a gain of $277 million, including the trademarks, inventory and certain other assets exclusively related to the products and a manufacturing facility located in Mexico primarily dedicated to the products.

Mature Brands and Other

Divestitures include several brands sold to Cheplapharm resulting in proceeds of $153 million and divestiture gains of $127 million in 2018.

Assets Held-For-Sale

In 2018, BMS agreed to sell its UPSA consumer health business for $1.6 billion. The transaction is expected to close in the second quarter of 2019 and will be accounted for as a sale of a business. The business was accounted for as held-for-sale as of December 31, 2018. Accordingly, assets of $479 million were reclassified to assets held-for-sale and included within prepaid expenses and other, including $79 million of receivables, $81 million of inventory, $187 million of property, plant and equipment and $127 million of goodwill. Additionally, liabilities of $152 million were reclassified to liabilities related to assets held-for-sale and included within accrued liabilities, including of $78 million of accrued liabilities, $35 million accounts payable, $25 million of deferred tax liabilities and $14 million of other liabilities at December 31, 2018.

In 2017, BMS agreed to sell an R&D facility in Wallingford, Connecticut. The transaction closed in 2018 and was accounted for as a sale of an asset. The facility was accounted for as held-for-sale as of December 31, 2017 and reduced to its estimated relative fair value resulting in an impairment charge of $79 million that was included in Research and development expense.

Licensing and Other Arrangements

Promedior

In 2015, BMS purchased a warrant that gives BMS the exclusive right to acquire Promedior, a biotechnology company whose lead asset, PRM-151, is being developed for the treatment of IPF and MF. The warrant is exercisable upon delivery of Phase II data following either of the IPF or MF Phase II clinical studies being directed by Promedior. The upfront payment allocated to the warrant was $84 million and included in Research and development expense in 2015. The remaining $66 million of the $150 million upfront payment was allocated to Promedior's obligation to complete the Phase II studies which was amortized over the expected period of the Phase II studies. The allocation was determined using Level 3 inputs. In 2018, BMS notified Promedior that it would not exercise its warrant to purchase all outstanding shares of Promedior.

Halozyme

In 2017, BMS and Halozyme entered into a global collaboration and license agreement to develop subcutaneously administered BMS IO medicines using Halozyme's *ENHANZE*® drug-delivery technology. This technology may allow for more rapid delivery of large volume injectable medications through subcutaneous delivery. BMS paid $105 million to Halozyme for access to the technology which was included in Research and development expense. BMS designated multiple IO targets, including PD-1, to develop using the *ENHANZE*® technology and has an option to select additional targets within five years from the effective date up to a maximum of 11 targets. BMS may pay contingent development, regulatory and sales-based milestones up to $160 million if achieved for each of the nominated collaboration targets, additional milestone payments for combination products and future royalties on sales of products using the *ENHANZE*® technology.

CytomX

In 2017, BMS expanded its strategic collaboration with CytomX to discover novel therapies using CytomX's proprietary Probody platform. As part of the original May 2014 collaboration to discover, develop and commercialize Probody therapeutics, BMS selected four oncology targets, including CTLA-4. Pursuant to the expanded agreement, CytomX granted BMS exclusive worldwide rights to develop and commercialize Probody therapeutics for up to eight additional targets. BMS paid CytomX $75 million for the rights to the initial four targets which was expensed as R&D prior to 2017. BMS paid $200 million to CytomX for access to the additional targets which was included in Research and development expense in 2017. BMS will also reimburse CytomX for certain research costs over the collaboration period, pay contingent development, regulatory and sales-based milestones up to $448 million if achieved for each collaboration target and future royalties.

Biogen

In 2017, BMS out-licensed to Biogen exclusive rights to develop and commercialize BMS-986168, an anti-eTau compound in development for Progressive Supranuclear Palsy. Biogen paid $300 million to BMS which was included in Other income (net). BMS is also entitled to contingent development, regulatory and sales-based milestone payments of up to $410 million if achieved and future royalties. BMS originally acquired the rights to this compound in 2014 through its acquisition of iPierian. Biogen assumed all of BMS's remaining obligations to the former stockholders of iPierian.

Roche

In 2017, BMS out-licensed to Roche exclusive rights to develop and commercialize BMS-986089, an anti-myostatin adnectin in development for Duchenne Muscular Dystrophy. Roche paid $170 million to BMS which was included in Other income (net). BMS is also entitled to contingent development and regulatory milestone payments of up to $205 million if achieved and future royalties.

Nitto Denko

In 2016, BMS and Nitto Denko entered into an exclusive worldwide license agreement granting BMS the right to develop and commercialize Nitto Denko's investigational siRNA molecules targeting HSP47 in vitamin A containing formulations, which includes Nitto Denko's lead asset ND-L02-s0201, currently in Phase II study for the treatment of advanced liver fibrosis. BMS paid $100 million to Nitto Denko which was included in Research and development expense. BMS may pay contingent development, regulatory and sales-based milestones up to $898 million if achieved and future royalties. The agreement also grants BMS the option to receive exclusive licenses for HSP47 siRNAs in vitamin A containing formulations for the treatment of lung fibrosis and other organ fibrosis.

F-Star

In 2014, BMS acquired an exclusive option to purchase F-Star and its lead asset FS102, an anti-HER2 antibody fragment, in development for the treatment of breast and gastric cancer among a well-defined population of HER2-positive patients. In 2017, BMS discontinued development of FS102 and did not exercise its option, resulting in an IPRD charge of $75 million included in Research and development expense and attributed to noncontrolling interest.

Note 5. OTHER INCOME (NET)

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Interest expense	$ 183	$ 196	$ 167
Investment income	(173)	(126)	(97)
Loss/(gain) on equity investments	512	(23)	37
Provision for restructuring	131	293	109
Litigation and other settlements	76	(487)	47
Equity in net income of affiliates	(93)	(75)	(77)
Divestiture gains	(178)	(164)	(576)
Royalties and licensing income	(1,353)	(1,351)	(719)
Transition and other service fees	(12)	(37)	(238)
Pension and postretirement	(27)	(1)	(72)
Intangible asset impairment	64	—	15
Loss on debt redemption	—	109	—
Other	20	(16)	(44)
Other income (net)	$ (850)	$ (1,682)	$ (1,448)

- Loss/(gain) on equity investments includes a fair value adjustment of $534 million related to the Company's equity investment in Nektar in 2018.
- Litigation and other settlements include $481 million for BMS's share of a patent-infringement settlement related to Merck's PD-1 antibody *Keytruda** in 2017.
- Royalties and licensing income includes royalties resulting from business divestitures, intellectual property legal settlements and upfront licensing fees including $470 million from Biogen and Roche in 2017.
- Transition and other service fees were primarily related to the divestiture of the diabetes and investigational HIV medicines businesses in 2016.

Note 6. RESTRUCTURING

In October 2016, the Company announced a restructuring plan to evolve and streamline its operating model and expects to incur charges in connection with employee workforce reductions and early site exits. The majority of charges are expected to be incurred through 2020, range between $1.5 billion to $2.0 billion, and consist of employee termination benefit costs, contract termination costs, accelerated depreciation, impairment charges and other site exit costs. Cash outlays in connection with these actions are expected to be approximately 40% to 50% of the total charges. Charges of approximately $1.1 billion have been recognized for these actions since the announcement including an impairment charge for a small molecule manufacturing operation in Swords, Ireland. Restructuring charges are recognized upon meeting certain criteria, including finalization of committed plans, reliable estimates and discussions with local works councils in certain markets.

Other restructuring charges in addition to the above actions recognized prior were primarily related to specialty care transformation initiatives designed to create a more simplified organization across all functions and geographic markets. In addition, accelerated depreciation and other charges were incurred in connection with the expected early exits of a small molecule manufacturing site in Cruiserath, Ireland and a R&D facility in Wallingford, Connecticut. Refer to "—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements" for further information.

Employee workforce reductions were approximately 900 in 2018, 1,900 in 2017 and 1,100 in 2016.

The following tables summarize the charges and activity related to the restructuring actions:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Employee termination costs	$ 87	$ 267	$ 97
Other termination costs	44	26	12
Provision for restructuring	131	293	109
Accelerated depreciation	113	289	72
Asset impairments	16	241	13
Other shutdown costs	8	3	19
Total charges	$ 268	$ 826	$ 213

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Cost of products sold	$ 57	$ 149	$ 21
Marketing, selling and administrative	1	1	—
Research and development	79	383	83
Other income (net)	131	293	109
Total charges	$ 268	$ 826	$ 213

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Liability at January 1	$ 186	$ 114	$ 125
Charges	148	319	116
Change in estimates	(17)	(26)	(7)
Provision for restructuring	131	293	109
Foreign currency translation and other	1	18	—
Payments	(219)	(239)	(120)
Liability at December 31	$ 99	$ 186	$ 114

Note 7. INCOME TAXES

The provision/(benefit) for income taxes consisted of:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Current:			
U.S.	$ 485	$ 2,782	$ 1,144
Non-U.S.	450	364	468
Total Current	935	3,146	1,612
Deferred:			
U.S.	29	1,063	(101)
Non-U.S.	57	(53)	(103)
Total Deferred	86	1,010	(204)
Total Provision	$ 1,021	$ 4,156	$ 1,408

Effective Tax Rate

The reconciliation of the effective tax rate to the U.S. statutory Federal income tax rate was:

Dollars in Millions	2018	% of Earnings Before Income Taxes	2017	% of Earnings Before Income Taxes	2016	% of Earnings Before Income Taxes
Earnings before income taxes:						
U.S.	$ 2,338		$ 2,280		$ 3,100	
Non-U.S.	3,630		2,851		2,815	
Total	$ 5,968		$ 5,131		$ 5,915	
U.S. statutory rate	1,253	21.0 %	1,796	35.0 %	2,070	35.0 %
Deemed repatriation transition tax	(56)	(0.9)%	2,611	50.9 %	—	—
Deferred tax remeasurement	—	—	285	5.6 %	—	—
Global intangible low taxed income (GILTI)	94	1.6 %	—	—	—	—
Foreign tax effect of certain operations in Ireland, Puerto Rico and Switzerland	(202)	(3.4)%	(561)	(10.9)%	(442)	(7.5)%
U.S. Federal valuation allowance	119	2.0 %	—	—	(29)	(0.5)%
U.S. Federal, state and foreign contingent tax matters	(55)	(0.9)%	72	1.4 %	87	1.5 %
U.S. Federal research based credits	(138)	(2.3)%	(144)	(2.8)%	(144)	(2.4)%
Goodwill allocated to divestitures	—	—	4	0.1 %	34	0.6 %
U.S. Branded Prescription Drug Fee	21	0.3 %	52	1.0 %	52	0.9 %
Non-deductible R&D charges	17	0.3 %	266	5.2 %	100	1.7 %
Puerto Rico excise tax	(152)	(2.6)%	(131)	(2.6)%	(131)	(2.2)%
Domestic manufacturing deduction	—	—	(78)	(1.5)%	(122)	(2.1)%
State and local taxes (net of valuation allowance)	67	1.1 %	77	1.5 %	23	0.4 %
Foreign and other	53	0.9 %	(93)	(1.9)%	(90)	(1.6)%
	$ 1,021	17.1 %	$ 4,156	81.0 %	$ 1,408	23.8 %

New Tax reform legislation was enacted on December 22, 2017, known as the Tax Cuts and Jobs Act of 2017 (The Act). The Act moved from a worldwide tax system to a quasi-territorial tax system and was comprised of broad and complex changes to the U.S. tax code including, but not limited to, (1) reduced the U.S. tax rate from 35% to 21%; (2) added a deemed repatriation transition tax on certain foreign earnings and profits; (3) generally eliminated U.S. federal income taxes on dividends from foreign subsidiaries; (4) included certain income of controlled foreign companies in U.S. taxable income (GILTI); (5) created a new minimum tax referred to as a base erosion anti-abuse income tax; (6) limited certain U.S. Federal research based credits; and (7) eliminated the domestic manufacturing deduction.

Although many aspects of the Act were not effective until 2018, additional tax expense of $2.9 billion was recognized in the fourth quarter of 2017 upon its enactment, including a $2.6 billion one-time deemed repatriation transition tax on previously untaxed post-1986 foreign earnings and profits (including related tax reserves). Those earnings were effectively taxed at a 15.5% rate to the extent that the specified foreign corporations held cash and certain other assets and an 8.0% rate on the remaining earnings and profits. The remaining additional tax expense included an adjustment to measure net deferred tax assets at the new U.S. tax rate of 21%. The provisional tax charge for the deemed repatriation transition tax (including related tax reserves) under Staff Accounting Bulletin No. 118 was reduced by $56 million in 2018.

The accounting for the reduction of deferred tax assets to the 21% tax rate was complete as of December 31, 2017, and the tax charge for the deemed repatriation transition tax is complete as of December 31, 2018.

Prior to the enactment of the act, earnings for certain of our manufacturing operations in low tax jurisdictions, such as Switzerland, Ireland and Puerto Rico, were indefinitely reinvested. As a result of the transition tax under the Act, the Company is no longer indefinitely reinvested with respect to its undistributed earnings from foreign subsidiaries and has provided a deferred tax liability or foreign and state income and withholding tax that would apply. The Company remains indefinitely reinvested with respect to its financial statement basis in excess of tax basis of its foreign subsidiaries. A determination of the deferred tax liability with respect to this basis difference is not practicable. BMS operates under a favorable tax grant in Puerto Rico not scheduled to expire prior to 2023.

A valuation allowance was set up in 2018 as a result of the Nektar equity investment fair value losses that would be considered limited as a capital loss.

U.S. Federal, state and foreign contingent tax matters includes a $119 million tax benefit in 2018 with respect to lapse of statutes.

Goodwill allocated to business divestitures as well as the U.S. Branded Prescription Drug Fee are not deductible for tax purposes.

R&D charges primarily from acquisition related and milestone payments to former shareholders are not deductible for tax purposes. These include Cormorant and IFM in 2018; Flexus, Cardioxyl and IFM in 2017; and Flexus, Padlock and Cormorant in 2016.

Puerto Rico imposes an excise tax on the gross company purchase price of goods sold from our manufacturer in Puerto Rico. The excise tax is recognized in Cost of products sold when the intra-entity sale occurs. For U.S. income tax purposes, the excise tax is not deductible but results in foreign tax credits that are generally recognized in our provision for income taxes when the excise tax is incurred.

Deferred Taxes and Valuation Allowance

The components of current and non-current deferred income tax assets/(liabilities) were as follows:

	December 31,	
Dollars in Millions	**2018**	2017
Deferred tax assets		
Foreign net operating loss carryforwards	**$ 2,978**	$ 2,872
State net operating loss and credit carryforwards	**121**	143
U.S. Federal net operating loss and credit carryforwards	**67**	99
Deferred income	**188**	212
Milestone payments and license fees	**552**	386
Pension and postretirement benefits	**26**	131
Intercompany profit and other inventory items	**670**	651
Other foreign deferred tax assets	**327**	312
Share-based compensation	**54**	60
Other	**352**	280
Total deferred tax assets	**5,335**	5,146
Valuation allowance	**(3,193)**	(2,827)
Deferred tax assets net of valuation allowance	**2,142**	2,319
Deferred tax liabilities		
Depreciation	**(61)**	(11)
Acquired intangible assets	**(220)**	(216)
Goodwill and other	**(533)**	(527)
Total deferred tax liabilities	**(814)**	(754)
Deferred tax assets, net	**$ 1,328**	$ 1,565
Recognized as:		
Deferred income taxes – non-current	**$ 1,371**	$ 1,610
Income taxes payable – non-current	**(18)**	(45)
Liabilities related to assets held-for-sale	**(25)**	—
Total	**$ 1,328**	$ 1,565

The U.S. Federal net operating loss carryforwards were $206 million at December 31, 2018. These carryforwards were acquired as a result of certain acquisitions and are subject to limitations under Section 382 of the Internal Revenue Code. The net operating loss carryforwards expire in varying amounts beginning in 2022. The foreign and state net operating loss carryforwards expire in varying amounts beginning in 2018 (certain amounts have unlimited lives).

At December 31, 2018, a valuation allowance of $3.2 billion was established for the following items: $2.9 billion primarily for foreign net operating loss and tax credit carryforwards, $134 million for state deferred tax assets including net operating loss and tax credit carryforwards and $138 million for U.S. Federal deferred tax assets including equity fair value adjustments and U.S. Federal net operating loss carryforwards.

Changes in the valuation allowance were as follows:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Balance at beginning of year	$ 2,827	$ 3,078	$ 3,534
Provision	458	50	39
Utilization	(43)	(335)	(355)
Foreign currency translation	(48)	341	(142)
Acquisitions	—	2	2
Non U.S. rate change	(1)	(309)	—
Balance at end of year	$ 3,193	$ 2,827	$ 3,078

Income tax payments were $747 million in 2018, $546 million in 2017 and $2.0 billion in 2016.

Business is conducted in various countries throughout the world and is subject to tax in numerous jurisdictions. A significant number of tax returns that are filed are subject to examination by various Federal, state and local tax authorities. Tax examinations are often complex, as tax authorities may disagree with the treatment of items reported requiring several years to resolve. Liabilities are established for possible assessments by tax authorities resulting from known tax exposures including, but not limited to, transfer pricing matters, tax credit deductibility of certain expenses, and deemed repatriation transition tax. Such liabilities represent a reasonable provision for taxes ultimately expected to be paid and may need to be adjusted over time as more information becomes known. The effect of changes in estimates related to contingent tax liabilities is included in the effective tax rate reconciliation above.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Balance at beginning of year	$ 1,155	$ 995	$ 944
Gross additions to tax positions related to current year	48	173	49
Gross additions to tax positions related to prior years	21	30	49
Gross additions to tax positions assumed in acquisitions	—	—	1
Gross reductions to tax positions related to prior years	(106)	(22)	(22)
Settlements	2	(20)	(13)
Reductions to tax positions related to lapse of statute	(119)	(13)	(4)
Cumulative translation adjustment	(6)	12	(9)
Balance at end of year	$ 995	$ 1,155	$ 995

Additional information regarding unrecognized tax benefits is as follows:

Dollars in Millions	Year Ended December 31, 2018	2017	2016
Unrecognized tax benefits that if recognized would impact the effective tax rate	$ 853	$ 1,002	$ 854
Accrued interest	167	148	112
Accrued penalties	11	15	17

Accrued interest and penalties payable for unrecognized tax benefits are included in either current or non-current income taxes payable. Interest and penalties related to unrecognized tax benefits are included in income tax expense.

BMS is currently under examination by a number of tax authorities which have proposed or are considering proposing material adjustments to tax positions for issues such as transfer pricing, certain tax credits and the deductibility of certain expenses. It is reasonably possible that new issues will be raised by tax authorities which may require adjustments to the amount of unrecognized tax benefits; however, an estimate of such adjustments cannot reasonably be made at this time.

It is also reasonably possible that the total amount of unrecognized tax benefits at December 31, 2018 could decrease in the range of approximately $320 million to $360 million in the next twelve months as a result of the settlement of certain tax audits and other events. The expected change in unrecognized tax benefits may result in the payment of additional taxes, adjustment of certain deferred taxes and/or recognition of tax benefits. It is reasonably possible that new issues will be raised by tax authorities that may increase unrecognized tax benefits; however, an estimate of such increases cannot reasonably be made at this time. BMS believes that it has adequately provided for all open tax years by tax jurisdiction.

The following is a summary of major tax jurisdictions for which tax authorities may assert additional taxes based upon tax years currently under audit and subsequent years that will likely be audited:

U.S.	2008 to 2012, 2015 to 2018
Canada	2009 to 2018
France	2015 to 2018
Germany	2008 to 2018
Italy	2017 to 2018
Mexico	2013 to 2018

Note 8. EARNINGS PER SHARE

	Year Ended December 31,		
Amounts in Millions, Except Per Share Data	**2018**	2017	2016
Net Earnings Attributable to BMS used for Basic and Diluted EPS Calculation	**$ 4,920**	$ 1,007	$ 4,457
Weighted-average common shares outstanding - basic	**1,633**	1,645	1,671
Incremental shares attributable to share-based compensation plans	**4**	7	9
Weighted-average common shares outstanding - diluted	**1,637**	1,652	1,680
Earnings per share - basic	**$ 3.01**	$ 0.61	$ 2.67
Earnings per share - diluted	**3.01**	0.61	2.65

Note 9. FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS

Financial instruments include cash and cash equivalents, marketable securities, accounts receivable and payable, debt instruments and derivatives.

Changes in exchange rates and interest rates create exposure to market risk. Certain derivative financial instruments are used when available on a cost-effective basis to hedge the underlying economic exposure. These instruments qualify as cash flow, net investment and fair value hedges upon meeting certain criteria, including effectiveness of offsetting hedged exposures. Changes in fair value of derivatives that do not qualify for hedge accounting are recognized in earnings as they occur. Derivative financial instruments are not used for trading purposes.

Financial instruments are subject to counterparty credit risk which is considered as part of the overall fair value measurement. Counterparty credit risk is monitored on an ongoing basis and mitigated by limiting amounts outstanding with any individual counterparty, utilizing conventional derivative financial instruments and only entering into agreements with counterparties that meet high credit quality standards. The consolidated financial statements would not be materially impacted if any counterparty failed to perform according to the terms of its agreement. Collateral is not required by any party whether derivatives are in an asset or liability position under the terms of the agreements.

Fair Value Measurements – The fair value of financial instruments are classified into one of the following categories:

Level 1 inputs utilize unadjusted quoted prices in active markets accessible at the measurement date for identical assets or liabilities. The fair value hierarchy provides the highest priority to Level 1 inputs.

Level 2 inputs utilize observable prices for similar instruments and quoted prices for identical or similar instruments in non-active markets. Additionally, certain corporate debt securities utilize a third-party matrix pricing model using significant inputs corroborated by market data for substantially the full term of the assets. Equity and fixed income funds are primarily invested in publicly traded securities valued at the respective NAV of the underlying investments. Level 2 derivative instruments are valued using LIBOR yield curves, less credit valuation adjustments, and observable forward foreign exchange rates at the reporting date. Valuations of derivative contracts may fluctuate considerably from volatility in underlying foreign currencies and underlying interest rates driven by market conditions and the duration of the contract.

Level 3 unobservable inputs are used when little or no market data is available. There were no Level 3 financial assets or liabilities as of December 31, 2018 and 2017.

Financial assets and liabilities measured at fair value on a recurring basis are summarized below:

Dollars in Millions	December 31, 2018 Level 1	December 31, 2018 Level 2	December 31, 2017 Level 1	December 31, 2017 Level 2
Cash and cash equivalents - Money market and other securities	**$ —**	**$6,173**	$ —	$4,728
Marketable securities:				
Certificates of deposit	**—**	**971**	—	141
Commercial paper	**—**	**273**	—	50
Corporate debt securities	**—**	**2,379**	—	3,548
Equity investments	**—**	**125**	—	132
Derivative assets	**—**	**44**	—	13
Equity investments	**88**	**266**	67	—
Derivative liabilities	**—**	**(31)**	—	(52)

Available-for-sale Securities

Changes in fair value of equity investments are included in Other income (net) upon adoption of ASU 2016-01 in the first quarter of 2018. The following table summarizes our debt and equity securities, classified as available-for-sale:

	December 31, 2018				December 31, 2017			
	Amortized	Gross Unrealized			Amortized	Gross Unrealized		
Dollars in Millions	Cost	Gains	Losses	Fair Value	Cost	Gains	Losses	Fair Value
Certificates of deposit	**$ 971**	**$ —**	**$ —**	**$ 971**	$ 141	$ —	$ —	$ 141
Commercial paper	**273**	**—**	**—**	**273**	50	—	—	50
Corporate debt securities	**2,416**	**—**	**(37)**	**2,379**	3,555	3	(10)	3,548
Equity investments[a]	**—**	**—**	**—**	**—**	31	37	(1)	67
	$ 3,660	**$ —**	**$ (37)**	**$ 3,623**	$ 3,777	$ 40	$ (11)	$ 3,806
Equity investments[b]				**479**				132
Total				**$ 4,102**				$ 3,938

Dollars in Millions	December 31, 2018	December 31, 2017
Current marketable securities	**$ 1,973**	$ 1,391
Non-current marketable securities[c]	**1,775**	2,480
Other assets[a]	**354**	67
Total	**$ 4,102**	$ 3,938

(a) Includes equity investments with readily determinable fair values not measured using the fair value option as of December 31, 2017.

(b) Includes equity and fixed income funds measured using the fair value option at December 31, 2017. Refer to "—Note.1 Accounting Policies and Recently Issued Accounting Standards" for more information.

(c) All non-current marketable securities mature within five years as of December 31, 2018 and December 31, 2017.

Equity investments not measured at fair value and excluded from the above table were limited partnerships and other equity method investments of $114 million at December 31, 2018 and $66 million at December 31, 2017 and other equity investments without readily determinable fair values of $206 million at December 31, 2018 and $152 million at December 31, 2017. These amounts are included in Other assets. Adjustments to equity investments without readily determinable fair values were $19 million resulting from observable price changes for similar securities of the same issuer and were recorded in Other income (net).

The following table summarizes net loss recorded for equity investments with readily determinable fair values held as of December 31, 2018:

Dollars in Millions	Year Ended December 31, 2018
Net loss recognized	**$ (530)**
Less: Net gain recognized for equity investments sold	**7**
Net unrealized loss on equity investments held	**$ (537)**

Qualifying Hedges and Non-Qualifying Derivatives

Cash Flow Hedges — Foreign currency forward contracts are used to hedge certain forecasted intercompany inventory purchases and sales transactions and certain foreign currency transactions. The fair value for contracts designated as cash flow hedges is temporarily reported in Accumulated other comprehensive loss and included in earnings when the hedged item affects earnings. Upon adoption of the amended guidance for derivatives and hedging, the entire change in fair value of the hedging instrument included in the assessment of hedge effectiveness is recorded in the derivatives qualifying as cash flow hedges component of Other Comprehensive (Loss)/Income. The net gain or loss on foreign currency forward contracts is expected to be reclassified to net earnings (primarily included in Cost of products sold) within the next 12 months. The notional amount of outstanding foreign currency forward contracts was primarily attributed to the euro of $1.2 billion and Japanese yen of $464 million at December 31, 2018.

The earnings impact related to discontinued cash flow hedges and hedge ineffectiveness was not significant during all periods presented. Cash flow hedge accounting is discontinued when the forecasted transaction is no longer probable of occurring within 60 days after the originally forecasted date or when the hedge is no longer effective. Assessments to determine whether derivatives designated as qualifying hedges are highly effective in offsetting changes in the cash flows of hedged items are performed at inception and on a quarterly basis. Foreign currency forward contracts not designated as hedging instruments are used to offset exposures in certain foreign currency denominated assets, liabilities and earnings. Changes in the fair value of these derivatives are recognized in earnings as they occur.

Net Investment Hedges — Non-U.S. dollar borrowings of €950 million ($1.1 billion) at December 31, 2018 are designated to hedge euro currency exposures of the net investment in certain foreign affiliates. These borrowings are designated as net investment hedges and recognized in long term debt. The effective portion of foreign exchange gain on the remeasurement of euro debt was $45 million and $48 million in 2018 and 2016, respectively, and a loss of $134 million in 2017, and were recorded in the foreign currency translation component of Accumulated other comprehensive loss with the related offset in long-term debt.

In January 2018, BMS entered into $300 million of cross-currency interest rate swap contracts maturing in December 2022 designated to hedge Japanese yen currency exposures of the Company's net investment in its Japan subsidiary. Contract fair value changes are recorded in the foreign currency translation component of Other Comprehensive (Loss)/Income with a related offset in Pension and other liabilities.

Fair Value Hedges — Fixed to floating interest rate swap contracts are designated as fair value hedges and used as an interest rate risk management strategy to create an appropriate balance of fixed and floating rate debt. The contracts and underlying debt for the hedged benchmark risk are recorded at fair value. The effective interest rate for the contracts is one-month LIBOR (2.50% as of December 31, 2018) plus an interest rate spread ranging from 0.3% to 4.6%. Gains or losses resulting from changes in fair value of the underlying debt attributable to the hedged benchmark interest rate risk are recorded in interest expense with an associated offset to the carrying value of debt. Since the specific terms and notional amount of the swap are intended to match those of the debt being hedged, all changes in fair value of the swap are recorded in interest expense with an associated offset to the derivative asset or liability on the consolidated balance sheet. As a result, there was no net impact in earnings. When the underlying swap is terminated prior to maturity, the fair value adjustment to the underlying debt is amortized as a reduction to interest expense over the remaining term of the debt.

The following summarizes the fair value of outstanding derivatives:

	December 31, 2018				December 31, 2017			
	Asset[a]		Liability[b]		Asset[a]		Liability[b]	
Dollars in Millions	Notional	Fair Value	Notional	Fair Value	Notional	Fair Value	Notional	Fair Value
Derivatives designated as hedging instruments:								
Interest rate swap contracts	$ —	$ —	$ 755	$ (10)	$ —	$ —	$ 755	$ (6)
Cross-currency interest rate swap contracts	50	—	250	(5)	—	—	—	—
Foreign currency forward contracts	1,503	44	496	(10)	944	12	489	(9)
Derivatives not designated as hedging instruments:								
Foreign currency forward contracts	54	—	600	(6)	206	1	1,369	(37)

(a) Included in prepaid expenses and other and other assets.
(b) Included in accrued liabilities and pension and other liabilities.

The following table summarizes the financial statement classification and amount of gain/(loss) recognized on hedging instruments:

	Year Ended December 31,					
	2018		2017		2016	
Dollars in Millions	Cost of products sold	Other income (net)	Cost of products sold	Other income (net)	Cost of products sold	Other income (net)
Interest rate swap contracts	$ —	$ 23	$ —	$ 31	$ —	$ 36
Cross-currency interest rate swap contracts	—	8	—	—	—	—
Foreign currency forward contracts	4	14	12	(52)	(20)	(36)

The following table summarizes the effect of derivative and non-derivative instruments designated as hedging instruments in Other Comprehensive (Loss)/Income:

	Year Ended December 31,		
Dollars in Millions	2018	2017	2016
Derivatives qualifying as cash flow hedges			
Foreign currency forward contracts gain/(loss):			
Recognized in Other Comprehensive (Loss)/Income[(a)]	$ 86	$ (108)	$ 6
Reclassified to Cost of products sold	(4)	(12)	20
Reclassified to Other income (net)	—	36	(8)
Derivatives qualifying as net investment hedges			
Cross-currency interest rate swap contracts loss:			
Recognized in Other Comprehensive (Loss)/Income	(5)	—	—
Non-derivatives qualifying as net investment hedges			
Non U.S. dollar borrowings gain/(loss):			
Recognized in Other Comprehensive (Loss)/Income	45	(134)	48

(a) The amount is expected to be reclassified into earnings in the next 12 months.

Debt Obligations

Short-term debt obligations include:

	December 31,	
Dollars in Millions	2018	2017
Commercial paper	$ —	$ 299
Non-U.S. short-term borrowings	320	512
Current portion of long-term debt	1,249	—
Other	134	176
Total	$ 1,703	$ 987

The average amount of commercial paper outstanding was $19 million and $389 million at a weighted-average interest rate of 1.27% and 1.17% during 2018 and 2017, respectively. The maximum amount of commercial paper outstanding was $300 million with no outstanding borrowings at December 31, 2018. The maximum amount of commercial paper outstanding was $1.3 billion with $299 million outstanding borrowings at December 31, 2017.

Long-term debt and the current portion of long-term debt includes:

Dollars in Millions	December 31, 2018	2017
Principal Value:		
1.750% Notes due 2019	$ 500	$ 500
1.600% Notes due 2019	750	750
2.000% Notes due 2022	750	750
7.150% Notes due 2023	302	302
3.250% Notes due 2023	500	500
1.000% Euro Notes due 2025	655	682
6.800% Notes due 2026	256	256
3.250% Notes due 2027	750	750
1.750% Euro Notes due 2035	655	682
5.875% Notes due 2036	287	287
6.125% Notes due 2038	226	230
3.250% Notes due 2042	500	500
4.500% Notes due 2044	500	500
6.875% Notes due 2097	87	87
0.13% - 5.75% Other - maturing 2019 - 2024	58	59
Subtotal	6,776	6,835
Adjustments to Principal Value:		
Fair value of interest rate swap contracts	(10)	(6)
Unamortized basis adjustment from swap terminations	201	227
Unamortized bond discounts and issuance costs	(72)	(81)
Total	$ 6,895	$ 6,975
Current portion of long-term debt	$ 1,249	$ —
Long-term debt	5,646	6,975

The fair value of long-term debt was $7.1 billion and $7.5 billion at December 31, 2018 and 2017, respectively, valued using Level 2 inputs which are based upon the quoted market prices for the same or similar debt instruments. The fair value of short-term borrowings approximates the carrying value due to the short maturities of the debt instruments.

Senior unsecured notes were issued in registered public offerings in 2017. The notes rank equally in right of payment with all of BMS's existing and future senior unsecured indebtedness and are redeemable in whole or in part, at any time at a predetermined redemption price. The following table summarizes the issuance of long-term debt obligations in 2017 (none in 2018 and 2016):

Dollars in Millions	2017
Principal Value:	
1.600% Notes due 2019	$ 750
3.250% Notes due 2027	750
Total	$ 1,500
Proceeds net of discount and deferred loan issuance costs	$ 1,488
Forward starting interest rate swap contracts terminated:	
Notional amount	$ 750
Realized gain	6
Unrealized loss	(2)

BMS repaid $750 million of 0.875% Notes at maturity in 2017. The Company repurchased certain long-term debt obligations with interest rates ranging from 5.875% to 6.875% in 2017. The following summarizes the debt redemption activity:

Dollars in Millions	2017
Principal amount	$ 337
Carrying value	366
Debt redemption price	474
Loss on debt redemption[(a)]	109

(a) Including acceleration of debt issuance costs, gain on previously terminated interest rate swap contracts and other related fees.

Interest payments were $212 million in 2018, $215 million in 2017 and $191 million in 2016 net of amounts received from interest rate swap contracts.

At December 31, 2018, the Company had three separate revolving credit facilities totaling $5.0 billion from a syndicate of lenders including two $1.5 billion facilities expiring in September 2022 and July 2023 that are extendable annually by one year on the anniversary date with the consent of the lenders. In January 2019, an existing 364 day $2.0 billion facility expiring in March 2019 was replaced with a new 364 day $2.0 billion facility expiring in January 2020 and a new three-year $1.0 billion facility expiring in January 2022 was entered into. All credit facilities provide for customary terms and conditions with no financial covenants. No borrowings were outstanding under any revolving credit facility at December 31, 2018 or 2017.

Available financial guarantees provided in the form of bank overdraft facilities, stand-by letters of credit and performance bonds were approximately $1.0 billion at December 31, 2018. Stand-by letters of credit are issued through financial institutions in support of guarantees for various obligations. Performance bonds are issued to support a range of ongoing operating activities, including sale of products to hospitals and foreign ministries of health, bonds for customs, duties and value added tax and guarantees related to miscellaneous legal actions.

Note 10. RECEIVABLES

	December 31,	
Dollars in Millions	**2018**	2017
Trade receivables	**$ 4,914**	$ 4,599
Less charge-backs and cash discounts	**(245)**	(209)
Less bad debt allowances	**(33)**	(43)
Net trade receivables	**4,636**	4,347
Alliance receivables	**395**	322
Prepaid and refundable income taxes	**218**	691
Royalties, VAT and other	**716**	940
Receivables	**$ 5,965**	$ 6,300

Non-U.S. receivables sold on a nonrecourse basis were $756 million in 2018, $637 million in 2017 and $618 million in 2016. In the aggregate, receivables from three pharmaceutical wholesalers in the U.S. represented 70% and 65% of total trade receivables at December 31, 2018 and 2017, respectively.

Changes to the allowances for bad debt, charge-backs and cash discounts were as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Balance at beginning of year	**$ 252**	$ 174	$ 122
Provision	**2,739**	2,090	1,613
Utilization	**(2,707)**	(2,015)	(1,561)
Other	**(6)**	3	—
Balance at end of year	**$ 278**	$ 252	$ 174

Note 11. INVENTORIES

Dollars in Millions	December 31, 2018	2017
Finished goods	$ 396	$ 384
Work in process	1,026	931
Raw and packaging materials	202	273
Inventories	$ 1,624	$ 1,588
Inventories	$ 1,195	$ 1,166
Other assets	429	422

Other assets include inventory expected to remain on hand beyond one year in both periods.

Note 12. PROPERTY, PLANT AND EQUIPMENT AND LEASES

Dollars in Millions	December 31, 2018	2017
Land	$ 104	$ 100
Buildings	5,231	4,848
Machinery, equipment and fixtures	2,962	3,059
Construction in progress	548	980
Gross property, plant and equipment	8,845	8,987
Less accumulated depreciation	(3,818)	(3,986)
Property, plant and equipment	$ 5,027	$ 5,001
United States	$ 3,772	$ 3,617
Europe	1,140	1,266
Rest of the World	115	118
Total	$ 5,027	$ 5,001

Depreciation expense was $505 million in 2018, $682 million in 2017 and $448 million in 2016.

Annual minimum rental commitments for non-cancelable operating leases (primarily real estate and motor vehicles) are approximately $100 million in each of the next five years and an aggregate $200 million thereafter. Operating lease expense was approximately $130 million in 2018, $120 million in 2017 and $140 million in 2016. Sublease income and capital lease obligations were not material for all periods presented.

Note 13. GOODWILL AND OTHER INTANGIBLE ASSETS

Dollars in Millions	Estimated Useful Lives	December 31, 2018	2017
Goodwill		$ 6,538	$ 6,863
Other intangible assets:			
Licenses	5 – 15 years	$ 510	$ 567
Developed technology rights	9 – 15 years	2,357	2,357
Capitalized software	3 – 10 years	1,156	1,381
IPRD		32	32
Gross other intangible assets		4,055	4,337
Less accumulated amortization		(2,964)	(3,127)
Total other intangible assets		$ 1,091	$ 1,210

An out of period adjustment was included in the year ended December 31, 2018 to reduce Goodwill and increase Accumulated other comprehensive loss by $180 million attributed to goodwill from prior acquisitions of foreign entities previously not recorded in the correct local currency. The adjustment did not impact the consolidated results of operations and was not material to previously reported balance sheets.

Amortization expense of other intangible assets was $198 million in 2018, $190 million in 2017 and $178 million in 2016. Future annual amortization expense of other intangible assets is expected to be approximately $230 million in 2019, $190 million in 2020, $160 million in 2021, $130 million in 2022, and $100 million in 2023.

Other intangible asset impairment charges were $84 million in 2018, $80 million in 2017 and $33 million in 2016. In 2018, a $64 million impairment charge was recorded in Other income (net) for an out-licensed asset obtained in the 2010 acquisition of ZymoGenetics, Inc., which did not meet its primary endpoint in a Phase II clinical study. A $75 million IPRD charge was recognized and attributed to noncontrolling interest after BMS declined to exercise its option to purchase F-Star in 2017.

Note 14. ACCRUED LIABILITIES

Dollars in Millions	December 31, 2018	2017
Rebates and returns	$ 2,417	$ 2,024
Employee compensation and benefits	848	869
Research and development	805	783
Dividends	669	654
Royalties	391	285
Branded Prescription Drug Fee	188	303
Liabilities related to assets held-for-sale	152	—
Litigation and other settlements	118	38
Restructuring	85	155
Pension and postretirement benefits	35	40
Other	781	863
Accrued liabilities	$ 6,489	$ 6,014

Note 15. EQUITY

Dollars and Shares in Millions	Common Stock Shares	Common Stock Par Value	Capital in Excess of Par Value of Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock Shares	Treasury Stock Cost	Noncontrolling Interest
Balance at January 1, 2016	2,208	$ 221	$ 1,459	$ (2,468)	$ 31,613	539	$ (16,559)	$ 158
Net earnings	—	—	—	—	4,457	—	—	50
Other Comprehensive (Loss)/Income	—	—	—	(35)	—	—	—	—
Cash dividends declared[c]	—	—	—	—	(2,557)	—	—	—
Stock repurchase program	—	—	—	—	—	4	(231)	—
Stock compensation	—	—	266	—	—	(7)	11	—
Distributions	—	—	—	—	—	—	—	(38)
Balance at December 31, 2016	2,208	221	1,725	(2,503)	33,513	536	(16,779)	170
Accounting change - cumulative effect[a]	—	—	—	—	(787)	—	—	—
Adjusted balance at January 1, 2017	2,208	221	1,725	(2,503)	32,726	536	(16,779)	170
Net earnings	—	—	—	—	1,007	—	—	27
Other Comprehensive (Loss)/Income	—	—	—	214	—	—	—	—
Cash dividends declared[c]	—	—	—	—	(2,573)	—	—	—
Stock repurchase program	—	—	—	—	—	44	(2,477)	—
Stock compensation	—	—	173	—	—	(5)	7	—
Variable interest entity	—	—	—	—	—	—	—	(59)
Distributions	—	—	—	—	—	—	—	(32)
Balance at December 31, 2017	2,208	221	1,898	(2,289)	31,160	575	(19,249)	106
Accounting change - cumulative effect[b]	—	—	—	(34)	332	—	—	—
Adjusted balance at January 1, 2018	**2,208**	**221**	**1,898**	**(2,323)**	**31,492**	**575**	**(19,249)**	**106**
Net earnings	—	—	—	—	**4,920**	—	—	**27**
Other Comprehensive (Loss)/Income	—	—	—	**(156)**	—	—	—	—
Cash dividends declared[c]	—	—	—	—	**(2,630)**	—	—	—
Stock repurchase program	—	—	—	—	—	**5**	**(313)**	—
Stock compensation	—	—	**183**	—	—	**(4)**	**(12)**	—
Adoption of ASU 2018-02[b]	—	—	—	**(283)**	**283**	—	—	—
Distributions	—	—	—	—	—	—	—	**(37)**
Balance at December 31, 2018	**2,208**	**$ 221**	**$ 2,081**	**$ (2,762)**	**$ 34,065**	**576**	**$ (19,574)**	**$ 96**

(a) Cumulative effect resulting from adoption of ASU 2016-16.
(b) Refer to "—Note 1. Accounting Policies and Recently Issued Accounting Standards" for additional information.
(c) Cash dividends declared per common share were $1.61, $1.57 and $1.53 in 2018, 2017 and 2016, respectively.

BMS has a stock repurchase program authorized by its Board of Directors allowing for repurchases in the open market or through private transactions, including plans established in accordance with Rule 10b5-1 under the Securities Exchange Act of 1934. The stock repurchase program does not have an expiration date and may be suspended or discontinued at any time. Treasury stock is recognized at the cost to reacquire the shares. Shares issued from treasury are recognized utilizing the first-in first-out method.

BMS repurchased $2 billion of its common stock in 2017 through accelerated share repurchase agreements. The agreements were funded through a combination of debt and cash.

The components of Other Comprehensive (Loss)/Income were as follows:

	Year Ended December 31,								
	2018			2017			2016		
Dollars in Millions	Pretax	Tax	After Tax	Pretax	Tax	After Tax	Pretax	Tax	After Tax
Derivatives qualifying as cash flow hedges:									
Unrealized gains/(losses)	$ 86	$ (9)	$ 77	$ (101)	$ 33	$ (68)	$ (5)	$ —	$ (5)
Reclassified to net earnings[a]	(4)	(3)	(7)	19	(8)	11	12	(3)	9
Derivatives qualifying as cash flow hedges	82	(12)	70	(82)	25	(57)	7	(3)	4
Pension and postretirement benefits:									
Actuarial (losses)/gains	(89)	(3)	(92)	47	11	58	(126)	(3)	(129)
Amortization[b]	65	(13)	52	77	(31)	46	78	(25)	53
Settlements[b]	121	(28)	93	167	(57)	110	91	(32)	59
Pension and postretirement benefits	97	(44)	53	291	(77)	214	43	(60)	(17)
Available-for-sale securities:									
Unrealized (losses)/gains	(30)	5	(25)	38	6	44	(12)	(1)	(13)
Realized (gains)/losses[b]	—	—	—	(7)	2	(5)	29	—	29
Available-for-sale securities	(30)	5	(25)	31	8	39	17	(1)	16
Foreign currency translation	(245)	(9)	(254)	(20)	38	18	(33)	(5)	(38)
Total Other Comprehensive (Loss)/Income	$ (96)	$ (60)	$ (156)	$ 220	$ (6)	$ 214	$ 34	$ (69)	$ (35)

(a) Included in Cost of products sold.
(b) Included in Other income (net).

The accumulated balances related to each component of Other Comprehensive (Loss)/Income, net of taxes, were as follows:

	December 31,	
Dollars in Millions	2018	2017
Derivatives qualifying as cash flow hedges	$ 51	$ (19)
Pension and postretirement benefits	(2,102)	(1,883)
Available-for-sale securities	(30)	32
Foreign currency translation	(681)	(419)
Accumulated other comprehensive loss	$ (2,762)	$ (2,289)

Note 16. RETIREMENT BENEFITS

BMS sponsors defined benefit pension plans, defined contribution plans and termination indemnity plans for regular full-time employees. The principal defined benefit pension plan is the Bristol-Myers Squibb Retirement Income Plan (the "Plan"), covering most U.S. employees and representing approximately 66% of the consolidated pension plan assets and 60% of the obligations. Future benefits related to service for this plan were eliminated in 2009. BMS contributes at least the minimum amount required by the ERISA. Plan benefits are based primarily on the participant's years of credited service and final average compensation. As of December 2018, Plan assets consist primarily of fixed-income securities.

In December 2018, BMS announced plans to fully terminate the Bristol-Myers Squibb Retirement Income Plan (the "Plan"). Pension obligations related to the Plan of $3.6 billion will be distributed through a combination of lump sum payments to eligible Plan participants who elect such payments and through the purchase of a group annuity contract from Athene Annuity and Life Company ("Athene"), a wholly-owned insurance subsidiary of Athene Holding Ltd. The benefit obligation for the Plan as of December 31, 2018 was therefore determined on a plan termination basis for which it is assumed that a portion of eligible active and deferred vested participants will elect lump sum payments. The remaining obligation expected to be transferred to Athene includes an annuity purchase price premium. The Plan has sufficient assets to satisfy all transaction obligations. The transaction is expected to close in the third quarter of 2019 at which time the Company expects to record a total non-cash pre-tax pension settlement charge of approximately $1.5 billion to $2.0 billion.

The net periodic benefit cost/(credit) of defined benefit pension plans includes:

Dollars in Millions	2018	2017	2016
Service cost — benefits earned during the year	$ 26	$ 25	$ 24
Interest cost on projected benefit obligation	193	188	192
Expected return on plan assets	(386)	(411)	(418)
Amortization of prior service credits	(4)	(4)	(3)
Amortization of net actuarial loss	74	82	84
Settlements and curtailments	121	159	91
Special termination benefits	—	3	1
Net periodic benefit cost/(credit)	$ 24	$ 42	$ (29)

Pension settlement charges were recognized after determining the annual lump sum payments will exceed the annual interest and service costs for certain pension plans, including the primary U.S. pension plan in 2018, 2017 and 2016.

Changes in defined benefit pension plan obligations, assets, funded status and amounts recognized in the consolidated balance sheets were as follows:

Dollars in Millions	2018	2017
Benefit obligations at beginning of year	$ 6,749	$ 6,440
Service cost—benefits earned during the year	26	25
Interest cost	193	188
Settlements and Curtailments	(278)	(330)
Actuarial (gains)/losses	(523)	368
Benefits paid	(123)	(121)
Foreign currency and other	(78)	179
Benefit obligations at end of year	$ 5,966	$ 6,749
Fair value of plan assets at beginning of year	$ 6,749	$ 5,831
Actual return on plan assets	(203)	804
Employer contributions	71	396
Settlements	(276)	(330)
Benefits paid	(123)	(121)
Foreign currency and other	(89)	169
Fair value of plan assets at end of year	$ 6,129	$ 6,749
Funded status	$ 163	$ —
Assets/(Liabilities) recognized:		
Other assets	$ 622	$ 487
Accrued liabilities	(32)	(31)
Pension and other liabilities	(427)	(456)
Funded status	$ 163	$ —
Recognized in Accumulated other comprehensive loss:		
Net actuarial losses	$ 2,717	$ 2,849
Prior service credit	(30)	(36)
Total	$ 2,687	$ 2,813

The accumulated benefit obligation for defined benefit pension plans was $6.0 billion and $6.7 billion at December 31, 2018 and 2017, respectively.

Additional information related to pension plans was as follows:

Dollars in Millions	2018	2017
Pension plans with projected benefit obligations in excess of plan assets:		
Projected benefit obligation	$ 1,275	$ 1,166
Fair value of plan assets	817	678
Pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	$ 1,181	$ 1,008
Fair value of plan assets	757	550

Actuarial Assumptions

Weighted-average assumptions used to determine defined benefit pension plan obligations at December 31 were as follows:

	2018	2017
Discount rate	3.5%	3.1%
Rate of compensation increase	0.5%	0.5%

Weighted-average actuarial assumptions used to determine defined benefit pension plan net periodic benefit cost/(credit) for the years ended December 31 were as follows:

	2018	2017	2016
Discount rate	3.1%	3.5%	3.8%
Expected long-term return on plan assets	6.2%	7.0%	7.2%
Rate of compensation increase	0.5%	0.5%	0.5%

The yield on high quality corporate bonds matching the duration of the benefit obligations is used in determining the discount rate. The Citi Pension Discount curve is used in developing the discount rate for the U.S. plans.

The expected return on plan assets was determined using the expected rate of return and a calculated value of assets, referred to as the "market-related value" which approximated the fair value of plan assets at December 31, 2018. Differences between assumed and actual returns are amortized to the market-related value on a straight-line basis over a three-year period. Several factors are considered in developing the expected return on plan assets, including long-term historical returns and input from external advisors. Individual asset class return forecasts were developed based upon market conditions, for example, price-earnings levels and yields and long-term growth expectations. The expected long-term rate of return is the weighted-average of the target asset allocation of each individual asset class.

Historical long-term actual annualized returns for U.S. pension plans were as follows:

	2018	2017	2016
10 years	10.4%	6.8%	6.1%
15 years	7.8%	9.3%	7.1%
20 years	7.1%	7.5%	7.7%

Actuarial gains and losses resulted from changes in actuarial assumptions (such as changes in the discount rate and revised mortality rates) and from differences between assumed and actual experience (such as differences between actual and expected return on plan assets). Actuarial gains in 2018 related to plan benefit obligations were primarily the result of increases in discount rates. Actuarial losses in 2017 related to plan benefit obligations were primarily the result of decreases in discount rates. Gains and losses are amortized over the life expectancy of the plan participants for U.S. plans (33 years in 2019) and expected remaining service periods for most other plans to the extent they exceed 10% of the higher of the market-related value or the projected benefit obligation for each respective plan. As the result of adopting ASU 2017-07, refer to "—Note 1. Accounting Policies and Recently Issued Accounting Standards" for further details, the periodic benefit cost or credit is included in Other income (net) except for the service cost component which is included in Cost of products sold, Research and development, and Marketing, selling and administrative expenses.

Postretirement Benefit Plans

Comprehensive medical and group life benefits are provided for substantially all U.S. retirees electing to participate in comprehensive medical and group life plans and to a lesser extent certain benefits for non-U.S. employees. The medical plan is contributory. Contributions are adjusted periodically and vary by date of retirement. The life insurance plan is noncontributory. Plan assets consist principally of equity and fixed-income securities. Postretirement benefit plan obligations were $253 million and $298 million at December 31, 2018 and 2017, respectively, and the fair value of plan assets were $331 million and $364 million at December 31, 2018 and 2017, respectively. The weighted-average discount rate used to determine benefit obligations was 3.9% and 3.3% at December 31, 2018 and 2017, respectively. The net periodic benefit credits were not material.

Plan Assets

The fair value of pension and postretirement plan assets by asset category at December 31, 2018 and 2017 was as follows:

	December 31, 2018				December 31, 2017			
Dollars in Millions	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Plan Assets								
Equity securities	$ 124	$ —	$ —	$ 124	$ 799	$ —	$ —	$ 799
Equity funds	2	475	—	477	160	1,358	—	1,518
Fixed income funds	—	606	—	606	—	724	—	724
Corporate debt securities	—	3,865	—	3,865	—	1,919	—	1,919
U.S. Treasury and agency securities	—	553	—	553	—	729	—	729
Short-term investment funds	—	55	—	55	—	135	—	135
Insurance contracts	—	—	134	134	—	—	138	138
Cash and cash equivalents	311	—	—	311	214	—	—	214
Other	—	105	19	124	—	92	13	105
Plan assets subject to leveling	$ 437	$ 5,659	$ 153	$ 6,249	$ 1,173	$ 4,957	$ 151	$ 6,281
Plan assets measured at NAV as a practical expedient								
Equity funds				$ —				$ 488
Venture capital and limited partnerships				121				154
Other				91				191
Total plan assets measured at NAV as a practical expedient				212				833
Net plan assets				$ 6,461				$ 7,114

The investment valuation policies per investment class are as follows:

Level 1 inputs utilize unadjusted quoted prices in active markets accessible at the measurement date for identical assets or liabilities. The fair value hierarchy provides the highest priority to Level 1 inputs. These instruments include equity securities, equity funds and fixed income funds publicly traded on a national securities exchange, and cash and cash equivalents. Cash and cash equivalents are highly liquid investments with original maturities of three months or less at the time of purchase and are recognized at cost, which approximates fair value. Pending trade sales and purchases are included in cash and cash equivalents until final settlement.

Level 2 inputs utilize observable prices for similar instruments, quoted prices for identical or similar instruments in non-active markets, and other observable inputs that can be corroborated by market data for substantially the full term of the assets or liabilities. Equity funds, fixed income funds, and short-term investment funds classified as Level 2 within the fair value hierarchy are valued at the NAV of their shares held at year end, which represents fair value. Corporate debt securities and U.S. Treasury and agency securities classified as Level 2 within the fair value hierarchy are valued utilizing observable prices for similar instruments and quoted prices for identical or similar instruments in markets that are not active.

Level 3 unobservable inputs are used when little or no market data is available. Insurance contracts are held by certain foreign pension plans and are carried at contract value, which approximates the estimated fair value and is based on the fair value of the underlying investment of the insurance company.

Venture capital and limited partnership investments are typically only redeemable through distributions upon liquidation of the underlying assets. There were no significant unfunded commitments for these investments and essentially all liquidations are expected to occur by the end of 2019. Most of the remaining investments using the practical expedient are redeemable on a weekly or monthly basis.

The investment strategy is to maximize return while maintaining an appropriate level of risk to provide sufficient liquidity for benefit obligations and plan expenses. During 2018, a target allocation of 97% long-duration fixed income and 3% private equity was adopted and is now maintained for the principal defined benefit pension plan, the Bristol-Myers Squibb Retirement Income Plan. BMS common stock represents less than 1% of the plan assets at December 31, 2018 and 2017.

Contributions and Estimated Future Benefit Payments

Contributions to pension plans were $71 million in 2018, $396 million in 2017 and $81 million in 2016 and are not expected to be material in 2019. Estimated annual future benefit payments for non-terminating plans (including lump sum payments) will be approximately $100 million in each of the next five years and in the subsequent five year period.

Savings Plans

The principal defined contribution plan is the Bristol-Myers Squibb Savings and Investment Program. The contribution is based on employee contributions and the level of Company match. The expense attributed to defined contribution plans in the U.S. was approximately $200 million in 2018, 2017 and 2016.

Note 17. EMPLOYEE STOCK BENEFIT PLANS

On May 1, 2012, the shareholders approved the 2012 Plan, which replaced the 2007 Stock Incentive Plan. The 2012 Plan provides for 109 million shares to be authorized for grants, plus any shares from outstanding awards under the 2007 Plan as of February 29, 2012 that expire, are forfeited, canceled, or withheld to satisfy tax withholding obligations. As of December 31, 2018, 102 million shares were available for award. Shares are issued from treasury stock to satisfy our obligations under this Plan.

Executive officers and key employees may be granted options to purchase common stock at no less than the market price on the date the option is granted. Options generally become exercisable ratably over four years and have a maximum term of ten years. The plan provides for the granting of stock appreciation rights whereby the grantee may surrender exercisable rights and receive common stock and/or cash measured by the excess of the market price of the common stock over the option exercise price. The Company has not granted any stock options or stock appreciation rights since 2009.

Restricted stock units may be granted to key employees, subject to restrictions as to continuous employment. Generally, vesting occurs ratably over a four year period from grant date. A stock unit is a right to receive stock at the end of the specified vesting period but has no voting rights.

Market share units are granted to executives. Vesting is conditioned upon continuous employment until the vesting date and a payout factor of at least 60% of the share price on the award date. The payout factor is the share price on vesting date divided by share price on award date, with a maximum of 200%. The share price used in the payout factor is calculated using an average of the closing prices on the grant or vest date, and the nine trading days immediately preceding the grant or vest date. Vesting occurs ratably over four years.

Performance share units are granted to executives, have a three year cycle and are granted as a target number of units subject to adjustment. The number of shares issued when performance share units vest is determined based on the achievement of performance goals and based on the Company's three-year total shareholder return relative to a peer group of companies. Vesting is conditioned upon continuous employment and occurs on the third anniversary of the grant date.

Stock-based compensation expense for awards ultimately expected to vest is recognized over the vesting period. Forfeitures are estimated based on historical experience at the time of grant and revised in subsequent periods if actual forfeitures differ from those estimates. Other information related to stock-based compensation benefits are as follows:

	Year Ended December 31,		
Dollars in Millions	**2018**	2017	2016
Restricted stock units	**$ 102**	$ 95	$ 89
Market share units	**38**	35	37
Performance share units	**81**	69	79
Total stock-based compensation expense	**$ 221**	$ 199	$ 205
Income tax benefit	**$ 41**	$ 59	$ 69

Shares in Millions	Stock Options		Restricted Stock Units		Market Share Units		Performance Share Units	
	Number of Options Outstanding	Weighted-Average Exercise Price of Shares	Number of Nonvested Awards	Weighted-Average Grant-Date Fair Value	Number of Nonvested Awards	Weighted-Average Grant-Date Fair Value	Number of Nonvested Awards	Weighted-Average Grant-Date Fair Value
Balance at January 1, 2018	3.8	$ 19.04	4.9	$ 56.85	1.5	$ 62.25	3.5	$ 62.57
Granted	—	—	**2.4**	**61.40**	**0.7**	**72.33**	**1.1**	**67.60**
Released/Exercised	**(2.1)**	**20.22**	**(1.7)**	**56.95**	**(0.6)**	**61.70**	**(1.6)**	**64.84**
Adjustments for actual payout	—	—	—	—	**0.1**	**59.29**	**0.1**	**64.84**
Forfeited/Canceled	—	—	**(0.6)**	**58.85**	**(0.2)**	**66.08**	**(0.3)**	**63.12**
Balance at December 31, 2018	**1.7**	**$ 17.51**	**5.0**	**$ 58.83**	**1.5**	**$ 66.76**	**2.8**	**$ 63.28**
Vested or expected to vest	**1.7**	**$ 17.51**	**4.4**	**$ 58.85**	**1.3**	**$ 66.67**	**3.3**	**$ 63.10**

Dollars in Millions	Restricted Stock Units	Market Share Units	Performance Share Units
Unrecognized compensation cost	**$ 212**	**$ 43**	**$ 85**
Expected weighted-average period in years of compensation cost to be recognized	**2.7**	**2.7**	**1.7**

Amounts in Millions, except per share data	2018	2017	2016
Weighted-average grant date fair value (per share):			
Restricted stock units	**$ 61.40**	$ 54.39	$ 60.56
Market share units	**72.33**	60.14	65.26
Performance share units	**67.60**	57.91	64.87
Fair value of awards that vested:			
Restricted stock units	**$ 98**	$ 91	$ 81
Market share units	**40**	33	50
Performance share units	**103**	84	93
Total intrinsic value of stock options exercised	**$ 89**	$ 84	$ 158

The fair value of restricted stock units, market share units and performance share units approximates the closing trading price of BMS's common stock on the grant date after adjusting for the units not eligible for accrued dividends. In addition, the fair value of market share units and performance share units considers the probability of satisfying the payout factor and total shareholder return, respectively.

The following table summarizes significant outstanding and exercisable options at December 31, 2018:

	Number Outstanding and Exercisable (in millions)	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price Per Share	Aggregate Intrinsic Value (in millions)
Options Outstanding and Exercisable	**1.7**	**0.2**	**$ 17.51**	**$ 57**

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the closing stock price of $51.98 on December 31, 2018.

Note 18. LEGAL PROCEEDINGS AND CONTINGENCIES

The Company and certain of its subsidiaries are involved in various lawsuits, claims, government investigations and other legal proceedings that arise in the ordinary course of business. These claims or proceedings can involve various types of parties, including governments, competitors, customers, suppliers, service providers, licensees, employees, or shareholders, among others. The resolution of these matters often develops over a long period of time and expectations can change as a result of new findings, rulings, appeals or settlement arrangements. The Company recognizes accruals for such contingencies when it is probable that a liability will be incurred and the amount of loss can be reasonably estimated. These matters involve patent infringement, antitrust, securities, pricing, sales and marketing practices, environmental, commercial, contractual rights, licensing obligations, health and safety matters, consumer fraud, employment matters, product liability and insurance coverage. Legal proceedings that are material or that the Company believes could become material are described below.

Although the Company believes it has substantial defenses in these matters, there can be no assurance that there will not be an increase in the scope of pending matters or that any future lawsuits, claims, government investigations or other legal proceedings will not be material. Unless otherwise noted, the Company is unable to assess the outcome of the respective litigation nor is it able to provide an estimated range of potential loss. Furthermore, failure to enforce our patent rights would likely result in substantial decreases in the respective product revenues from generic competition.

INTELLECTUAL PROPERTY

*Plavix** - Australia

As previously disclosed, Sanofi was notified that, in August 2007, GenRx Proprietary Limited (GenRx) obtained regulatory approval of an application for clopidogrel bisulfate 75mg tablets in Australia. GenRx, formerly a subsidiary of Apotex Inc. (Apotex), has since changed its name to Apotex. In August 2007, Apotex filed an application in the Federal Court of Australia (the Federal Court) seeking revocation of Sanofi's Australian Patent No. 597784 (Case No. NSD 1639 of 2007). Sanofi filed counterclaims of infringement and sought an injunction. On September 21, 2007, the Federal Court granted Sanofi's injunction. A subsidiary of the Company was subsequently added as a party to the proceedings. In February 2008, a second company, Spirit Pharmaceuticals Pty. Ltd., also filed a revocation suit against the same patent. This case was consolidated with the Apotex case, and a trial occurred in April 2008. On August 12, 2008, the Federal Court of Australia held that claims of Patent No. 597784 covering clopidogrel bisulfate, hydrochloride, hydrobromide, and taurocholate salts were valid. The Federal Court also held that the process claims, pharmaceutical composition claims, and claim directed to clopidogrel and its pharmaceutically acceptable salts were invalid. The Company and Sanofi filed notices of appeal in the Full Court of the Federal Court of Australia (Full Court) appealing the holding of invalidity of the claim covering clopidogrel and its pharmaceutically acceptable salts, process claims, and pharmaceutical composition claims which have stayed the Federal Court's ruling. Apotex filed a notice of appeal appealing the holding of validity of the clopidogrel bisulfate, hydrochloride, hydrobromide, and taurocholate claims. A hearing on the appeals occurred in February 2009. On September 29, 2009, the Full Court held all of the claims of Patent No. 597784 invalid. In November 2009, the Company and Sanofi applied to the High Court of Australia (High Court) for special leave to appeal the judgment of the Full Court. In March 2010, the High Court denied the Company and Sanofi's request to hear the appeal of the Full Court decision. The case was remanded to the Federal Court for further proceedings related to damages sought by Apotex. The Company and Apotex have settled the Apotex case, and the case was dismissed. The Australian government has intervened in this matter and is seeking maximum damages up to 449 million AUD ($316 million), plus interest, which would be split between the Company and Sanofi, for alleged losses experienced for paying a higher price for branded *Plavix** during the period when the injunction was in place. The Company and Sanofi have disputed that the Australian government is entitled to any damages and the Australian government's claim is still pending and a trial was concluded in September 2017. The Company is expecting a decision in 2019.

Sprycel - Europe

In May 2013, Apotex, Actavis Group PTC ehf, Generics [UK] Limited (Mylan) and an unnamed company filed oppositions in the EPO seeking revocation of European Patent No. 1169038 (the '038 patent) covering dasatinib, the active ingredient in *Sprycel*. On January 20, 2016, the Opposition Division of the EPO revoked the '038 patent. In May 2016, the Company appealed the EPO's decision to the EPO Board of Appeal. In February 2017, the EPO Board of Appeal upheld the Opposition Division's decision, and revoked the '038 patent. Orphan drug exclusivity and data exclusivity for *Sprycel* in the EU expired in November 2016. The EPO Board of Appeal's decision does not affect the validity of our other *Sprycel* patents within and outside Europe, including different patents that cover the monohydrate form of dasatinib and the use of dasatinib to treat CML. Additionally, in February 2017, the EPO Board of Appeal reversed and remanded an invalidity decision on European Patent No. 1610780 and its claim to the use of dasatinib to treat CML, which the EPO's Opposition Division had revoked in October 2012. In December 2018, the EPO's Opposition Division upheld the validity of the patent directed to the use of dasatinib to treat CML, which expires in 2024. The Company intends to take appropriate legal actions to protect *Sprycel*. Generics have been approved in certain EU markets. We may experience a decline in European revenues in the event that generic dasatinib product enters the market.

Anti-PD-1 Antibody Patent Oppositions and Litigation

In September 2015, Dana-Farber Cancer Institute (Dana-Farber) filed a complaint in Massachusetts federal court seeking to correct the inventorship on up to five related U.S. patents directed to methods of treating cancer using PD-1 and PD-L1 antibodies. Specifically, Dana-Farber is seeking to add two scientists as inventors to these patents. In October 2017, Pfizer was allowed to intervene in this case alleging that one of the scientists identified by Dana-Farber was employed by a company eventually acquired by Pfizer during the relevant period. In February 2019, the Company settled the lawsuit with Pfizer. A bench trial in the lawsuit with Dana-Farber began on February 4, 2019. A decision is expected in 2019.

Eliquis Patent Litigation - U.S.

In 2017, twenty-five generic companies sent the Company Paragraph-IV certification letters informing the Company that they had filed aNDAs seeking approval of generic versions of *Eliquis*. As a result, two *Eliquis* patents listed in the FDA Orange Book are being challenged: the composition of matter patent claiming apixaban specifically and a formulation patent. In April 2017, the Company, along with its partner Pfizer, initiated patent lawsuits under the Hatch-Waxman Act against all generic filers in federal district courts in Delaware and West Virginia. In August 2017, the U.S. Patent and Trademark Office granted patent term restoration to the composition of matter patent, thereby restoring the term of the *Eliquis* composition of matter patent, which is the Company's basis for projected LOE, from February 2023 to November 2026. The Company has settled lawsuits with a number of aNDA filers through December 2018. The settlements do not affect the Company's projected LOE for *Eliquis*.

PRICING, SALES AND PROMOTIONAL PRACTICES LITIGATION

*Plavix** State Attorneys General Lawsuits

The Company and certain affiliates of Sanofi are defendants in consumer protection and/or false advertising actions brought by several states relating to the sales and promotion of *Plavix**.

PRODUCT LIABILITY LITIGATION

The Company is a party to various product liability lawsuits. Plaintiffs in these cases seek damages and other relief on various grounds for alleged personal injury and economic loss. As previously disclosed, in addition to lawsuits, the Company also faces unfiled claims involving its products.

*Byetta**

Amylin, a former subsidiary of the Company, and Lilly are co-defendants in product liability litigation related to *Byetta**. To date, there are over 500 separate lawsuits pending on behalf of approximately 2,000 active plaintiffs (including pending settlements), which include injury plaintiffs as well as claims by spouses and/or other beneficiaries, in various courts in the U.S. The majority of these cases have been brought by individuals who allege personal injury sustained after using *Byetta**, primarily pancreatic cancer, and, in some cases, claiming alleged wrongful death. The majority of cases are pending in Federal Court in San Diego in an MDL or in a coordinated proceeding in California Superior Court in Los Angeles (JCCP). In November 2015, the defendants' motion for summary judgment based on federal preemption was granted in both the MDL and the JCCP. In November 2017, the Ninth Circuit reversed the MDL summary judgment order and remanded the case to the MDL. In November 2018, the California Court of Appeal reversed the state court dismissal and the state court cases were remanded to the JCCP for further proceedings. Amylin has product liability insurance covering a substantial number of claims involving *Byetta** and any additional liability to Amylin with respect to *Byetta** is expected to be shared between the Company and AstraZeneca.

*Abilify**

The Company and Otsuka are co-defendants in product liability litigation related to *Abilify**. Plaintiffs allege *Abilify** caused them to engage in compulsive gambling and other impulse control disorders. There have been over 2,000 cases filed in state and federal courts and additional cases are pending in Canada. The Judicial Panel on Multidistrict Litigation has consolidated the federal court cases for pretrial purposes in the U.S. District Court for the Northern District of Florida. On February 15, 2019, the Company and Otsuka entered into a master settlement agreement establishing a proposed settlement program to resolve all *Abilify** compulsivity claims filed as of January 28, 2019 in the MDL as well as the various state courts, including California and New Jersey.

Eliquis

The Company and Pfizer are co-defendants in product liability litigation related to *Eliquis*. Plaintiffs assert claims, including claims for wrongful death, as a result of bleeding they allege was caused by their use of *Eliquis*. As of January 2019, no claims remain pending in the MDL in the U.S District Court for the Southern District of New York. Three cases remain pending in state courts and one remains pending in Canada. Over 200 cases have been dismissed with prejudice in the MDL. The claims of 23 plaintiffs are on appeal to the Second Circuit Court of Appeals. The Company expects a decision in 2019.

*Onglyza**

The Company and AstraZeneca are co-defendants in product liability litigation related to *Onglyza**. Plaintiffs assert claims, including claims for wrongful death, as a result of heart failure or other cardiovascular injuries they allege were caused by their use of *Onglyza**. As of January 2019, claims are pending in state and federal court on behalf of approximately 250 individuals who allege they ingested the product and suffered an injury. A significant majority of these claims are pending in federal courts. In February 2018, the Judicial Panel on Multidistrict Litigation ordered all federal cases to be transferred to an MDL in the U.S. District Court for the Eastern District of Kentucky. As part of the Company's global diabetes business divestiture, the Company sold *Onglyza** to AstraZeneca in February 2014 and any potential liability with respect to *Onglyza** is expected to be shared with AstraZeneca.

SHAREHOLDER DERIVATIVE LITIGATION

Since December 2015, three shareholder derivative lawsuits were filed in New York state court against certain officers and directors of the Company. The plaintiffs allege, among other things, breaches of fiduciary duty surrounding the Company's previously disclosed October 2015 civil settlement with the SEC of alleged FCPA violations in China in which the Company agreed to a payment of approximately $14.7 million in disgorgement, penalties and interest. As of October 2017, all three of the lawsuits have been dismissed. The Company received a notice of appeal as to one of the dismissed lawsuits. Oral argument in the appeal of the dismissal has been scheduled for February 2019.

SECURITIES LITIGATION

Since February 2018, two separate putative class action complaints were filed in the U.S. District for the Northern District of California and in the U.S. District Court for the Southern District of New York against the Company, the Company's Chief Executive Officer, Giovanni Caforio, the Company's Chief Financial Officer, Charles A. Bancroft and certain former and current executives of the Company. The case in California has been voluntarily dismissed. The remaining complaint alleges violations of securities laws for the Company's disclosures related to the CheckMate-026 clinical trial in lung cancer. A fully briefed motion to dismiss in pending before the court. The Company intends to defend itself vigorously in this litigation.

OTHER LITIGATION

Acquisition of Celgene Litigation

As of February 20, 2019, nine complaints were filed by Celgene shareholders in the U.S. District Court for the District of Delaware, U.S. District Court for the District of New Jersey, the U.S. District Court for the Southern District of New York and the Court of Chancery of the State of Delaware seeking to enjoin the Company's proposed acquisition of Celgene. The complaints in these actions name as defendants Celgene and the members of Celgene's board of directors. Four of these complaints also name the Company and Burgundy Merger Sub, Inc., a wholly-owned subsidiary of the Company that was formed solely for the purpose of completing the pending acquisition of Celgene and will be merged with and into Celgene upon the completion of the acquisition, as defendants. Of the complaints naming the Company as a defendant, three are styled as putative class actions. The plaintiffs allege violations of various federal securities laws and breaches of fiduciary duties in connection with the acquisition of Celgene by the Company.

Separately, a tenth complaint styled as a putative class action was filed in the Court of Chancery of the State of Delaware on behalf of the Company's shareholders naming members of the Company's board of directors as defendants. This complaint alleges that each of the members of the Company's board of directors breached his or her fiduciary duties to the Company and its shareholders by failing to disclose material information about the pending acquisition.

The Company, Burgundy Merger Sub and Celgene intend to defend themselves vigorously in these lawsuits.

Acquisition of Flexus Litigation

In February 2015, the Company acquired Flexus including rights to its IDO-1 inhibitor. In September 2015, Incyte Corporation ("Incyte") sued Flexus and Flexus's founders ("Flexus Defendants") in the Superior Court of the State of Delaware. In its initial and subsequent amended complaints, Incyte alleged claims against the Flexus Defendants, among others, for the misappropriation of various trade secrets relating to the research and development of Incyte's IDO-1 inhibitor. In November 2018, following a two and a-half week trial on trade secrets, a jury in the Superior Court of Delaware returned a defense verdict on behalf of the Flexus Defendants. Incyte may appeal the decision.

Average Wholesale Price Litigation

The Company is a defendant in a *qui tam* (whistleblower) lawsuit in the U.S. District Court for the Eastern District of Pennsylvania, in which the U.S. Government declined to intervene. The complaint alleges that the Company inaccurately reported its average manufacturer prices to the Centers for Medicare and Medicaid Services to lower what it owed. Similar claims have been filed against other companies. The Court denied the Company's motion to dismiss in November 2018.

GOVERNMENT INVESTIGATIONS

Like other pharmaceutical companies, the Company and certain of its subsidiaries are subject to extensive regulation by national, state and local government agencies in the U.S. and other countries in which BMS operates. As a result, the Company, from time to time, is subject to various governmental inquiries and investigations. It is possible that criminal charges, substantial fines and/or civil penalties, could result from government investigations.

ENVIRONMENTAL PROCEEDINGS

As previously reported, the Company is a party to several environmental proceedings and other matters, and is responsible under various state, federal and foreign laws, including CERCLA, for certain costs of investigating and/or remediating contamination resulting from past industrial activity at the Company's current or former sites or at waste disposal or reprocessing facilities operated by third parties.

CERCLA Matters

With respect to CERCLA matters for which the Company is responsible under various state, federal and foreign laws, the Company typically estimates potential costs based on information obtained from the U.S. Environmental Protection Agency, or counterpart state or foreign agency and/or studies prepared by independent consultants, including the total estimated costs for the site and the expected cost-sharing, if any, with other "potentially responsible parties," and the Company accrues liabilities when they are probable and reasonably estimable. The Company estimated its share of future costs for these sites to be $62 million at December 31, 2018, which represents the sum of best estimates or, where no best estimate can reasonably be made, estimates of the minimal probable amount among a range of such costs (without taking into account any potential recoveries from other parties). The amount includes the estimated costs for any additional probable loss associated with the previously disclosed North Brunswick Township High School Remediation Site.

Note 19. SUBSEQUENT EVENT

On January 3, 2019, BMS announced that the Company has entered into a definitive merger agreement under which BMS will acquire Celgene. Under the terms of the agreement, if the merger is completed, Celgene shareholders will receive one share of BMS common stock and $50.00 in cash for each share of Celgene common stock held by them. Celgene shareholders will also receive one tradeable contingent value right for each share of Celgene representing the right to receive $9.00 in cash, which is subject to the achievement of future regulatory milestones. Based on the closing price of a share of BMS common stock on January 2, 2019, the most recent trading day prior to the date of the announcement, the merger consideration represented approximately $74 billion. The amount of consideration to be received by Celgene stockholders will fluctuate with changes in the price of the shares of BMS common stock. BMS expects to fund the transaction through a combination of existing cash and new debt. BMS also expects to enter into an accelerated share repurchase program of up to approximately $5.0 billion, subject to the closing of the transaction, market conditions and Board of Directors' approval. The Company expects the transaction will close at the end of the third quarter of 2019, subject to approval by Bristol-Myers Squibb and Celgene shareholders and the satisfaction of customary closing conditions and regulatory approvals.

Note 20. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

Dollars in Millions, except per share data	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2018					
Total Revenues	**$ 5,193**	**$ 5,704**	**$ 5,691**	**$ 5,973**	**$ 22,561**
Gross Margin	**3,609**	**4,079**	**4,043**	**4,283**	**16,014**
Net Earnings	**1,495**	**382**	**1,912**	**1,158**	**4,947**
Net Earnings/(Loss) Attributable to:					
Noncontrolling Interest	**9**	**9**	**11**	**(2)**	**27**
BMS	**1,486**	**373**	**1,901**	**1,160**	**4,920**
Earnings per Share - Basic[(a)]	**$ 0.91**	**$ 0.23**	**$ 1.16**	**$ 0.71**	**$ 3.01**
Earnings per Share - Diluted[(a)]	**0.91**	**0.23**	**1.16**	**0.71**	**3.01**
Cash dividends declared per common share	**$ 0.40**	**$ 0.40**	**$ 0.40**	**$ 0.41**	**$ 1.61**
Cash and cash equivalents	**$ 5,342**	**$ 4,999**	**$ 5,408**	**$ 6,911**	**$ 6,911**
Marketable securities[(b)]	**3,680**	**3,193**	**3,439**	**3,748**	**3,748**
Total Assets	**33,083**	**32,641**	**33,734**	**34,986**	**34,986**
Long-term debt[(c)]	**5,775**	**5,671**	**5,687**	**6,895**	**6,895**
Equity	**12,906**	**12,418**	**13,750**	**14,127**	**14,127**

Dollars in Millions, except per share data	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017					
Total Revenues	$ 4,929	$ 5,144	$ 5,254	$ 5,449	$ 20,776
Gross Margin	3,664	3,575	3,675	3,768	14,682
Net Earnings	1,526	922	856	(2,329)	975
Net Earnings/(Loss) Attributable to:					
Noncontrolling Interest	(48)	6	11	(1)	(32)
BMS	1,574	916	845	(2,328)	1,007
Earnings/(Loss) per Share - Basic[(a)]	$ 0.95	$ 0.56	$ 0.52	$ (1.42)	$ 0.61
Earnings/(Loss) per Share - Diluted[(a)]	0.94	0.56	0.51	(1.42)	0.61
Cash dividends declared per common share	$ 0.39	$ 0.39	$ 0.39	$ 0.40	$ 1.57
Cash and cash equivalents	$ 3,910	$ 3,470	$ 4,644	$ 5,421	$ 5,421
Marketable securities[(b)]	4,884	5,615	5,004	3,871	3,871
Total Assets	32,937	33,409	33,977	33,551	33,551
Long-term debt[(c)]	7,237	6,911	6,982	6,975	6,975
Equity	14,535	14,821	14,914	11,847	11,847

(a) Earnings per share for the quarters may not add to the amounts for the year, as each period is computed on a discrete basis.
(b) Marketable securities includes current and non-current assets.
(c) Long-term debt includes the current portion.

The following specified items affected the comparability of results in 2018 and 2017:

2018

Dollars in Millions	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Cost of products sold[a]	**$ 13**	**$ 14**	**$ 13**	**$ 18**	**$ 58**
Marketing, selling and administrative	**1**	**—**	**—**	**1**	**2**
License and asset acquisition charges	**60**	**1,075**	**—**	**—**	**1,135**
Site exit costs	**20**	**19**	**18**	**22**	**79**
Research and development	**80**	**1,094**	**18**	**22**	**1,214**
Loss/(gain) on equity investments	**(15)**	**356**	**(97)**	**268**	**512**
Provision for restructuring	**20**	**37**	**45**	**29**	**131**
Litigation and other settlements	**—**	**—**	**—**	**70**	**70**
Divestiture gains	**(43)**	**(25)**	**(108)**	**(1)**	**(177)**
Royalties and licensing income	**(50)**	**(25)**	**—**	**—**	**(75)**
Pension and postretirement	**31**	**37**	**27**	**26**	**121**
Intangible asset impairment	**64**	**—**	**—**	**—**	**64**
Other income (net)	**7**	**380**	**(133)**	**392**	**646**
Increase/(decrease) to pretax income	**101**	**1,488**	**(102)**	**433**	**1,920**
Income taxes on items above	**(8)**	**(218)**	**1**	**(43)**	**(268)**
Income taxes attributed to U.S. tax reform	**(32)**	**3**	**(20)**	**(7)**	**(56)**
Income taxes	**(40)**	**(215)**	**(19)**	**(50)**	**(324)**
Increase/(decrease) to net earnings	**$ 61**	**$ 1,273**	**$ (121)**	**$ 383**	**$ 1,596**

2017

Dollars in Millions	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Cost of products sold[a]	$ —	$ 130	$ 1	$ 18	$ 149
Marketing, selling and administrative	—	—	—	1	1
License and asset acquisition charges	50	393	310	377	1,130
IPRD impairments	75	—	—	—	75
Site exit costs	72	96	64	151	383
Research and development	197	489	374	528	1,588
Provision for restructuring	164	15	28	86	293
Litigation and other settlements	(481)	—	—	—	(481)
Divestiture gains	(100)	—	—	(26)	(126)
Royalties and licensing income	—	(497)	—	—	(497)
Pension and postretirement	33	36	22	71	162
Loss on debt redemption	—	109	—	—	109
Other income (net)	(384)	(337)	50	131	(540)
Increase/(decrease) to pretax income	(187)	282	425	678	1,198
Income taxes on items above	72	20	(41)	(138)	(87)
Income taxes attributed to U.S. tax reform	—	—	—	2,911	2,911
Income taxes	72	20	(41)	2,773	2,824
Increase/(decrease) to net earnings	(115)	302	384	3,451	4,022
Noncontrolling interest	(59)	—	—	—	(59)
Increase/(decrease) to net earnings attributable to BMS	$ (174)	$ 302	$ 384	$ 3,451	$ 3,963

(a) Specified items in Cost of products sold are accelerated depreciation, asset impairment and other shutdown costs.

REPORTS OF MANAGEMENT

Management's Responsibility for Financial Statements

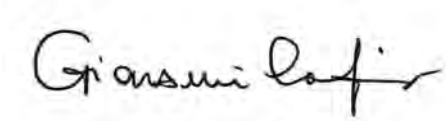
Management is responsible for the preparation and integrity of the financial information presented in this Annual Report. The accompanying consolidated financial statements have been prepared in conformity with United States generally accepted accounting principles, applying certain estimates and judgments as required. In management's opinion, the consolidated financial statements present fairly the Company's financial position, results of operations and cash flows.

The Audit Committee of the Board of Directors meets regularly with the internal auditors, Deloitte & Touche LLP (D&T), the Company's independent registered accounting firm, and management to review accounting, internal control structure and financial reporting matters. The internal auditors and D&T have full and free access to the Audit Committee. As set forth in the Company's Standard of Business Conduct and Ethics, the Company is firmly committed to adhering to the highest standards of moral and ethical behavior in all of its business activities.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision and with the participation of management, including the chief executive officer and chief financial officer, management assessed the effectiveness of internal control over financial reporting as of December 31, 2018 based on the framework in "Internal Control—Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment, management has concluded that the Company's internal control over financial reporting was effective at December 31, 2018 to provide reasonable assurance regarding the reliability of its financial reporting and the preparation of its financial statements for external purposes in accordance with United States generally accepted accounting principles. Due to 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.

Deloitte & Touche LLP, an independent registered public accounting firm, has audited the Company's financial statements included in this report on Form 10-K and issued its report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, which is included herein.



Giovanni Caforio
Chief Executive Officer

Charles Bancroft
Chief Financial Officer

February 25, 2019

CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2018, management carried out an evaluation, under the supervision and with the participation of its chief executive officer and chief financial officer, of the effectiveness of the design and operation of its disclosure controls and procedures as defined in Exchange Act Rules 13a-15(e) and 15d-15(e), as of the end of the period covered by this 2018 Form 10-K. Based on this evaluation, management has concluded that as of December 31, 2018, such disclosure controls and procedures were effective.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of management, including the chief executive officer and chief financial officer, management assessed the effectiveness of internal control over financial reporting as of December 31, 2018 based on the framework in "Internal Control—Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment, management has concluded that the Company's internal control over financial reporting was effective at December 31, 2018 to provide reasonable assurance regarding the reliability of its financial reporting and the preparation of its financial statements for external purposes in accordance with United States generally accepted accounting principles. Due to 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.

Deloitte & Touche LLP, an independent registered public accounting firm, has audited the Company's financial statements included in this report on this 2018 Form 10-K and issued its report on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, which is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonable likely to materially affect, the Company's internal control over financial reporting.

OTHER INFORMATION

On February 20, 2019, in the Company's Amendment No. 2 to its Registration Statement on Form S-4 for the Company's pending acquisition of Celgene, the Company disclosed that Starboard Value LP sent a notice of nomination of five directors to the Company's board of directors, which the Company informed Starboard Value that it would review. In connection with its delivery of the notice, Starboard Value requested to meet with the Company's management and that, pending these discussions, the notice and meetings be kept confidential. The Company's management has subsequently met with Starboard Value on multiple occasions. Any vote on potential changes to Company's board of directors would come at our 2019 Annual Meeting of Shareholders, the date for which has not been set as of the time of this filing. The Company's shareholders are expected to vote on the proposed acquisition of Celgene on April 12, 2019.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Bristol-Myers Squibb Company

Opinion on the Financial Statements

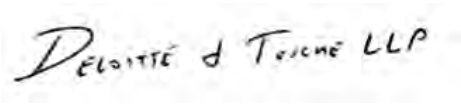
We have audited the accompanying consolidated balance sheets of Bristol-Myers Squibb Company and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of earnings, comprehensive income, and cash flows, for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 25, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.



Parsippany, New Jersey
February 25, 2019

We have served as the Company's auditor since 2006.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Bristol-Myers Squibb Company

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Bristol-Myers Squibb Company and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated February 25, 2019, expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

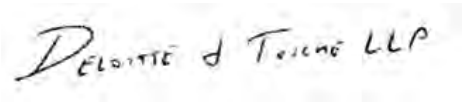
The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

Definition and Limitations of Internal Control over Financial Reporting

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.

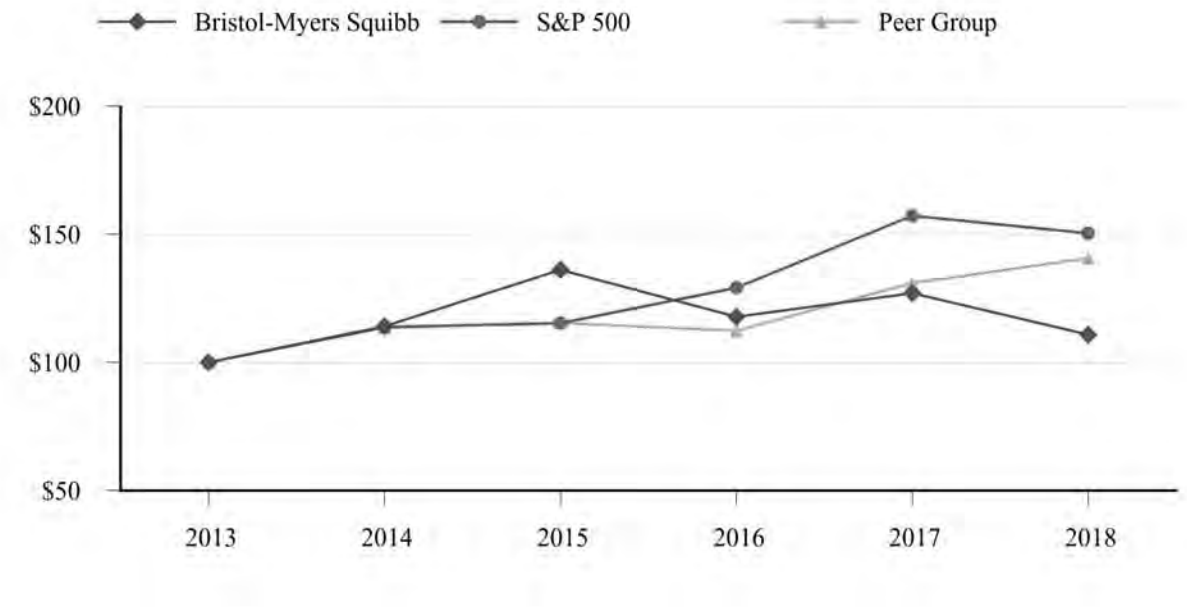
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree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



Parsippany, New Jersey
February 25, 2019

PERFORMANCE GRAPH

The following graph compares the cumulative total stockholders' returns of our common shares with the cumulative total stockholders' returns of the companies listed in the Standard & Poor's 500 Index and a composite peer group of major pharmaceutical companies comprised of AbbVie, Amgen, AstraZeneca, Biogen, Celgene, Gilead, GlaxoSmithKline, Johnson & Johnson, Lilly, Merck, Novartis, Pfizer, Roche and Sanofi. The graph assumes $100 investment on December 31, 2013 in each of our common shares, the S&P 500 Index and the stock of our peer group companies, including reinvestment of dividends, for the years ended December 31, 2014, 2015, 2016, 2017 and 2018. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



	2013	2014	2015	2016	2017	2018
Bristol-Myers Squibb	$ 100.00	$ 114.06	$ 136.04	$ 117.73	$ 126.95	**$ 110.82**
S&P 500	100.00	113.69	115.26	129.05	157.22	**150.33**
Peer Group	100.00	113.55	115.40	112.35	130.89	**140.60**

FIVE YEAR FINANCIAL SUMMARY

Amounts in Millions, except per share data	2018	2017	2016	2015	2014
Income Statement Data:					
Total Revenues	**$ 22,561**	$ 20,776	$ 19,427	$ 16,560	$ 15,879
Net Earnings	**4,947**	975	4,507	1,631	2,029
Net Earnings/(Loss) Attributable to:					
Noncontrolling Interest	**27**	(32)	50	66	25
BMS	**4,920**	1,007	4,457	1,565	2,004
Net Earnings per Common Share Attributable to BMS:					
Basic	**$ 3.01**	$ 0.61	$ 2.67	$ 0.94	$ 1.21
Diluted	**3.01**	0.61	2.65	0.93	1.20
Average common shares outstanding:					
Basic	**1,633**	1,645	1,671	1,667	1,657
Diluted	**1,637**	1,652	1,680	1,679	1,670
Cash dividends paid on BMS common and preferred stock	**$ 2,613**	$ 2,577	$ 2,547	$ 2,477	$ 2,398
Cash dividends declared per common share	**$ 1.61**	$ 1.57	$ 1.53	$ 1.49	$ 1.45
Financial Position Data at December 31:					
Cash and cash equivalents	**$ 6,911**	$ 5,421	$ 4,237	$ 2,385	$ 5,571
Marketable securities[(a)]	**3,748**	3,871	4,832	6,545	6,272
Total Assets	**34,986**	33,551	33,707	31,748	33,749
Long-term debt[(a)]	**6,895**	6,975	6,465	6,550	7,242
Equity	**14,127**	11,847	16,347	14,424	14,983

(a) Includes current and non-current portion.

SUMMARY OF ABBREVIATED TERMS

Bristol-Myers Squibb Company and its consolidated subsidiaries may be referred to as Bristol-Myers Squibb, BMS, the Company, we, our or us in this 2018 Form 10-K, unless the context otherwise indicates. Throughout this 2018 Form 10-K we have used terms which are defined below:

2018 Form 10-K	Annual Report on Form 10-K for the fiscal year ended December 31, 2018	LIBOR	London Interbank Offered Rate
AbbVie	AbbVie Inc.	Lilly	Eli Lilly and Company
ALL	acute lymphoblastic leukemia	LOE	loss of exclusivity
Amgen	Amgen Inc.	mCRC	metastatic colorectal cancer
Amylin	Amylin Pharmaceuticals, Inc.	mCRPC	metastatic castration-resistant prostate cancer
aNDA	abbreviated New Drug Application	MDL	multi-district litigation
ASEAN	Association of Southeast Asian Nations	Mead Johnson	Mead Johnson Nutrition Company
AstraZeneca	AstraZeneca PLC	Merck	Merck & Co., Inc.
Biogen	Biogen, Inc.	MF	myelofibrosis
Cardioxyl	Cardioxyl Pharmaceuticals, Inc.	MPM	malignant pleural mesothelioma
CERCLA	U.S. Comprehensive Environmental Response, Compensation and Liability Act	MSI-H	high microsatellite instability
Celgene	Celgene Corporation	mUC	metastatic urothelial carcinoma
CHMP	Committee for Medicinal Products for Human Use	NAV	net asset value
CML	chronic myeloid leukemia	Nektar	Nektar Therapeutics
Cormorant	Cormorant Pharmaceuticals	Nitto Denko	Nitto Denko Corporation
CPPIB	CPPIB Credit Europe S.A.R.L., a Luxembourg private limited liability company	NKT	natural killer T
CRC	colorectal cancer	Novartis	Novartis Pharmaceutical Corporation
CytomX	CytomX Therapeutics, Inc.	NSCLC	non-small cell lung cancer
dMMR	DNA mismatch repair deficient	NVAF	non-valvular atrial fibrillation
DSA	Distribution Services Agreement	Ono	Ono Pharmaceutical Co., Ltd.
EC	European Commission	OTC	Over-the-counter
EMA	European Medicines Agency	Otsuka	Otsuka Pharmaceutical Co., Ltd.
EPO	European Patent Office	PAD	Protein/Peptidyl Arginine Deiminase
EPS	earnings per share	Padlock	Padlock Therapeutics, Inc.
ERISA	Employee Retirement Income Security Act of 1974	PD-1	programmed death receptor-1
EU	European Union	Pfizer	Pfizer, Inc.
FASB	Financial Accounting Standards Board	Promedior	Promedior, Inc.
FCPA	Foreign Corrupt Practices Act	PSA	prostate-specific antigen
FDA	U.S. Food and Drug Administration	PsiOxus	PsiOxus Therapeutics, Ltd.
Flexus	Flexus Biosciences, Inc.	R&D	Research and Development
F-Star	F-Star Alpha Ltd.	RA	rheumatoid arthritis
GAAP	U.S. generally accepted accounting principles	RCC	renal cell carcinoma
Gilead	Gilead Sciences, Inc.	Reckitt	Reckitt Benckiser Group plc
GlaxoSmithKline	GlaxoSmithKline PLC	Roche	Roche Holding AG
GTN	gross-to-net	Sanofi	Sanofi S.A.
Halozyme	Halozyme Therapeutics, Inc.	sBLA	supplemental Biologics License Application
HIV	human immunodeficiency virus	SCCHN	squamous cell carcinoma of the head and neck
IFM	IFM Therapeutics, Inc.	SCLC	small cell lung cancer
ImClone	ImClone Systems Incorporated	SEC	U.S. Securities and Exchange Commission
IO	Immuno-Oncology	SK Biotek	SK Biotek Co., Ltd.
IPF	idiopathic pulmonary fibrosis	the 2012 Plan	The 2012 Stock Award and Incentive Plan
iPierian	iPierian, Inc.	U.S.	United States
IPRD	in-process research and development	UK	United Kingdom
Janssen	Janssen Pharmaceuticals, Inc.	VTE	venous thromboembolic
JIA	Juvenile Idiopathic Arthritis		

BRISTOL-MYERS SQUIBB | Board of Directors

Giovanni Caforio, M.D.
Chairman of the Board and Chief Executive Officer, Bristol-Myers Squibb

Peter J. Arduini
President and Chief Executive Officer, Integra LifeSciences Holdings Corporation
(a, c)

Robert Bertolini
Former President and Chief Financial Officer, Bausch & Lomb; Former Chief Financial Officer, Schering-Plough
(a, b)

Matthew W. Emmens
Former Chief Executive Officer and Chairman of the Board, Shire PLC; Former President, Chief Executive Officer and Chairman, Vertex Pharmaceuticals; Former Chief Executive Officer, Astra Merck
(c, d)

Michael Grobstein
Former Vice Chairman, Ernst & Young LLP
(a, c)

Alan J. Lacy
Trustee, Fidelity Funds; Former Chairman, Dave & Buster's Entertainment, Inc.
(a, b)

Dinesh C. Paliwal
President and Chief Executive Officer, Harman International
(b, c)

Theodore R. Samuels
Former President, Capital Guardian Trust Company
(a, b)

Vicki L. Sato, Ph.D.
Lead Independent Director, Bristol-Myers Squibb; Independent Chairman of the Board, Denali Therapeutics, Inc.; Former Professor of Management Practice and Molecular and Cell Biology, Harvard University
(b, d)

Gerald L. Storch
Chief Executive Officer, Storch Advisors; Former Vice Chairman, Target; Former Chairman and Chief Executive Officer, Toys "R" Us; Former Principal, McKinsey & Company
(a, c)

Karen H. Vousden, Ph.D.
Chief Scientist, Cancer Research UK; Former Chief Executive Officer, Beatson Institute for Cancer Research
(d)

(a) Audit Committee
(b) Committee on Directors and Corporate Governance
(c) Compensation and Management Development Committee
(d) Science and Technology Committee

BRISTOL-MYERS SQUIBB | Leadership Team

Giovanni Caforio, M.D.
Chairman of the Board and
Chief Executive Officer

Charles Bancroft
Executive Vice President and Chief Financial
Officer, Global Business Operations

Paul Biondi
Senior Vice President,
Strategy and Business Development

Chris Boerner, Ph.D.
Executive Vice President,
Chief Commercial Officer

Adam Dubow
Senior Vice President,
Chief Compliance and Ethics Officer

John Elicker
Senior Vice President,
Corporate Affairs and Investor Relations

Ann Powell Judge
Senior Vice President,
Chief Human Resources Officer

Sandra Leung
Executive Vice President,
General Counsel

Thomas J. Lynch, Jr., M.D.
Executive Vice President,
Chief Scientific Officer

Lou Schmukler
Senior Vice President and President,
Global Product Development & Supply

Paul von Autenried
Senior Vice President,
Chief Information Officer

BRISTOL-MYERS SQUIBB | Stockholder Information

Common Stock

Ticker symbol: BMY
New York Stock Exchange

Stockholder Services

All inquiries concerning stockholder accounts and stock transfer matters – including address changes, the elimination of duplicate mailings and the Shareowner Services Plus Plan℠ – should be directed to the Company's Transfer Agent and Registrar:

EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, MN 55120-4100

www.shareowneronline.com

855-598-5485 (within the U.S.)
651-450-4064 (outside the U.S.)

A telecommunications relay service should be used by the hearing impaired when calling the telephone numbers above.

Shareowner Services Plus Plan℠

The Shareowner Services Plus Plan℠ is designed for long-term investors who wish to build share ownership in the Company's common stock over time. You can participate in the plan if you are a registered holder of the Company's common stock. If you do not own the Company's common stock, you can become a participant by making your initial purchase through the plan. The plan features dividend reinvestment, optional cash purchase, share safekeeping, and share sales and transfers. Bristol-Myers Squibb Company has appointed EQ Shareowner Services as Administrator for the plan. The plan is not sponsored or administered by Bristol-Myers Squibb Company.

Form 10-K

For a free copy of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, contact:

Corporate Secretary
Bristol-Myers Squibb Company
430 E. 29th Street, 14FL
New York, NY 10016

The Form 10-K is also available at investor.bms.com.

The most recent certifications by the Company's chief executive officer and chief financial officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 are filed as exhibits to the Company's Form 10-K. The Company has also filed with the New York Stock Exchange the most recent Annual CEO Certification as required by Section 303A.12(a) of the New York Stock Exchange Listed Company Manual.

Additional Information

Information on the following subjects is available at www.bms.com:

- Bristol-Myers Squibb Foundation
- Clinical Trials
- Compliance and Ethics
- Diversity and Workforce Statistics
- Patient Assistance Programs
- Policy and Advocacy Engagement and Political Contributions
- Sustainability/Environmental Programs

This Annual Report contains certain forward-looking information within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on current expectations and involve inherent risks and uncertainties that could cause actual outcomes and results to differ materially from current expectations. Please see page 26 in the Financial Review for a discussion and description of these risks and uncertainties. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.

Product Names and Company Programs

Global products and company program names appearing throughout in italics are referred to herein by their registered and approved U.S. trademarks, unless specifically noted otherwise.

Abilify is a trademark of Otsuka Pharmaceutical Co., Ltd.

Adcetris is a trademark of Seattle Genetics, Inc.

Atripla, Truvada, and *Tybost* are trademarks of Gilead Sciences, Inc. and/or one of its affiliates.

Avapro/Avalide (known in the EU as *Aprovel/Karvea*) and *Plavix* are trademarks of Sanofi

Byetta is a trademarks of Amylin Pharmaceuticals, LLC

ENHANZE is a trademark of Halozyme, Inc.

Erbitux is a trademark of ImClone LLC

Farxiga and *Onglyza* are trademarks of AstraZeneca AB

Gleevec is a trademark of Novartis AG

Ixempra is a trademark of R-Pharm US Operating, LLC

Keytruda is a trademark of Merck Sharp & Dohme Corp.

Prostvac is a trademark of BN ImmunoTherapeutics Inc.

SECURE THE FUTURE is trademark of Bristol-Myers Squibb.

Brand names of products that are in all italicized letters, without an asterisk, are registered trademarks of Bristol-Myers Squibb and/or one of its subsidiaries.

Shareowner Services Plus Plan is a Service Mark of EQ Shareowner Services.

| PATIENT STORY |

Waiting for a Breakthrough

Samantha Wesson

> "I HAVEN'T LET MY DISEASE STOP ME FROM LIVING MY LIFE TO ITS FULLEST."

Samantha Wesson is one of countless patients waiting for a breakthrough.

A 54-year-old wife and mother from Poughkeepsie, New York, Samantha suffers from psoriasis – an incurable autoimmune disease where skin cells build up and form scales and itchy, often painful, dry patches – and psoriatic arthritis, a form of arthritis that affects some people who have psoriasis.

"When I've been covered from head to toe, it's ugly, it's painful, it's itching, and it's pretty devastating," Samantha says.

Like most patients, Samantha developed psoriasis first, at age 15, and developed psoriatic arthritis later in life.

Samantha (with her husband Paul) credits the support of her family and friends with the strength to stay hopeful despite the autoimmune disorder with which she has struggled since age 15.

"Unfortunately, people in our society judge others by their appearance. At first, the psoriasis appeared behind my ears and on my scalp," says Samantha. "For a young girl, and almost everyone with psoriasis, these symptoms can be terribly embarrassing because most people think that the condition is contagious, which it isn't."

Samantha began to treat her symptoms with creams and various medications, to little or no effect. As her disease progressed, she turned to other treatments – including biologics – which provided her some relief. However, these breaks from her suffering were short-lived, until her body adapted to and rejected the treatments, usually after one to two years.

Recently, Samantha developed the painful joint pain associated with psoriatic arthritis. "Sometimes the pain in my knees and ankles makes it difficult for me to get out of bed," she says.

Despite the many hardships Samantha has endured, she remains positive and optimistic. "I have never let the disease control my life," she says. "With the support from my family and friends, I haven't let it stop me from living my life to its fullest."

According to Samantha, progress on new treatment options means hope for patients.

"I want to thank everyone who is working to find a breakthrough," she says. "It would mean everything to me, and bring relief to my family. But all I can do is wait, and hope for a new treatment that works for me."

Bristol-Myers Squibb recently enrolled a Phase 3 clinical trial with its TYK-2 inhibitor in psoriasis.

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