





Transforming patients' lives through scienceTM

Our Mission

To discover, develop and deliver innovative medicines
that help patients prevail over serious diseases

Our Vision

To be the world's leading biopharma company
that transforms patients' lives through science

Our Values

Integrity | Innovation | Urgency | Passion | Accountability | Inclusion

A LETTER FROM Giovanni Caforio

“Our employees' passion and commitment to our mission will help us execute against our long-term strategy, deliver value to our shareholders and bring new scientific breakthroughs to patients around the world.”



2022 was an important year for our company, one with significant clinical and regulatory achievements that broadened our portfolio, advanced our pipeline and, importantly, delivered innovative new medicines to our patients.

Despite navigating a persistent global pandemic and ongoing macro and geopolitical challenges, our employees' dedication to our vision of transforming patients' lives through science never wavered. Our commitment to executing against our business strategy resulted in strong operational and financial performance in 2022. Total revenues were \$46.2 billion, which is consistent with the prior year, or an increase of three percent¹ when adjusted for foreign exchange, generating GAAP EPS of \$2.95 and non-GAAP EPS² of \$7.70. Our in-line brands and new product portfolio performed well growing nine percent for the full year, or 13 percent when adjusting for foreign exchange, with new products delivering \$2.0 billion in revenues.

Bringing Transformational Medicines to Patients

In 2022, we launched three, new first-in-class medicines: *Opdualag*® for metastatic melanoma, *Camzyos*® for obstructive hypertrophic cardiomyopathy and *Sotyktu*™

for moderate to severe plaque psoriasis. All three of these medicines have the opportunity to change the standard of care for their respective diseases. We also expanded the potential of our new product portfolio through significant clinical milestones throughout the course of the year. We achieved positive top-line results for *Reblozyl*® in first-line myelodysplastic syndromes and *Abecma*® in the KarMMa-3 trial, which demonstrated superiority to standard regimens in relapsed and refractory multiple myeloma. Registrational trials were also initiated for *Sotyktu* in systemic lupus erythematosus, a disease with very high unmet medical need. We also made meaningful investments in our cell therapy franchise to expand manufacturing capacity and supply more product to patients.

We continued to enhance our strong internal research and development capabilities with an extensive network of external collaborations. These include new strategic partnerships with Century and Immatics as well as the acquisition of Turning Point Therapeutics, which expanded our precision oncology portfolio. We augmented our existing artificial intelligence capabilities through a partnership with Owkin to further aid in the acceleration of drug design and development.

Advancing Multiple Paths for Sustained Growth

As a company, we must constantly evolve our business, so we deliver sustained value to our patients, employees, business partners and shareholders.

Bristol Myers Squibb is well positioned for the future, with multiple paths to growth through the second half of the decade. Ahead of the losses of exclusivity that are scheduled to take place this decade, we have made significant progress toward renewing and transforming our product portfolio. This includes successfully building critical mass across our four core therapeutic areas and diversifying and broadening our pipeline.

Central to our strategy is the potential of our new product portfolio. Over the past three years, we have launched nine new medicines, many of which are either best-in-class or first-in-class medicines that have meaningful potential to expand into additional indications. Our pipeline execution and strong commercial momentum position us well to achieve \$10 billion to \$13 billion of risk-adjusted revenue in 2025 from this portfolio. As a result of our pipeline advancement, we have significantly de-risked the more than \$25 billion of long-term, non-risk-adjusted revenue potential in 2030 from our new products.³

Our second wave of innovation will be bolstered by our exciting mid- and late-stage pipeline. We have six assets in or moving into Phase 3 clinical development across our core therapeutic areas, with expected non-risk-adjusted peak sales potential of greater than \$10 billion.³ The assets include milvexian, a next generation anti-thrombotic, our CELMoD agents for multiple myeloma and LPA-1 in lung fibrosis.

Our research teams have built a robust early-stage pipeline, consisting of 50+ assets, with more than 15-20 of these assets expected to progress to proof of concept within the next 18 months. We continue to leverage our financial flexibility to enhance our internal innovation through our disciplined business development strategy. Together, this has resulted in a much younger, more diversified and resilient product portfolio, which will be instrumental in helping navigate an increasingly complex environment in the United States and abroad.

Living Our Values in the Communities We Serve

As a purpose-driven company and a leader in our industry, Bristol Myers Squibb recognizes our responsibility to benefit the communities we serve. During 2022, we further deepened our commitment to our environmental, social and governance (ESG) principles.

We are collectively working to accelerate innovation, enhance patient access to innovative medicines, build an inclusive, diverse and equitable work environment, and to strengthen our environmental sustainability—all while operating with the highest levels of quality, integrity and ethics.

Bristol Myers Squibb continued to make progress in 2022 across our commitments to health equity and inclusion and diversity (I&D). We exceeded the target set to locate more than 25 percent of our clinical trials in highly diverse regions in the U.S., with more than 58 percent of our clinical trial sites now located in highly diverse U.S. communities. Our efforts were recognized with a Gold Badge rating on the Bioethics International Scorecard on clinical trial diversity. We believe that increasing diversity during discovery and development is a scientific imperative that will help lead to better science and better patient outcomes.

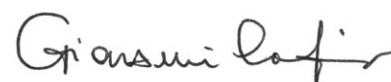
The foundation of our success centers around an inclusive culture that is rooted in diversity of thought, experience and background. In 2022, we increased the number of global executives who are women to 48.7% and in the U.S., our Black/African American and Latino/Hispanic executives increased to 6.1% and 6.1%, respectively. Since announcing our \$1 billion Supplier Diversity commitment in 2020, I am pleased to say that we achieved our goal well ahead of the 2025 target date.

As a science-driven company, we understand that human health is inextricably linked to the health of the planet. We consider environmental responsibility as an imperative for doing business and expanding health equity around the world.

Strongly Positioned to Deliver Long-Term Value

Our accomplishments in 2022 reflect our ongoing progress towards transforming our business. We are very well positioned to advance the commercialization of our new product portfolio, progress our pipeline and invest in future sources of growth due to our strong financial foundation.

Looking ahead, I am very optimistic about the future of our business. This is due to our talented workforce, with their dedication and proven ability to discover, develop and deliver transformational medicines. Our employees' passion and commitment to our mission will help us execute against our long-term strategy, deliver value to our shareholders and bring new scientific breakthroughs to patients around the world.



— Giovanni Caforio, M.D.

Board Chair and Chief Executive Officer

March 9, 2023

¹ Full year includes unfavorable foreign exchange impact of 3%.

² This non-GAAP amount excludes certain costs, expenses, gains and losses and other specified items. A reconciliation of GAAP to non-GAAP measures can be found on our website at bms.com. See, "Quarterly package of financial information" available on bms.com/investors for information on the list of specified items excluded from non-GAAP EPS.

³ Non-risk adjusted sales are subject to positive registrational trials and health authority approval. Financial projections may contain non-promoted sales. BMS promotes only according to label.



Delivered Strong Financial and Operational Performance

TOTAL NET SALES

\$46.2B

Consistent with prior year or, an increase of 3% when excluding foreign exchange

7% In-Line Brand YoY growth

87% New Product Portfolio* YoY growth

Potential for risk-adjusted sales of **\$10-\$13B** revenues in 2025

Potential for **\$25B+** of non-risk-adjusted revenues in 2030

GAAP EPS¹

\$2.95

Non-GAAP EPS^{1,2}

\$7.70

* New Product Portfolio includes *Reblozyl*® (luspatercept-aamt), *Inrebic*® (fedratinib), *Onureg*® (azacitidine tablets), *Zeposia*® (ozanimod), *Breyanzi*® (lisocabtagene maraleucel), *Abecma*® (idecabtagene vicleucel), *Opdualag*® (relatlimab plus nivolumab), *Camzyos*® (mavacamten) and *Sotyktyu*™ (deucravacitinib).

¹ GAAP and non-GAAP EPS include the net impact of Acquired IPRD charges and licensing income of (\$0.24) per share for the full year 2022. Acquired IPRD refers to certain in-process research and development ("Acquired IPRD") charges resulting from upfront or contingent milestone payments in connection with asset acquisitions or licensing of third-party intellectual property rights.

² This Non-GAAP amount excludes certain costs, expenses, gains and losses and other specified items. A reconciliation of GAAP to non-GAAP measures can be found on our website at bms.com. See, "Quarterly package of financial Information" available on bms.com/investors for information on the list of specified items excluded from Non-GAAP EPS.

³ Portfolio achievements from 2H 2019-2022.

⁴ Includes \$4.6 billion for dividends paid and \$8.0 billion for common stock repurchases.

Significant Pipeline Advancement in 2022

18 approvals in the US, EU and Japan

9 approvals for *Opdivo*; *Opdivo* plus *Yervoy*



5 positive registrational topline readouts

\$9.5B

invested in research and development

Launched 3 First-In-Class Medicines

Opdualag
(nivolumab and relatlimab-rmbw)
Injection for intravenous use | 480 mg/160 mg

For metastatic melanoma

CAMZYOS
(mavacamten)
capsules

For obstructive hypertrophic cardiomyopathy

SOTYKTU
(deucravacitinib)
6 mg tablets

For moderate to severe plaque psoriasis

Strategically Positioned for Multiple Waves of Innovation

9 new products launched over ~3 years³

15+



additional indications over ~3 years³

6 high potential mid-late stage registrational assets across therapeutic areas

50+



early-stage assets in development

Balanced Approach to Capital Allocation

\$13.1B

in cash flow from operating activities

Reduced debt by

~\$5B

Returned cash to shareholders

\$12.6B⁴

Development Portfolio by Therapeutic Area

Listed below are our clinical studies and approved indications for our marketed products in the related therapeutic area as of February 2, 2023. 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.

Hematology

Phase I

Additional Indications

OPDIVO

- Hematologic Malignancies

Investigational Compounds

alnuctamab BCMA TCE

- Relapsed/Refractory Multiple Myeloma

Anti-SIRPα

- Hematologic Malignancies

BCMA ADC^Δ

- Relapsed/Refractory Multiple Myeloma

BCMA NKE

- Relapsed/Refractory Multiple Myeloma

BET Inhibitor (CC-90010)^Δ

- Hematologic Malignancies

CD33 NKE

- Relapsed/Refractory Multiple Myeloma

CD47xCD20

- Non-Hodgkin's Lymphoma

CK1α Degradar

- Hematologic Malignancies

GPRC5D CAR-T

- Relapsed/Refractory Multiple Myeloma

GSPT1 CELMoD

(CC-90009)^Δ

- Relapsed/Refractory Acute Myeloid Leukemia

iberdomide^Δ

- 1L Diffuse Large B-cell Lymphoma
- 3L+ Follicular Lymphoma
- Relapsed/Refractory Non-Hodgkin Lymphoma
- Large B-cell Lymphoma

Phase II

Additional Indications

ABECMA^{*}

- 1-4L+ Multiple Myeloma

BREYANZI

- 3L+ Chronic Lymphocytic Leukemia
- 3L+ Follicular Lymphoma
- 3L+ Marginal Zone Lymphoma
- 3L+ Mantle Cell Lymphoma

ONUREG

- Low-to-Intermediate risk MDS

OPDIVO^{*} + EMLICITI[†]

- Relapsed/Refractory Multiple Myeloma

REBLOZYL^{*}

- A-Thalassemia SubQ

IDHIFA

- 1L Acute Myeloid Leukemia

Investigational Compounds

A/I CELMoD (CC-99282)^Δ

- Relapsed/Refractory Non-Hodgkin Lymphoma

BET Inhibitor

(BMS-986158)

- Hematologic Malignancies

iberdomide

- Newly-Diagnosed Multiple Myeloma

Phase III

Additional Indications

ABECMA^{*}

- 3-5L Multiple Myeloma

INREBIC

- MF Previously treated with Ruxolitinib

REBLOZYL^{*}

- 1L TD MDS Associated Anemia
- 1L TD MF Associated Anemia

Investigational Compounds

iberdomide

- 2L+ Multiple Myeloma
- **mezigdomide (CC-92480)**
- 2L+ Multiple Myeloma

Approved Indications

ABECMA

- 5L+ Relapsed/Refractory Multiple Myeloma
- 4L+ Relapsed/Refractory Multiple Myeloma

BREYANZI

- 2L Large B-cell Lymphoma
- 3L+ Large B-cell Lymphoma

EMLICITI[†] + POMALYST/

IMNOVID

- Relapsed/Refractory Multiple Myeloma

EMLICITI[†] + REVLIMID

- Relapsed/Refractory Multiple Myeloma

IDHIFA

- Relapsed/Refractory Acute Myeloid Leukemia

INREBIC

- Myelofibrosis

ONUREG

- Post-Induction Acute Myeloid Leukemia Maintenance

OPDIVO^{*}

- Advanced Hodgkin Lymphoma

POMALYST/IMNOVID

- Multiple Myeloma
- Relapsed/Refractory Multiple Myeloma
- AIDS related Kaposi Sarcoma
- HIV-negative Kaposi Sarcoma

REBLOZYL^{*}

- Transfusion-Dependent Beta-Thalassemia
- MDS Previously treated with ESA

REVLIMID

- 1L Multiple Myeloma
- Mantle Cell Lymphoma
- MDS
- Multiple Myeloma
- Previously treated Follicular Lymphoma
- Relapsed/Refractory Adult T-cell Leukemia/Lymphoma

SPRYCEL

- 1L CML
- Pediatric ALL
- Refractory CML

Development Portfolio by Therapeutic Area

Oncology

Phase I

Additional Indications**OPDIVO®**

– Solid Tumors

OPDIVO® + YERVOY®

– Solid Tumors

Investigational Compounds**AHR Antagonist[^]**

– Solid Tumors

Anti-CCR8[^]

– Solid Tumors

Anti-ILT4[^]

– Solid Tumors

AR-LDD[^]

– Solid Tumors

Anti-NKG2A[^]

– Solid Tumors

Claudin 18.2 ADC[^]

– Advance Solid Tumors

CD3xPSCA Bispecific

– Solid Tumors

DGK Inhibitor

– Solid Tumors

JNK Inhibitor

– Solid Tumors

LSD1 Inhibitor[^]

– Solid Tumors

MAGE A4/8 TCR[^]

– Solid Tumors

SHP2 Inhibitor[^]

– Solid Tumors

TGFβ Inhibitor[^]

– Solid Tumors

TIGIT Bispecific[^]

– Solid Tumors

Phase II

Additional Indications**OPDIVO®**

– Solid Tumors

– 2L CRC

– Pan Tumor TMB High

OPDIVO® + YERVOY®

– Solid Tumors

– 2L Metastatic Castration-

Resistant Prostate Cancer

OPDIVO® + CDK4/6 Inhibitor

– Neoadjuvant ER+/HER2-

Breast

nivolumab + relatlimab

– 1L Stage IV NSCLC

– 1L/2L Hepatocellular carcinoma

Investigational Compounds**Anti-CTLA-4 NF Probody Therapeutic**

– Solid Tumors

Anti-Fucosyl GM1[^]

– Solid Tumors

Anti-IL8[^]

– Solid Tumors

Anti-TIGIT[^]

– Solid Tumors

BET Inhibitor (CC-90010)[^]

– Solid Tumors

farletuzumab-ecteribulin[^]

– Solid Tumors

repotrectinib

– ROS1 NSCLC

– NTRK Pan Tumor

Phase III

Additional Indications**OPDIVO®**

– Peri-adjuvant Muscle

Invasive Urothelial Carcinoma

– Adjuvant Gastric Cancer

– Adjuvant HCC

– Adjuvant Melanoma

– 1L Metastatic Castration-

Resistant Prostate Cancer

– Peri-adjuvant NSCLC Stage IB-IIIA Adjuvant NSCLC[#]**OPDIVO® + YERVOY®**

– 1L Bladder Cancer

– 1L HCC

– 1L+ MSI-High CRC h

– Adjuvant RCC

– Stage III Unresectable NSCLC

OPDUALAG (fixed dose nivolumab + relatlimab)[^]

– Adjuvant Melanoma

– 2L+ Microsatellite Stable

Metastatic CRC

– 1L Melanoma SubQ

Investigational Compounds**subcutaneous nivolumab + rHuPH20[^]**

– 2L RCC

– Adjuvant Melanoma

Approved Indications

ABRAXANE

– Breast

– Gastric

– Locally Advanced or Metastatic NSCLC

– Metastatic Breast Cancer

– NSCLC

– Pancreatic

– Unresectable Pancreatic

OPDIVO®

– 1L Metastatic Melanoma

– 1L Gastric

– Esophageal Squamous Cell

Carcinoma

– 1L Esophageal

– Adjuvant Melanoma

– Adjuvant Bladder

– Adjuvant Esophageal/ Gastroesophageal

Mesothelioma

– Previously treated advanced RCC

– Previously treated Gastric

cancer (Japan, China)

– 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 Urothelial Cancer

– Previously treated Esophageal Cancer

– Neoadjuvant NSCLC

OPDIVO® + cabozantinib[^]

– Metastatic RCC

OPDIVO® + YERVOY®

– 1L Metastatic Melanoma

– 1L Mesothelioma

– 1L NSCLC

– 1L RCC

– Previously treated Metastatic MSI-High CRC

– Previously treated HCC

– 1L Esophageal

– 1L Gastric

OPDUALAG (fixed dose nivolumab + relatlimab)

– 1L Melanoma

YERVOY®

– Adjuvant Melanoma

– Metastatic Melanoma

Development Portfolio by Therapeutic Area

Immunology

Phase I

Investigational Compounds**afimedoran (TLR7/8****Inhibitor)**

- Cutaneous Lupus Erythematosus

Anti-CD40

- Autoimmune Disease

RIPK1 Inhibitor

- Autoimmune Disease

IL2-CD25

- Autoimmune Disease

PKCθ Inhibitor

- Autoimmune Disease

TYK2 Inhibitor

- Autoimmune Disease

Phase II

Additional Indications**SOTYKTU (deucravacitinib)**

- Crohn's Disease
- Alopecia Areata
- Ulcerative Colitis
- Discoid Lupus Erythematosus

Investigational Compounds**Afimetoran**

- Systemic Lupus Erythematosus

Phase III

Additional Indications**SOTYKTU (deucravacitinib)**

- Psoriatic Arthritis
- Systemic Lupus Erythematosus

ZEPOSIA

- Crohn's Disease

Investigational Compounds**cendakimab**

- Eosinophilic Esophagitis

Approved Indications

ORENCIA

- Active Polyarticular JIA
- Early Rheumatoid Arthritis
- JIA Intravenous
- JIA Subcutaneous
- Psoriatic Arthritis
- RA Auto injector
- RA Intravenous
- RA Subcutaneous

- Acute Graft versus Host Disease

SOTYKTU (deucravacitinib)

- Moderate-to-Severe Psoriasis

ZEPOSIA

- Relapsing Multiple Sclerosis
- Moderate-to-Severe Ulcerative Colitis

Cardiovascular

Phase I

Investigational Compounds**Factor XIa Inhibitor***

- Thrombotic Disorders

Phase II

Additional Indications**CAMZYOS (mavacamten)**

- Heart Failure with Preserved Ejection Fraction (HFpEF)

Investigational Compounds**Cardiac Myosin Inhibitor (MYK-224)**

- Obstructive Hypertrophic Cardiomyopathy

danicamtiv

- Genetic Dilated Cardiomyopathy

Phase III

Additional Indications**CAMZYOS (mavacamten)**

- Non-obstructive Hypertrophic Cardiomyopathy

Investigational Compounds**milvexian***

- Secondary Stroke Prevention (SSP)#

Approved Indications

CAMZYOS (mavacamten)

- Symptomatic Obstructive Hypertrophic Cardiomyopathy

ELIQUIS*

- Stroke Prevention in Atrial Fibrillation
- Venous Thromboembolism Prevention
- Orthopedic Surgery
- Venous Thromboembolism Treatment

Fibrotic Diseases

Phase II

Investigational Compounds**HSP47***

- Non-Alcoholic Steatohepatitis

LPA₁ Antagonist

- Pulmonary Fibrosis

Neuroscience

Phase I

Investigational Compounds**Anti-Tau***

- Neuroscience

BTK Inhibitor

- Neuroscience

eIF2b Activator*

- Neuroscience

FAAH/MGLL Dual Inhibitor

- Neuroscience

Note: Above pipeline excludes clinical collaborations

* Development Partnerships: **ABECMA (ide-cel)**: 2seventy bio; **AHR**: Ikena Oncology; **Anti-Tau**: Prothena; **CAMZYOS** in China, Singapore, Thailand, Macau, HK, Taiwan: LianBio; **Claudin 18.2 ADC**: LaNova Medicines; **CD3xPSCA**: Avencell; **eIF2b Activator**: Evotec; **ELIQUIS**: Pfizer; **EMPLICITI**: AbbVie; **farletuzumab**: Eisai; **HSP47**: Nitto Denko Corporation; **rHuPH20**: Halozyme; **IDHIFA**: Servier; **MAGEA4/8 TCER**: Immatics; **milvexian**: Janssen Pharmaceuticals, Inc.; **OPDIVO**, **YERVOY**, **OPDUALAG**: Ono; **REBLOZYL**: Merck; **SHP2 Inhibitor**: BridgeBio Pharma; **TIGIT Bispecific**: Agenus; **PKCθ Inhibitor**: Exscientia

^ Trial(s) exploring various combinations

Partner-run study

Bristol Myers Squibb
2022 Financial Report

Table of Contents

Management's Discussion and Analysis of Financial Condition and Results of Operations	2
Quantitative and Qualitative Disclosures About Market Risk	30
Consolidated Financial Statements	32
Notes to the Consolidated Financial Statements	35
Reports of Management	80
Controls and Procedures	81
Reports of Independent Registered Public Accounting Firm	82
Performance Graph	86
Summary of Abbreviated Terms	87

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

Management’s discussion and analysis of financial condition and results of operations is provided as a supplement to and should be read in conjunction with the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K to enhance the understanding of our results of operations, financial condition and cash flows.

The comparison of 2021 to 2020 results has been omitted from this Annual Report on Form 10-K and is incorporated by reference in our Form 10-K for the year ended December 31, 2021 “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” filed on February 10, 2021.

EXECUTIVE SUMMARY

Bristol-Myers Squibb Company is a global 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 2022 Annual Report on Form 10-K for definitions of capitalized terms used throughout the document.

In 2022, we obtained 18 approvals for new medicines and additional indications and formulations of currently marketed medicines in major markets (the U.S., EU and Japan), including advancement in oncology through FDA and EC approval of *Opdualag*, the first PD-1 inhibitor and LAG-3 blocking antibody combination. Additionally, in the U.S., EU and Japan, two *Opdivo* based regimens as first-line treatments for unresectable advanced or metastatic ESCC were approved. We continue to advance and invest in our cell therapy portfolio through the approval of *Abecma* in Japan for the treatment of multiple myeloma for patients with at least three prior therapies, and approvals of *Breyanzi* for the relapsed or refractory diffuse large B-cell lymphoma, with second-line treatments in the U.S. and Japan, and third-line treatments in the EU. We continue the expansion of our cell therapy manufacturing capabilities at our existing facilities in Washington and New Jersey, as well as through the construction of new state-of-the-art manufacturing facilities in Massachusetts and in Leiden, Netherlands. The approvals for *Sotyktu* (deucravacitinib) in the U.S. and Japan for the treatment of moderate to severe plaque psoriasis expanded our portfolio in immunology. Within cardiovascular, we broadened our New Product Portfolio with the FDA approval of *Camzyos* (mavacamten) for patients with symptomatic obstructive HCM. In addition, in August 2022, we acquired Turning Point, a precision oncology company, with the goal of expanding our solid tumor portfolio with the addition of repotrectinib.

In 2022, our revenues remained consistent with the prior year due to growth in our In-Line Products (primarily *Eliquis* and *Opdivo*) and New Product Portfolio (primarily *Opdualag*, *Abecma* and *Reblozyl*), offset by Recent LOE Products (primarily *Revlimid*) and the impact of foreign exchange. The \$0.17 decrease in GAAP EPS in 2022 was primarily due to changes to equity investment and contingent consideration fair value adjustments, partially offset by lower impairment charges and weighted-average common shares outstanding. After adjusting for specified items, non-GAAP EPS increased \$0.54 as a result of lower weighted-average common shares outstanding and Acquired IPRD charges and higher royalties and licensing income.

Highlights

The following table summarizes our financial information:

Dollars in Millions, except per share data	Year Ended December 31,	
	2022	2021
Total Revenues	\$ 46,159	\$ 46,385
Diluted Earnings Per Share		
GAAP	\$ 2.95	\$ 3.12
Non-GAAP	7.70	7.16

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, reconciliations and changes to our non-GAAP financial measures refer to “—Non-GAAP Financial Measures.”

Economic and Market Factors

Governmental Actions

Our products continue to be subject to increasing pressures across the portfolio from pharmaceutical market access and pricing controls and discounting, changes to tax and importation laws and other restrictions in the U.S., the EU and other regions around the world that result in lower prices, lower reimbursement rates and smaller populations for whom payers will reimburse, which can negatively impact our results of operations (including intangible asset impairment charges), operating cash flow, liquidity and financial flexibility. For example, on August 16, 2022, President Biden signed the IRA which provides for (i) the government to negotiate prices for select high-cost Medicare Part D (beginning in 2026) and Part B drugs (beginning in 2028) that are more than nine years (for small-molecule drugs) or 13 years (for biological products) from their FDA approval, (ii) manufacturers to pay a rebate for Medicare Part B and Part D drugs when prices increase faster than inflation beginning in 2022 for Part D and 2023 for Part B, and (iii) Medicare Part D redesign which replaces the current coverage gap provisions and establishes a \$2,000 cap for out-of-pocket limits costs for Medicare beneficiaries beginning in 2025, with manufacturers being responsible for 10% of costs up to the \$2,000 cap and 20% after that cap is reached. Implementation of this legislation is expected to be carried out through upcoming actions by regulatory authorities, the outcome of which is uncertain. Additionally, in connection with the IRA the following changes have been made to U.S. tax laws, including (i) a 15% minimum tax that generally applies to U.S. corporations on adjusted financial statement income beginning in 2023 and (ii) a non-deductible 1% excise tax provision on net stock repurchases, to be applied to repurchases beginning in 2023. We continue to evaluate the impact of the IRA legislation on our results of operations and it is possible that these changes may result in a material impact on our business and results of operations. Furthermore, countries are expected to make changes to their tax laws and updates to international tax treaties to implement the agreement by the Organization for Economic Co-operation and Development to establish a global minimum tax. See risk factors on these items included in our most recently filed 2022 Form 10-K under “Part I—Item 1A. Risk Factors—Product, Industry and Operational Risks—Increased pricing pressure and other restrictions in the U.S. and abroad continue to negatively affect our revenues and profit margins” and “—Changes to tax regulations could negatively impact our earnings.”

COVID-19

In response to the COVID-19 pandemic, international, federal, state and local public health and governmental authorities took a number of actions to limit the spread of COVID-19 and address related disruptions in the U.S. and global economy. As the COVID-19 pandemic affected global healthcare systems as well as major economic and financial markets, we adopted several procedures focused on ensuring the continued supply of our medicines to our patients and protecting the health, wellbeing and safety of our workforce. While the pandemic has not significantly impacted our results of operations, the situation remains dynamic and it is difficult to reasonably assess or predict the full extent of the negative impact that the COVID-19 pandemic may have on our business, financial condition, results of operations and cash flows.

Significant Product Approvals

The following is a summary of the significant approvals received in 2022:

Product	Date	Approval
<i>Breyanzi</i>	December 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Breyanzi</i> allowing its use in the second-line treatment of relapsed or refractory large B-cell lymphoma, regardless of whether autologous hematopoietic stem-cell transplantation is intended.
<i>Sotyktu</i>	September 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Sotyktu</i> for treatment of plaque psoriasis, generalized pustular psoriasis, or erythrodermic psoriasis, for patients who have had an inadequate response to conventional therapies.
<i>Sotyktu</i>	September 2022	FDA approval of <i>Sotyktu</i> for the treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy.
<i>Opdualag</i>	September 2022	EC approval of <i>Opdualag</i> for the first-line treatment of advanced (unresectable or metastatic) melanoma in adults and adolescents 12 years of age and older with tumor cell PD-L1 expression < 1%.
<i>Breyanzi</i>	June 2022	FDA approval of <i>Breyanzi</i> for the treatment of adult patients with relapsed or refractory large B-cell lymphoma after one line of therapy who are not eligible for transplant or who relapsed within 12 months of first-line chemoimmunotherapy.

Product	Date	Approval
<i>Opdivo+Yervoy</i>	May 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Opdivo</i> plus <i>Yervoy</i> as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status.
<i>Opdivo</i>	May 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-containing chemotherapy as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status.
<i>Opdivo+Yervoy</i>	May 2022	FDA approval of <i>Opdivo</i> plus <i>Yervoy</i> as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status.
<i>Opdivo</i>	May 2022	FDA approval of <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-containing chemotherapy as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status.
<i>Camzyos</i>	April 2022	FDA approval of <i>Camzyos</i> for the treatment of adults with symptomatic obstructive HCM.
<i>Breyanzi</i>	April 2022	EC approval of <i>Breyanzi</i> for the treatment of adult patients with relapsed or refractory diffuse large B-cell lymphoma, primary mediastinal large B-cell lymphoma and follicular lymphoma grade 3B after two or more lines of systemic therapy.
<i>Opdivo+Yervoy</i>	April 2022	EC approval of <i>Opdivo</i> plus <i>Yervoy</i> for the first-line treatment of adult patients with unresectable advanced, recurrent or metastatic ESCC with tumor cell PD-L1 expression $\geq 1\%$.
<i>Opdivo</i>	April 2022	EC approval of <i>Opdivo</i> for the adjuvant treatment of adults with muscle-invasive urothelial carcinoma with tumor cell PD-L1 expression $\geq 1\%$ who are at risk of recurrence after undergoing radical resection.
<i>Opdivo</i>	April 2022	EC approval of <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-based chemotherapy for the first-line treatment of adult patients with unresectable advanced, recurrent, or metastatic ESCC with PD-L1 expression $\geq 1\%$.
<i>Opdualag</i>	March 2022	FDA approval of <i>Opdualag</i> , a fixed-dose combination of nivolumab and relatlimab, for the treatment of adult and pediatric patients 12 years of age and older with unresectable or metastatic melanoma.
<i>Opdivo</i>	March 2022	FDA approval of <i>Opdivo</i> in combination with platinum-doublet chemotherapy for adult patients with resectable NSCLC in the neoadjuvant setting.
<i>Opdivo</i>	March 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Opdivo</i> for the adjuvant treatment of urothelial carcinoma.
<i>Abecma</i>	January 2022	Japan's Ministry of Health, Labour and Welfare approval of <i>Abecma</i> for the treatment of adult patients with relapsed or refractory multiple myeloma who have received at least three prior therapies.

Refer to “—Product and Pipeline Developments” for all of the developments in our marketed products and late-stage pipeline in 2022 and in early 2023.

Strategy

Our principal strategy is to combine the resources, scale and capability of a large pharmaceutical company with the speed, agility and focus on innovation typically found in the biotech industry. Our priorities are to continue to renew and diversify our portfolio through launching new medicines, advancing our early, mid and late-stage pipeline, and executing disciplined business development. We remain committed to maintaining a strong investment grade credit rating and returning capital to shareholders.

Our focus is on discovering, developing and delivering transformational medicines for patients facing serious diseases in the following core therapeutic areas: (i) oncology with a priority in certain tumor types; (ii) hematology with opportunities to broaden our franchise and sustain a leadership position in multiple myeloma; (iii) immunology with priorities in relapsing multiple sclerosis, psoriasis, psoriatic arthritis, lupus, RA and inflammatory bowel disease; (iv) cardiovascular disease (v) fibrotic disease with priorities in lung and liver, and (vi) neuroscience with a focus on neurodegenerative disease.

We continue to advance the next wave of innovative medicines by investing significantly in our oncology, hematology (with alnuctamab in multiple myeloma), immunology (with LPA1 antagonist in pulmonary fibrosis) and cardiovascular portfolios with our alliance partnership with Janssen where we are advancing a next-generation antithrombotic medicine milvexian. We have expanded our oncology portfolio, including a precision oncology asset repotrectinib in ROS-1 mutated NSCLC. For hematology, there is a broad effort to continue addressing the unmet medical needs in multiple myeloma, lymphoma, and anemia (e.g., MDS and MF associated anemia) and we are working across multiple modalities and mechanisms of action such as cereblon modulators (“CELMoDs”), ADCs, T-cell Engagers and CAR-T therapies. For immunology, the Phase III clinical trials are underway for cendakimab in eosinophilic esophagitis.

Our commercial model has been successful with revenues from our in-line brands and new product portfolio continuing to grow, which demonstrates strong execution of our strategy. In 2022, we have launched three first-in-class medicines with blockbuster potential across three therapeutic areas: *Opdualag* in first line melanoma, *Camzyos* in oHCM, *Sotyktu* in moderate to severe psoriasis. 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 oncology mechanisms and develop treatment options for refractory oncology patients. We are further strengthening our IO portfolio with *Opdualag* for the treatment of melanoma and potential expanded opportunities in lung, liver, CRC and adjuvant melanoma. We continue to drive adoption 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 globally. In immunology, the Phase III registrational clinical trials are underway for *Sotyktu* in systemic lupus erythematosus (SLE) and psoriatic arthritis. We are able to leverage our leading capabilities in hematological malignancies and our robust pipeline to provide opportunities for long-term growth to offset the impact of current and future patent expires for *Revlimid* and *Pomalyst*.

We expect the growth of our in-line and new product portfolio will enable us to more than offset the expected decline in *Revlimid*, *Abraxane* and other products revenues due to their loss of market exclusivity through 2025.

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. Through our Celgene acquisition restructuring activities, we realized at least \$3.0 billion of synergies annually resulting from cost savings and avoidance. The achieved synergies were across general and administrative, manufacturing, R&D, and procurement, and also resulted in streamlining the Company's pricing and information technology infrastructure.

Our strategy extends well beyond the discovery, development and delivery of transformative medicines that help patients prevail over serious diseases. We believe that driving long-term business value is at the heart of living our purpose, from improving access and affordability to advancing inclusion and diversity and health equity in all areas of medicine to supporting a healthy planet in order to sustain lives and communities everywhere. Our Environmental, Social and Governance (ESG) strategy is integrated into our company's core strategy, as the opportunities and potential impacts of ESG issues are directly connected to our business. Our ESG strategy focuses on (i) operating with effective governance and the highest ethical standards, and seeking transparency and dialogue with our stakeholders to improve our understanding of their needs, (ii) fostering an environment of inclusion and belonging and build a globally diverse workforce to drive equitable advancement and outcomes for all, (iii) around the globe, improve access to our innovative therapies and promote health equity to improve health outcomes for populations disproportionately affected by serious diseases and (iv) understand our responsibility to create a maximum positive impact while minimizing our environmental footprint while leveraging sustainability to drive innovation, build resiliency and manage nonfinancial risks.

Acquisitions, Divestitures, Licensing and Other Arrangements

For detailed information on significant acquisitions, divestitures, collaborations, licensing and other arrangements during 2022 refer to “Consolidated Financial Statements —Note 3. Alliances” and “—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements.”

RESULTS OF OPERATIONS

Regional Revenues

The composition of the changes in revenues was as follows:

Dollars in Millions	Year Ended December 31,		2022 vs. 2021	
	2022	2021	% Change	Foreign Exchange ^(b)
United States	\$ 31,828	\$ 29,214	9 %	—
International	13,497	16,319	(17)%	(9)%
Other ^(a)	834	852	(2)%	—
Total	\$ 46,159	\$ 46,385	—	(3)%

(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 revenues.

United States

- U.S. revenues in 2022 increased primarily due to *Eliquis*, New Product Portfolio, and *Opdivo*, partially offset by our Recent LOE Products. Average net selling prices increased by 4% in 2022 compared to the same period a year ago.

International

- International revenues in 2022 decreased primarily due to lower demand for *Revlimid* as a result of generic erosion, foreign exchange and lower average net selling prices, partially offset by In-Line Products and New Product Portfolio.

No single country outside the U.S. contributed more than 10% of total revenues in 2022 and 2021. Our business is typically not seasonal.

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	Year Ended December 31, 2022			
	Charge-Backs and Cash Discounts	Medicaid and Medicare Rebates	Other Rebates, Returns, Discounts and Adjustments	Total
Balance at January 1, 2022	\$ 723	\$ 3,206	\$ 3,193	\$ 7,122
Provision related to sales made in:				
Current period	7,483	11,364	6,344	25,191
Prior period	(14)	(2)	(213)	(229)
Payments and returns	(7,511)	(10,746)	(6,319)	(24,576)
Foreign currency translation and other	(6)	—	(125)	(131)
Balance at December 31, 2022	\$ 675	\$ 3,822	\$ 2,880	\$ 7,377

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

Dollars in Millions	Year Ended December 31,		% Change
	2022	2021	2022 vs. 2021
Gross product sales	\$ 69,633	\$ 67,897	3 %
GTN Adjustments			
Charge-backs and cash discounts	(7,469)	(7,253)	3 %
Medicaid and Medicare rebates	(11,362)	(9,374)	21 %
Other rebates, returns, discounts and adjustments	(6,131)	(6,215)	(1)%
Total GTN Adjustments	(24,962)	(22,842)	9 %
Net product sales	\$ 44,671	\$ 45,055	(1)%
GTN adjustments percentage	36 %	33 %	3 %
U.S.	41 %	40 %	1 %
Non-U.S.	17 %	17 %	—

Reductions to provisions for product sales made in prior periods resulting from changes in estimates were \$229 million and \$319 million for 2022 and 2021, respectively. The reductions to provisions in 2022 primarily related to Non-U.S. revisions in clawback amounts primarily driven by the VAT recoverable estimates in 2022 and *Eliquis* coverage gap discounts in 2021. GTN adjustments are primarily a function of product sales volume, regional and payer channel mix, contractual or legislative discounts and rebates. U.S. GTN adjustments percentage increased primarily due to higher government channel mix, which has higher GTN adjustment percentages.

Product Revenues

Dollars in Millions	Year Ended December 31,		
	2022	2021	% Change
In-Line Products			
<i>Eliquis</i>	\$ 11,789	\$ 10,762	10 %
U.S.	7,786	6,456	21 %
Non-U.S.	4,003	4,306	(7) %
<i>Opdivo</i>	8,249	7,523	10 %
U.S.	4,812	4,202	15 %
Non-U.S.	3,437	3,321	3 %
<i>Pomalyst/Imnovid</i>	3,497	3,332	5 %
U.S.	2,438	2,249	8 %
Non-U.S.	1,059	1,083	(2) %
<i>Orencia</i>	3,464	3,306	5 %
U.S.	2,638	2,410	9 %
Non-U.S.	826	896	(8) %
<i>Sprycel</i>	2,165	2,117	2 %
U.S.	1,497	1,297	15 %
Non-U.S.	668	820	(19) %
<i>Yervoy</i>	2,131	2,026	5 %
U.S.	1,304	1,265	3 %
Non-U.S.	827	761	9 %
<i>Empliciti</i>	296	334	(11) %
U.S.	185	200	(8) %
Non-U.S.	111	134	(17) %
Mature and other products	1,749	1,900	(8) %
U.S.	565	580	(3) %
Non-U.S.	1,184	1,320	(10) %
New Product Portfolio			
<i>Reblozyl</i>	717	551	30 %
U.S.	591	485	22 %
Non-U.S.	126	66	91 %
<i>Abecma</i>	388	164	**
U.S.	297	158	88 %
Non-U.S.	91	6	**
<i>Opdualag</i>	252	—	N/A
U.S.	252	—	N/A
Non-U.S.	—	—	N/A
<i>Zeposia</i>	250	134	87 %
U.S.	177	99	79 %
Non-U.S.	73	35	**

Dollars in Millions	Year Ended December 31,		% Change
	2022	2021	2022 vs. 2021
<i>Breyanzi</i>	182	87	**
U.S.	151	84	80 %
Non-U.S.	31	3	**
<i>Onureg</i>	124	73	70 %
U.S.	95	69	38 %
Non-U.S.	29	4	**
<i>Inrebic</i>	85	74	15 %
U.S.	69	67	3 %
Non-U.S.	16	7	**
<i>Camzyos</i>	24	—	N/A
U.S.	24	—	N/A
Non-U.S.	—	—	N/A
<i>Sotyktu</i>	8	—	N/A
U.S.	8	—	N/A
Non-U.S.	—	—	N/A
Recent LOE Products^(a)			
<i>Revlimid</i>	9,978	12,821	(22)%
U.S.	8,359	8,695	(4)%
Non-U.S.	1,619	4,126	(61)%
<i>Abraxane</i>	811	1,181	(31)%
U.S.	580	898	(35)%
Non-U.S.	231	283	(18)%
Total Revenues	46,159	46,385	—
U.S.	31,828	29,214	9 %
Non-U.S.	14,331	17,171	(17)%

** Change in excess of 100%.

(a) Recent LOE Products include products with significant decline in revenue from a prior reporting period as a result of a loss of exclusivity.

Eliquis (apixaban) — an oral Factor Xa inhibitor, indicated for the reduction in risk of stroke/systemic embolism in NVAf and for the treatment of DVT/PE and reduction in risk of recurrence following initial therapy.

- U.S. revenues increased 21% in 2022 due to higher demand and higher average net selling prices, including favorable GTN adjustments.
- International revenues decreased 7% in 2022 primarily due to foreign exchange impacts of 11% and lower average net selling prices, partially offset by higher demand. Excluding foreign exchange impacts, revenues increased by 4%.
- Following the May 2021 expiration of regulatory exclusivity for *Eliquis* in Europe, and court decisions in (i) the United Kingdom finding the UK apixaban composition of matter patent and related SPC invalid and (ii) the Netherlands denying a BMS request for a preliminary injunction that would have prevented an at-risk generic launch, generic manufacturers have begun marketing generic versions of *Eliquis* in the UK and the Netherlands, and may seek to market generic versions of *Eliquis* in additional countries in Europe, prior to the expiration of our patents, which may lead to additional infringement and invalidity actions involving our *Eliquis* patents being filed in various countries in Europe. We believe in the innovative science behind *Eliquis* and the strength of our intellectual property, which we will defend against infringement. Refer to “Consolidated Financial Statements—Note 20. Legal Proceedings and Contingencies—Intellectual Property” for further information.

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, CRC, head and neck, RCC, HCC, lung, melanoma, MPM, stomach and esophageal cancer. The *Opdivo+Yervoy* regimen also is approved in multiple markets for the treatment of NSCLC, melanoma, MPM, RCC, CRC and various gastric and esophageal cancers. There are several ongoing potentially registrational studies for *Opdivo* across other tumor types and disease areas, in monotherapy and in combination with *Yervoy* and various anti-cancer agents.

- U.S. revenues increased 15% in 2022 due to higher demand across multiple indications including the *Opdivo+Yervoy* combinations for NSCLC, *Opdivo+Cabometyx** combination for kidney cancer, bladder and various gastric and esophageal cancers, partially offset by declining second-line eligibility across tumor indications and increased competition.
- International revenues increased 3% in 2022 due to higher demand partially offset by foreign exchange impacts of 11% and lower average net selling prices. Excluding foreign exchange impacts, revenues increased by 14%.

Pomalyst/Imnovid (pomalidomide) — a proprietary, distinct, small molecule that is administered orally and modulates the immune system and other biologically important targets. *Pomalyst/Imnovid* is indicated for patients with multiple myeloma who have received at least two prior therapies including lenalidomide and a proteasome inhibitor and have demonstrated disease progression on or within 60 days of completion of the last therapy.

- U.S. revenues increased 8% in 2022 due to higher average net selling prices and higher demand.
- International revenues decreased 2% in 2022 due to foreign exchange impacts of 10% and lower average net selling prices, partially offset by higher demand. Excluding foreign exchange impacts, revenues increased by 8%.

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 9% in 2022 due to higher demand.
- International revenues decreased 8% in 2022 due to foreign exchange impacts of 11%, partially offset by higher demand. Excluding foreign exchange impacts, revenues increased by 3%.
- In the U.S. and EU, estimated minimum market exclusivity dates were previously based on method of use patents that expired in 2021. Formulation and additional patents expire in 2026 and beyond. There are no *Orencia* biosimilars on the market in the U.S., EU or Japan.

Sprycel (dasatinib) — an oral inhibitor of multiple tyrosine kinase indicated for the first-line treatment of patients 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) and the treatment of children and adolescents aged 1 year to 18 years with chronic phase Philadelphia chromosome-positive CML.

- U.S. revenues increased 15% in 2022 due to higher average net selling prices and higher demand.
- International revenues decreased 19% in 2022 due to foreign exchange impacts of 11% and lower demand as a result of generic erosion. Excluding foreign exchange impacts, revenues decreased by 8%.

Yervoy (ipilimumab) — a monoclonal antibody for the treatment of patients with unresectable or metastatic melanoma. The *Opdivo+Yervoy* regimen also is approved in multiple markets for the treatment of NSCLC, melanoma, MPM, RCC, CRC and esophageal cancer.

- U.S. revenues increased 3% in 2022 due to higher average net selling prices.
- International revenues increased 9% in 2022 due to higher demand as a result of additional indication launches and core indications, partially offset by foreign exchange impacts of 12% and lower average net selling prices. Excluding foreign exchange impacts, revenues increased by 21%.

Empliciti (elotuzumab) — a humanized monoclonal antibody for the treatment of multiple myeloma.

Mature and other products — includes all other products, including those which have lost exclusivity in major markets, OTC products and royalty revenue and mature products.

- International revenues for mature and other products decreased 10% due to lower demand as a result of a continued generic erosion and foreign exchange impacts of 5%. Excluding foreign exchange impacts, revenues decreased by 5%.

Reblozyl (luspatercept-aamt) — an erythroid maturation agent indicated for the treatment of anemia in adult patients with beta thalassemia who require regular red blood cell transfusions and for the treatment of anemia failing an ESA in adult patients with very low- to intermediate-risk MDS who have ring sideroblasts and require RBC transfusions.

- U.S. revenues increased 22% in 2022 primarily due to higher demand.

Abecma (idecabtagene vicleucel) — is a B-cell maturation antigen-directed genetically modified autologous CAR-T cell therapy indicated for the treatment of adult patients with relapsed or refractory multiple myeloma after four or more prior lines of therapy, including an immunomodulatory agent, a proteasome inhibitor, and an anti-CD38 monoclonal antibody. *Abecma* was launched in May 2021.

Opdualag (nivolumab and relatlimab-rmbw) — a combination of nivolumab, a PD-1 blocking antibody, and relatlimab, a LAG-3 blocking antibody, indicated for the treatment of adult and pediatric patients 12 years of age or older with unresectable or metastatic melanoma. *Opdualag* was launched in March 2022.

Zeposia (ozanimod) — an oral immunomodulatory drug used to treat relapsing forms of multiple sclerosis, to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults and to treat moderately to severely active UC in adults. *Zeposia* was launched in June 2020.

Breyanzi (lisocabtagene maraleucel) — is a CD19-directed genetically modified autologous CAR-T cell therapy indicated for the treatment of adult patients with certain types of relapsed or refractory large B-cell lymphoma after one or more lines of systemic therapy. *Breyanzi* was launched in April 2021.

Onureg (azacitidine) — an oral hypomethylating agent that incorporates into DNA and RNA, indicated for continued treatment of adult patients with AML who achieved first complete remission or complete remission with incomplete blood count recovery following intensive induction chemotherapy and are not able to complete intensive curative therapy. *Onureg* was launched in September 2020.

Inrebic (fedratinib) — an oral kinase inhibitor indicated for the treatment of adult patients with intermediate-2 or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) myelofibrosis. *Inrebic* was launched in August 2019.

Camzyos (mavacamten) — a cardiac myosin inhibitor indicated for the treatment of adults with symptomatic obstructive HCM to improve functional capacity and symptoms. *Camzyos* was launched in April 2022.

Sotyktu (deucravacitinib) — an oral, selective, allosteric tyrosine kinase 2 inhibitor indicated for the treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy. *Sotyktu* was launched in September 2022.

Revlimid (lenalidomide) — an oral immunomodulatory drug that in combination with dexamethasone is indicated for the treatment of patients with multiple myeloma. *Revlimid* as a single agent is also indicated as a maintenance therapy in patients with multiple myeloma following autologous hematopoietic stem cell transplant.

- U.S. revenues decreased 4% in 2022 due to lower demand driven by generic erosion, partially offset by higher average net selling prices.
- International revenues decreased 61% in 2022 due to lower demand as a result of generic erosion across several European countries and Canada, lower average net selling prices and foreign exchange impacts of 4%. Excluding foreign exchange impacts, revenues decreased by 57%.
- In the U.S., certain third parties have been granted volume-limited licenses to sell generic lenalidomide beginning in March 2022 or thereafter. Pursuant to these licenses, several generics have entered or are expected to enter the U.S. market with volume-limited quantities of generic lenalidomide. In the EU, generic lenalidomide products have entered the market. In Japan, the composition of matter patent expired in July 2022, however BMS is not aware of any generic approvals. Global revenues for *Revlimid* are expected to decline to approximately \$6.5 billion in 2023.

Abraxane (paclitaxel albumin-bound particles for injectable suspension) — a solvent-free protein-bound chemotherapy product that combines paclitaxel with albumin using our proprietary *Nab*[®] technology platform, and is used to treat breast cancer, NSCLC and pancreatic cancer, among others.

- U.S. revenues decreased 35% in 2022 primarily due to entry of authorized generics and lower demand. Authorized generic arrangements include product supply sales and profit sharing fees.
- International revenues decreased 18% in 2022 due to lower demand resulting from generic erosion and foreign exchange impacts of 5%. Excluding foreign exchange impacts, revenues decreased by 13%.
- In the U.S. and EU, generics have entered the market. In Japan, the estimated minimum market exclusivity date is 2023 based on a method of use patent.

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. There were no products in the U.S. wholesaler distribution channel and outside of the U.S. in the direct customer distribution channel with estimated levels of inventory in excess of one month as of December 31, 2022 (U.S.) and September 30, 2022 (outside of the U.S.).

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 78% of total gross sales of U.S. products for the year ended December 31, 2022. Factors that may influence our estimates include generic erosion, 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.

Camzyos is only available through a restricted program called the *Camzyos* REMS Program. Product distribution is limited to REMS certified pharmacies, and enrolled pharmacies must only dispense to patients who are authorized to receive *Camzyos*. *Revlimid* and *Pomalyst* are distributed in the U.S. primarily through contracted pharmacies under the Lenalidomide REMS and *Pomalyst* REMS programs, respectively. These are proprietary risk-management distribution programs tailored specifically to provide for the safe and appropriate distribution and use of *Revlimid* and *Pomalyst*. Internationally, *Revlimid* and *Imnovid* are distributed under mandatory risk-management distribution programs tailored to meet local authorities’ specifications to provide for the products’ safe and appropriate distribution and use. These programs may vary by country and, depending upon the country and the design of the risk-management program, the product may be sold through hospitals or retail pharmacies.

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, 2022 is not available prior to the filing of this Annual Report on 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

Dollar in Millions	Year Ended December 31,		% Change
	2022	2021	2022 vs 2021
Cost of products sold ^(a)	\$ 10,137	\$ 9,940	2 %
Marketing, selling and administrative	7,814	7,690	2 %
Research and development	9,509	10,195	(7)%
Acquired IPRD	815	1,159	(30)%
Amortization of acquired intangible assets	9,595	10,023	(4)%
Other (income)/expense, net	576	(720)	**
Total Expenses	\$ 38,446	\$ 38,287	—

** Change in excess of 100%.

(a) Excludes amortization of acquired intangible assets.

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 impairment charges. Cost of products sold typically varies between periods as a result of volume, product mix (particularly royalties and profit sharing), foreign exchange, as well as changes in price, inflation, costs attributed to manufacturing site exits and impairment charges. Cost of products sold excludes amortization from acquired intangible assets.

Cost of products sold increased by \$197 million primarily driven by product mix including higher profit sharing due to *Eliquis* revenue growth (\$541 million), higher manufacturing startup costs and inventory related charges primarily from expanding our CAR-T cell therapy capabilities, partially offset by foreign exchange and related hedging settlements (\$588 million) and impairment charges related to *Inrebic* EU regulatory approval milestones in 2021 (\$315 million).

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 costs. 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.

Marketing, selling and administrative expenses increased by \$124 million primarily due to higher charitable giving (\$235 million) and the cash settlement of Turning Point unvested stock awards (\$73 million), partially offset by foreign exchange.

Research and development

Research and development activities include research and early discovery, 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, 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 IPRD impairment charges.

Research and development expense decreased by \$686 million primarily due to lower IPRD impairment charges (\$742 million), partially offset by the cash settlement of Turning Point unvested stock awards in 2022 (\$80 million). Refer to "Consolidated Financial Statements—Note 15. Goodwill and Other Intangible Assets" for further information on impairment charges.

Acquired IPRD

Acquired IPRD expenses are comprised of upfront payments, contingent milestone payments in connection with asset acquisitions or in-license arrangements of third-party intellectual property rights, as well as any upfront and contingent milestones payable by BMS to alliance partners prior to regulatory approval. Acquired IPRD charges are detailed in the table below.

Dollars in Millions	Year Ended December 31,	
	2022	2021
Mavacamten royalty extinguishment	\$ 295	\$ —
Dragonfly milestone and opt-in license fee	200	—
Immatics upfront license fee	150	—
BridgeBio upfront collaboration fee	90	—
Eisai upfront collaboration fee	—	650
Agenus upfront license fee and milestone	—	220
Prothena opt-in license fee	—	80
Evotec opt-in license fee	—	58
Other	80	151
Acquired IPRD	\$ 815	\$ 1,159

Refer to “Consolidated Financial Statements—Note 3. Alliances” and “—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements” for additional information.

Amortization of Acquired Intangible Assets

Amortization of acquired intangible assets decreased by \$428 million in 2022 compared to 2021, primarily due to a change in the expected expiration of the market exclusivity period for *Pomalyst* to the first quarter of 2026 and the expiration of *Abraxane* market exclusivity in the fourth quarter of 2022.

Other (income)/expense, net

Other (income)/expense, net changed by \$1.3 billion in 2022, primarily due to equity investments, contingent value rights and other items discussed below.

Components of Other (income)/expense, net were as follows:

Dollars in Millions	Year Ended December 31,	
	2022	2021
Interest expense	\$ 1,232	\$ 1,334
Royalty and licensing income	(1,283)	(1,067)
Royalty income - divestitures	(832)	(666)
Equity investment losses/(income), net	801	(745)
Integration expenses	440	564
Loss on debt redemption	266	281
Divestiture gains	(211)	(9)
Litigation and other settlements	178	82
Investment income	(171)	(39)
Provision for restructuring	75	169
Contingent consideration	(9)	(542)
Other	90	(82)
Other (income)/expense, net	\$ 576	\$ (720)

- Interest expense decreased in 2022 due to additional debt maturities. Refer to “Consolidated Financial Statements—Note 10. Financing Arrangements” for further information.
- Royalties increased in 2022 primarily due to higher *Keytruda** and diabetes business divestiture royalties. Refer to “Consolidated Financial Statements—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements” for further information.
- Equity investments generated losses in 2022 compared to income in 2021 due to fair value adjustments for investments that have readily determinable fair value, observable price changes for investments without readily determinable fair values resulting primarily from initial public offerings or third-party acquisitions of entities which we held an ownership interest, and changes in limited partnership net asset values. Refer to “Consolidated Financial Statements—Note 9. Financial Instruments and Fair Value Measurements” for more information.
- Integration expenses decreased in 2022 due to lower consulting fees to implement Celgene integration initiatives related to processes and systems.
- Loss on debt redemption resulted from the early redemption of long-term debt of \$6.0 billion in 2022 and \$3.5 billion in 2021.
- Divestiture gains resulted from certain mature product rights divested in 2022.
- Investment income increased in 2022 primarily due to higher interest rates.
- Litigation and other settlements includes amounts related to commercial disputes regarding licensing and supply obligation matters, intellectual property and promotional practice matters. In addition, 2022 includes income of \$40 million resulting from a settlement resolving all legal claims and business interests pertaining to Nimbus’ TYK2 inhibitor. The settlement also provides for contingent development, regulatory and sales-based milestones payable to BMS upon the occurrence of certain events. Refer to “Consolidated Financial Statements—Note 20. Legal Proceedings and Contingencies.”
- Provision for restructuring includes exit and other costs primarily related to the Celgene Acquisition Plan. We have achieved at least \$3.0 billion in annual synergies related to the Celgene Acquisition Plan. Refer to “Consolidated Financial Statements—Note 6. Restructuring” for further information.
- Contingent consideration primarily includes fair value adjustments resulting from the change in the traded price of contingent value rights issued with the Celgene acquisition. The contractual obligation to pay the contingent value rights terminated in January 2021 because the FDA did not approve liso-cel (JCAR017) by December 31, 2020.
- Other includes foreign exchange losses of \$83 million in 2022 and \$15 million in 2021 (net of hedging), exit costs of \$39 million resulting from the transition of our commercial operations in the Russian Federation to a third-party distributor and Turning Point acquisition costs of \$32 million in 2022.

Income Taxes

Dollars in Millions	Year Ended December 31,	
	2022	2021
Earnings Before Income Taxes	\$ 7,713	\$ 8,098
Provision for Income Taxes	1,368	1,084
Effective Tax Rate	17.7 %	13.4 %
Impact of Specified Items	(2.4)%	2.6 %
Effective Tax Rate Excluding Specified Items	15.3 %	16.0 %

The income tax impact attributed to the GAAP effective tax rate includes the impact from specified items summarized in the following “—Non-GAAP Financial Measures” section. Income tax impact of specified items was primarily due to low jurisdictional tax rates attributed to intangible asset amortization in both periods, IPRD impairment charges and non-taxable contingent value rights fair value adjustments in 2021, a revaluation in 2021 (and to a lesser extent 2022) of the basis of intangible and other assets internally transferred to streamline our legal entity structure after the Celgene acquisition, and tax reserve releases related to the 2009 Mead Johnson split-off transaction in 2022.

The 0.7% decrease in the effective tax rate excluding specified items during 2022 primarily resulted from releases of income tax reserves of \$297 million for tax positions that were effectively settled for the BMS 2008 to 2012 tax years (excluding Mead Johnson related amounts that were specified) and the lapse of statute of limitations for the Celgene 2012 to 2016 tax years, partially offset by jurisdictional earnings mix. Refer to “Consolidated Financial Statements—Note 7. Income Taxes” for additional information.

Non-GAAP Financial Measures

Our non-GAAP financial measures, such as 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 past or future operating results. These items are excluded from non-GAAP earnings and related EPS information because the Company believes they neither relate to the ordinary course of the Company's business nor reflect the Company's underlying business performance. Similar charges or gains were recognized in prior periods and will likely reoccur in future periods, including (i) amortization of acquired intangible assets, including product rights that generate a significant portion of our ongoing revenue and will recur until the intangible assets are fully amortized, (ii) unwind of inventory purchase price adjustments, (iii) acquisition and integration expenses, (iv) restructuring costs, (v) accelerated depreciation and impairment of property, plant and equipment and intangible assets, (vi) divestiture gains or losses, (vii) stock compensation resulting from acquisition-related equity awards, (viii) pension, legal and other contractual settlement charges, (ix) equity investment and contingent value rights fair value adjustments (including fair value adjustments attributed to limited partnership equity method investments) and (x) amortization of fair value adjustments of debt acquired from Celgene in our 2019 exchange offer, 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. Certain other significant tax items are also excluded such as the impact resulting from release of income tax reserves related to the Mead Johnson split-off transaction and internal transfers of intangible and other assets to streamline our legal entity structure subsequent to the Celgene acquisition. We also provide international revenues for our priority products excluding the impact of foreign exchange. We calculate foreign exchange impacts by converting our current-period local currency financial results using the prior period average currency rates and comparing these adjusted amounts to our current-period results. Reconciliations of these non-GAAP measures to the most comparable GAAP measures are included in Exhibit 99.2 to our Form 8-K filed on February 2, 2023 and are incorporated herein by reference.

Beginning with the first quarter of 2022, significant R&D charges or other income resulting from upfront or contingent milestone payments in connection with asset acquisitions or licensing of third-party intellectual property rights are no longer excluded from our non-GAAP financial measures. We made these changes to our presentation of non-GAAP financial measures following comments from and discussions with the SEC. For purposes of comparability, the non-GAAP financial measures for the year ended December 31, 2021, have been updated to reflect this change.

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. This information is not intended to be considered in isolation or as a substitute for the related financial measures prepared in accordance with GAAP and may not be the same as or comparable to similarly titled measures presented by other companies due to possible differences in method and in the items being adjusted. We encourage investors to review our financial statements and publicly-filed reports in their entirety and not to rely on any single financial measure.

Specified items were as follows:

Dollars in Millions	Year Ended December 31,	
	2022	2021
Inventory purchase price accounting adjustments	\$ 293	\$ 264
Intangible asset impairment	—	315
Site exit and other costs	63	24
Cost of products sold	356	603
Employee compensation charges	73	1
Site exit and other costs	6	2
Marketing, selling and administrative	79	3
IPRD impairments	98	840
Inventory purchase price accounting adjustments	130	1
Employee compensation charges	80	1
Site exit and other costs	—	1
Research and development	308	843
Amortization of acquired intangible assets	9,595	10,023
Interest expense ^(a)	(83)	(120)
Equity investment losses/(gains), net	799	(758)
Integration expenses	440	564
Loss on debt redemption	266	281
Divestiture gains	(211)	(9)
Litigation and other settlements	140	—
Provision for restructuring	75	169
Contingent consideration	—	(542)
Other	71	—
Other (income)/expense, net	1,497	(415)
Increase to pretax income	11,835	11,057
Income taxes on items above	(1,332)	(993)
Income tax reserve release attributed to Mead Johnson	(225)	—
Income taxes attributed to internal transfer of intangible and other assets	(72)	(983)
Income taxes	(1,629)	(1,976)
Increase to net earnings	\$ 10,206	\$ 9,081

(a) Includes amortization of purchase price adjustments to Celgene debt.

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

Dollars in Millions, except per share data	Year Ended December 31,	
	2022	2021
Net Earnings Attributable to BMS used for Diluted EPS Calculation — GAAP	\$ 6,327	\$ 6,994
Specified Items	10,206	9,081
Net Earnings Attributable to BMS used for Diluted EPS Calculation — Non-GAAP	\$ 16,533	\$ 16,075
Weighted Average Common Shares Outstanding — Diluted	2,146	2,245
Diluted Earnings Per Share Attributable to BMS — GAAP	\$ 2.95	\$ 3.12
Diluted EPS Attributable to Specified Items	4.75	4.04
Diluted EPS Attributable to BMS — Non-GAAP	\$ 7.70	\$ 7.16

Financial Position, Liquidity and Capital Resources

Our net debt position was as follows:

Dollars in Millions	December 31,	
	2022	2021
Cash and cash equivalents	\$ 9,123	\$ 13,979
Marketable debt securities	130	2,987
Total cash, cash equivalents and marketable debt securities	9,253	16,966
Short-term debt obligations	(4,264)	(4,948)
Long-term debt	(35,056)	(39,605)
Net debt position	\$ (30,067)	\$ (27,587)

Liquidity and Capital Resources

We regularly assess our anticipated working capital needs, debt and leverage ratio levels, debt maturities, capital expenditure requirements, dividend payouts, potential share repurchases and future investments or acquisitions in order to maximize shareholder return, efficiently finance our ongoing operations and maintain flexibility for future strategic transactions. We also regularly evaluate our capital structure to ensure financial risks, adequate liquidity access and lower cost of capital are efficiently managed, which may lead to the issuance of additional debt securities, the repurchase of debt securities prior to maturity or the issuance or repurchase of common stock. Under the Tax Cuts and Jobs Act of 2017, research and development costs are required to be capitalized and amortized effective January 1, 2022, which resulted in an increase of approximately \$1.9 billion in U.S. tax payments in 2022 as compared to 2021.

We believe that our existing cash, cash equivalents and marketable debt securities together with cash generated from operations in the next few years, and, if required, from the issuance of commercial paper, will be sufficient to satisfy our anticipated cash needs for at least the next few years, including dividends, capital expenditures, milestone payments, working capital, income taxes, restructuring initiatives, business development and acquisitions, repurchase of common stock, debt maturities of approximately \$10.6 billion through 2026, as well as any debt repurchases through redemptions or tender offers. As of December 31, 2022, our net debt position increased by \$2.5 billion primarily due to common stock repurchases and dividends (\$12.6 billion) and the Turning Point acquisition (\$3.3 billion), partially offset by cash from operating activities (\$13.1 billion).

We have a share repurchase program, authorized by our Board of Directors, allowing for repurchases of BMS common stock shares, effected in the open market or through privately negotiated transactions in compliance with Rule 10b-18 under the Exchange Act, including through Rule 10b5-1 trading plans. The share repurchase program does not obligate us to repurchase any specific number of shares nor does it have a specific expiration date and may be suspended or discontinued at any time. In 2022, we repurchased approximately 109 million shares of our common stock for \$8.0 billion, including approximately 69 million shares for \$5.0 billion through our ASR program. The remaining share repurchase capacity under the share repurchase program was \$7.2 billion as of December 31, 2022. Refer to “Consolidated Financial Statements—Note 17. Equity” for additional information.

Dividend payments were \$4.6 billion in 2022 and \$4.4 billion in 2021. Dividend paid per common share was \$0.54 during each quarter of 2022. Dividends are authorized on a quarterly basis by our Board of Directors.

Under our commercial paper program, we may issue a maximum of \$5.0 billion unsecured notes that have maturities of not more than 366 days from the date of issuance. There were no commercial paper borrowings outstanding as of December 31, 2022.

In 2022, we issued an aggregate principal amount of \$6.0 billion and repurchased an aggregate principal amount of \$6.0 billion primarily to modify our future debt maturities. In addition, \$4.8 billion of debt matured and was repaid. Refer to “Consolidated Financial Statements—Note 10. Financing Arrangements” for further information.

As of December 31, 2022, we had a five-year \$5.0 billion revolving credit facility expiring in January 2027, which is extendable annually by one year with the consent of the lenders. This facility provides for customary terms and conditions with no financial covenants and may be used to provide backup liquidity for our commercial paper borrowings. No borrowings were outstanding under any revolving credit facility at December 31, 2022 or 2021.

Our investment portfolio includes marketable debt 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 10. Financing Arrangements" for further information.

Capital Expenditures

Annual capital expenditures were approximately \$1.1 billion in 2022, \$970 million in 2021 and \$750 million in 2020 and are expected to be approximately \$1.2 billion in 2023 and 2024. We continue to make capital expenditures in connection with the expansion of our cell therapy and other manufacturing capabilities, research and development and other facility-related activities.

Contractual Obligations and Off-Balance Sheet Arrangements

In the normal course of business, we enter into contracts and commitments that obligate us to make payments in the future. Information regarding our obligations relating to debt, income taxes and lease arrangements are provided in "Consolidated Financial Statements—Note 1. Accounting Policies and Recently Issued Accounting Standards", "—Note 10. Financing Arrangements", "—Note 7. Income Taxes" and "—Note 14. Leases", respectively.

We are committed to an aggregate \$22.0 billion of potential contingent future research and development milestone payments to third parties for in-licensing, asset acquisitions and development programs including early-stage milestones of \$7.5 billion (milestones achieved through Phase III clinical studies) and late-stage milestones of \$14.5 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. Certain agreements also provide for sales-based milestones aggregating to \$17.5 billion that we would be obligated to pay 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" and "—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements" for further information.

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.

Credit Ratings

Our current long-term and short-term credit ratings assigned by Moody's Investors Service are A2 and Prime-1, respectively, with a stable long-term credit outlook, and our current long-term and short-term credit ratings assigned by Standard & Poor's are A+ and A-1, respectively with a stable long-term credit outlook. 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.

Cash Flows

The following is a discussion of cash flow activities:

Dollars in Millions	Year Ended December 31,	
	2022	2021
Cash flow provided by/(used in):		
Operating activities	\$ 13,066	\$ 16,207
Investing activities	(1,062)	(538)
Financing activities	(16,962)	(16,224)

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.

The \$3.1 billion change in cash flow from operating activities compared to 2021 was driven by higher tax payments (\$1.9 billion) primarily resulting from research and development expenses that are capitalized and amortized for tax purposes, Turning Point acquisition-related payments (\$300 million), higher upfront research and early discovery payments (\$250 million), as well as timing of cash collections and timing of vendor payments in the ordinary course of business.

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, proceeds from business divestitures (including royalties), the sale and maturity of marketable securities, sale of equity investments, as well as upfront and contingent milestones payments from licensing arrangements.

The \$524 million change in cash flow from investing activities compared to 2021 was primarily due to the acquisition of Turning Point (\$3.2 billion, net of cash acquired), lower proceeds from the sale of equity investments (\$2.4 billion), partially offset by the changes in the amount of marketable debt securities held (\$4.1 billion), lower Acquired IPRD payments (\$646 million) and higher proceeds from divestitures (\$557 million).

Financing Activities

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

The \$738 million change in cash flow from financing activities compared to 2021 was primarily due to higher repurchases of common stock (\$1.7 billion), partially offset by changes in the amount of net debt borrowings (\$871 million).

SEC Consent Order

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 concerning our sales to direct customers for the purpose of complying with the Consent, which 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 78% 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 affect our financial condition and results of operations and require the most difficult, subjective or complex judgments, often because 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: (i) identify the customer contract; (ii) identify the contract's performance obligation; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligation; and (v) 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.

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 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, customers are offered cash discounts as an incentive for prompt payment, generally approximating 2% of the invoiced sales price. Accounts receivable is reduced for the estimated amount of cash discount at the time of sale and the discount is typically taken by the customer within one month.

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 70% point of service discount to the CMS when the Medicare Part D beneficiaries are in the coverage gap. 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 loss of market exclusivity. 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 is 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.

Acquisition and Intangible Assets Valuations

We make certain judgments to determine whether transactions should be accounted for as acquisitions of assets or as business combinations. If it is determined that substantially all of the fair value of gross assets acquired in a transaction is concentrated in a single asset (or a group of similar assets), the transaction is treated as an acquisition of assets. We evaluate the inputs, processes, and outputs associated with the acquired set of activities and assets. If the assets in a transaction include an input and a substantive process that together significantly contribute to the ability to create outputs, the transaction is treated as an acquisition of a business. Our assessments concluded that the Turning Point transaction was a business combination in 2022 and the MyoKardia transaction in 2020 was an asset acquisition.

We account for business combinations using the acquisition method of accounting, which requires that assets acquired and liabilities assumed generally be recorded at their fair values as of the acquisition date. Excess of consideration over the fair value of net assets acquired is recorded as goodwill. Estimating fair value requires us to make significant judgments and assumptions.

In transactions accounted for as acquisitions of assets, no goodwill is recorded and contingent consideration, such as payments upon achievement of various developmental, regulatory and commercial milestones, generally is not recognized at the acquisition date. In an asset acquisition, upfront payments allocated to IPRD projects at the acquisition date are expensed unless there is an alternative future use. In addition, product development milestones are expensed upon achievement.

We have identifiable intangible assets that are measured at their respective fair values as of the acquisition date. Generally, we engage an independent third-party valuation firm to assist in determining the fair values of these assets as of the acquisition date. The fair value of these assets is estimated using discounted cash flow models. These models required the use of the following significant estimates and assumptions among others:

- Identification of product candidates with sufficient substance requiring separate recognition;
- Estimates of revenues and operating profits related to commercial products or product candidates;
- Eligible patients, pricing and market share used in estimating future revenues;
- Probability of success for unapproved product candidates and additional indications for commercial products;
- Resources required to complete the development and approval of product candidates;
- Timing of regulatory approvals and exclusivity;
- Appropriate discount rate by products;
- Market participant income tax rates; and
- Allocation of expected synergies to products.

We believe the fair value used to record intangible assets acquired are based upon reasonable estimates and assumptions considering the facts and circumstances as of the acquisition date.

Impairment and Amortization of Long-lived Assets, including Intangible Assets

Long-lived assets include intangible assets and property, plant and equipment and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable or at least annually for IPRD. 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 changes in competitive landscape, earlier than expected loss of market exclusivity, pricing reductions, adverse regulatory changes or clinical study results, delay or failure to obtain regulatory approval for initial or follow on indications and unanticipated development costs, inability to achieve expected synergies resulting from cost savings and avoidance, 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. If the carrying value of long-lived assets exceeds its fair value, then the asset is written-down to its fair 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. The estimated useful lives of long-lived assets is subjective and requires significant judgment regarding patent lives, future plans and external market factors. Long-lived assets are also periodically reviewed for changes in facts or circumstances resulting in a reduction to the estimated useful life of the asset, requiring the acceleration of depreciation or amortization. Impairment charges included in Cost of products sold and Research and development expense were \$101 million in 2022, \$1.2 billion in 2021 and \$1.1 billion in 2020. Refer to “Consolidated Financial Statements—Note 15. Goodwill and Other Intangible Assets” for further discussion and analysis of these impairment charges.

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 \$4.1 billion at December 31, 2022 (net of valuation allowance of \$873 million) and \$2.7 billion at December 31, 2021 (net of valuation allowance of \$1.1 billion).

The U.S. federal net operating loss carryforwards were \$709 million at December 31, 2022. 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 2023. The foreign and state net operating loss carryforwards expire in varying amounts beginning in 2023 (certain amounts have unlimited lives).

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 Internal Revenue Service 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. In December 2022, we have determined this position to be effectively settled and have released the related reserves.

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 initial public offering 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 20. 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 represents approximately 40% 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 late-stage new indication developments in our marketed products, as well as developments in our late-stage pipeline through February 2, 2023:

Product	Indication	Date	Developments
<i>Opdivo</i>	Bladder	April 2022	Announced EC approval of <i>Opdivo</i> for the adjuvant treatment of adults with muscle-invasive urothelial carcinoma with tumor cell PD-L1 expression $\geq 1\%$ who are at risk of recurrence after undergoing radical resection. The approval is based on results from the Phase III CheckMate -274 trial.
		March 2022	Ono, our alliance partner for <i>Opdivo</i> in Japan, announced that the Japan's Ministry of Health, Labour and Welfare approved <i>Opdivo</i> for the adjuvant treatment of urothelial carcinoma, for partial change in approved items of the manufacturing and marketing approval. The approval is based on results from the Phase III CheckMate-274 (ONO-4538-33) trial.
	ESCC	May 2022	Ono, our alliance partner for <i>Opdivo</i> in Japan, announced that Japan's Ministry of Health, Labour and Welfare approved <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-containing chemotherapy for the first-line treatment for adult patients with previously untreated unresectable advanced or metastatic ESCC with PD-L1 expression $> 1\%$, as well as in the all-randomized population. The approval is based on the Phase III CheckMate -648 trial (ONO-4538-50/CA209648).
		May 2022	Announced FDA approval of <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-containing chemotherapy as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status. The approval is based on the Phase III CheckMate -648 trial.
		April 2022	Announced EC approval of <i>Opdivo</i> in combination with fluoropyrimidine- and platinum-based chemotherapy for the first-line treatment of adult patients with unresectable advanced, recurrent, or metastatic ESCC with PD-L1 expression $\geq 1\%$. The approval is based on results from the Phase III CheckMate -648 trial.
	Melanoma	October 2022	Announced that results from the Phase III CheckMate -76K trial evaluating <i>Opdivo</i> in the adjuvant setting in patients with completely resected stage IIB or IIC melanoma demonstrated a statistically significant and clinically meaningful benefit in recurrence-free survival and the risk of recurrence or death was reduced by 58% versus placebo. No new safety signals were observed.
		March 2022	Announced that the Phase III PIVOT IO-001 trial did not meet the primary endpoints of progression-free survival (PFS) and objective response rate (ORR) in patients with previously untreated unresectable or metastatic melanoma who were treated with bempedaldesleukin in combination with <i>Opdivo</i> compared to <i>Opdivo</i> monotherapy. The DMC notified the companies that the third primary endpoint of overall survival (OS) did not meet statistical significance at the first interim analysis. The trial was conducted in collaboration with Nektar. The trial will be unblinded and no additional analyses for the OS endpoint will be performed. Based on subsequent results from pre-planned analyses of two late-stage clinical studies in RCC and bladder cancer, coupled with the results of PIVOT IO-001 noted above, BMS and Nektar have jointly decided to end the global clinical development program for bempedaldesleukin in combination with <i>Opdivo</i> .

Product	Indication	Date	Developments
<i>Opdivo</i>	NSCLC	April 2022	Ono, our alliance partner for <i>Opdivo</i> in Japan, announced that the companies have submitted the supplemental Japanese NDA to Pharmaceuticals and Medical Devices Agency for <i>Opdivo</i> to expand its use as a neoadjuvant treatment of resectable NSCLC in combination with chemotherapy for a partial change in approved items of the manufacturing and marketing approval in Japan. The application is based on the Phase III CheckMate -816 study.
		April 2022	Announced results from the Phase III CheckMate-816 trial which showed that neoadjuvant treatment with <i>Opdivo</i> in combination with chemotherapy significantly improved event-free survival, a primary endpoint, compared to chemotherapy alone in patients with resectable NSCLC. <i>Opdivo</i> in combination with chemotherapy reduced the risk of disease recurrence, progression or death by 37%, and demonstrated favorable early overall survival trend.
		March 2022	Announced that the EMA validated the Type II Variation application for <i>Opdivo</i> in combination with chemotherapy for the neoadjuvant treatment of patients with resectable stage IB to IIIA NSCLC. The application is based on results from the Phase III CheckMate-816 trial.
		March 2022	Announced FDA approval of <i>Opdivo</i> in combination with platinum-doublet chemotherapy for the treatment of adult patients with resectable NSCLC in the neoadjuvant setting. The approval is based on the Phase III CheckMate-816 trial.
	RCC	April 2022	Announced, with our alliance partner Nektar, that based on results from pre-planned analysis of two late-stage clinical studies of bempagdesleukin in combination with <i>Opdivo</i> in RCC and bladder cancer, to jointly end the global clinical development program for bempagdesleukin in combination with <i>Opdivo</i> . These studies and all other ongoing studies in the program will be discontinued.
		February 2022	Announced two-year follow-up results from analysis of the Phase III CheckMate-9ER trial, demonstrating sustained survival, response rate benefits, and health-related quality of life improvements, with the combination of <i>Opdivo</i> and <i>Cabometyx</i> * versus sunitinib in the first-line treatment of advanced RCC.
<i>Opdivo + Yervoy</i>	RCC	July 2022	Announced that Part A of the Phase III CheckMate -914 trial, evaluating <i>Opdivo</i> plus <i>Yervoy</i> as an adjuvant treatment for patients with localized RCC who have undergone full or partial removal of the kidney and who are at moderate or high risk of relapse, did not meet the primary endpoint of disease-free survival. The safety profile was consistent with previously reported studies of the <i>Opdivo</i> plus <i>Yervoy</i> combination in solid tumors.
	NSCLC	June 2022	Announced five-year follow up results from Part I of the Phase III CheckMate -227 trial demonstrating long-term, durable survival outcomes with <i>Opdivo</i> plus <i>Yervoy</i> in first-line treatment of patients with metastatic NSCLC regardless of PD-L1 expression levels. In the primary endpoint population, the combination nearly doubled overall survival rate compared to chemotherapy.
		June 2022	Announced three-year follow up results from the Phase III CheckMate -9LA trial demonstrating long-term, durable survival benefits with <i>Opdivo</i> plus <i>Yervoy</i> with two cycles of chemotherapy compared to four cycles of chemotherapy in patients with previously untreated metastatic NSCLC regardless of PD-L1 expression and histology.
	Bladder	May 2022	Announced that results from Phase III CheckMate -901 trial, comparing <i>Opdivo</i> plus <i>Yervoy</i> to standard-of-care chemotherapy as a first-line treatment for patients with untreated unresectable or metastatic urothelial carcinoma, who are ineligible for cisplatin based chemotherapy, did not meet the primary endpoint of overall survival in patients whose tumor cells express PD-L1 > 1% at final analysis. The trial is continuing to assess other primary and secondary endpoints, no new safety signals were observed at the time of analysis.
	ESCC	May 2022	Ono, our alliance partner for <i>Opdivo</i> plus <i>Yervoy</i> in Japan, announced that Japan's Ministry of Health, Labour and Welfare approved <i>Opdivo</i> in combination with fluoropyrimidine- and platinum- containing chemotherapy for the first-line treatment for adult patients with previously untreated unresectable advanced or metastatic ESCC with PD-L1 expression $\geq 1\%$, as well as in the all-randomized population. The approval is based on the Phase III CheckMate -648 trial.
		May 2022	Announced FDA approval of <i>Opdivo</i> plus <i>Yervoy</i> as a first-line treatment for adult patients with unresectable advanced or metastatic ESCC regardless of PD-L1 status. The approval is based on the Phase III CheckMate -648 trial.
		April 2022	Announced EC approval of <i>Opdivo</i> plus <i>Yervoy</i> for the first-line treatment of adult patients with unresectable advanced, recurrent or metastatic ESCC with tumor cell PD-L1 expression > 1%. The approval is based on results from the Phase III CheckMate -648 trial.

Product	Indication	Date	Developments
<i>Orencia</i>	COVID-19	June 2022	Announced that initial results from the Phase III Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV-1) immune modulators clinical trial sponsored by the National Institutes of Health showed a strong, but not statistically significant improvement in the primary endpoint of time to recovery as measured by day of hospital discharge. Analyses of the secondary endpoints, including mortality and clinical status, demonstrated <i>Orencia</i> reduced participants' risk of death and improved their clinical status at 28 days after entering the study when compared with placebo.
<i>Reblozyl</i>	Beta Thalassemia	January 2023	Announced that the Committee for Medicinal Product for Human Use (CHMP) of the European Medicines Agency (EMA) has recommended approval of <i>Reblozyl</i> as a treatment for adult patients with anemia associated with non-transfusion-dependent (NTD) beta thalassemia.
		June 2022	Announced the withdrawal of the sBLA for <i>Reblozyl</i> for the treatment of anemia in adults with non-transfusion dependent beta thalassemia. We could not appropriately address the FDA's questions about the benefit-risk profile of <i>Reblozyl</i> in this patient population based on the current dataset from the Phase II BEYOND trial.
	MDS	October 2022	Announced that results from the Phase III COMMANDS trial evaluating <i>Reblozyl</i> met its primary endpoint, demonstrating a highly statistically significant and clinical meaningful improvement in red blood cell transfusion independence with concurrent hemoglobin increase in the first-line treatment of adult patients with very low-, low- or intermediate-risk MDS who require red blood cell transfusions.
<i>Abecma</i>	Multiple Myeloma	August 2022	Announced with our alliance partner, 2seventy bio, Inc., positive topline results from the Phase III KarMMA-3 trial evaluating <i>Abecma</i> compared to standard combination regimens in adults with multiple myeloma that is relapsed and refractory after two to four prior lines of therapy and refractory to the last regimen showing <i>Abecma</i> significantly improves progression-free survival. Treatment with <i>Abecma</i> also showed an improvement in the key secondary endpoint of overall response rate compared to standard regimens.
		January 2022	Announced Japan's Ministry of Health, Labour and Welfare approval of <i>Abecma</i> for the treatment of adult patients with relapsed or refractory multiple myeloma, who have received at least three prior therapies, including an immunomodulatory agent, a proteasome inhibitor and an anti-CD38 antibody, and have either experienced disease progression on the last therapy or relapse after the last therapy. The approval is based on results from the Phase II BB2121-MM-001 and Phase I CRB-401 trials.
<i>Zeposia</i>	MS	October 2022	Announced retrospective analysis from the ongoing Phase III DAYBREAK open-label extension trial of <i>Zeposia</i> in relapsing MS showed that more than 92% of participants mounted a serologic response to COVID-19 following vaccination, with 10% COVID-19-related adverse events in vaccinated participants, all non-serious. Post hoc analyses from the Phase III DAYBREAK and RADIANCE trials demonstrated a greater proportion of patients treated with <i>Zeposia</i> versus interferon beta-1a had a lower annualized rate of brain volume loss.
	UC	October 2022	Announced post hoc analyses from the Phase III True North study evaluating the duration of response following continuous <i>Zeposia</i> treatment for up to one year and following treatment interruption in patients with moderately to severely active UC. After achieving a clinical response at the end of the induction period, 86.1% of patients who remained on <i>Zeposia</i> showed no disease relapse at week 52. Disease control was maintained for up to eight weeks in patients who switched to placebo after initial response.

Product	Indication	Date	Developments
<i>Breyanzi</i>	Lymphoma	January 2023	Announced positive topline results from the Phase II portion of the TRANSCEND CLL 004, a Phase I/II, open-label, single-arm, multicenter study evaluating <i>Breyanzi</i> in adults with relapsed or refractory chronic lymphocytic leukemia or small lymphocytic lymphoma. The study met the primary endpoint of complete response rate compared to historical control.
		December 2022	Announced Japan's Ministry of Health, Labour and Welfare approval of <i>Breyanzi</i> for use in the second-line treatment of relapsed or refractory large B-cell lymphoma, regardless of whether autologous hematopoietic stem-cell transplantation is intended. The approval is based on the results of clinical trials in patients with relapsed or refractory aggressive B-cell non-Hodgkin lymphoma after first-line therapy, including global Phase III clinical trials (JCAR017-BCM-003) in patients intended for autologous hematopoietic stem-cell transplantation, Phase II clinical trials (017006) in the United States (U.S.) in patients not intended for autologous hematopoietic stem-cell transplantation, and cohort 2 of Phase II clinical trials (JCAR017-BCM-001) in Europe and Japan.
		June 2022	Announced FDA approval of <i>Breyanzi</i> for the second-line treatment of adult patients with large B-cell lymphoma, including diffuse large B-cell lymphoma not otherwise specified high-grade B-cell lymphoma, primary mediastinal large B-cell lymphoma and follicular lymphoma grade 3B who have: refractory disease to first line chemoimmunotherapy or relapsed within 12 months of first-line chemoimmunotherapy; or refractory disease to first-line chemoimmunotherapy or relapse after first-line chemoimmunotherapy and are not eligible for hematopoietic stem cell transplant due to comorbidities or age. The approval is based on results from the Phase II PILOT and Phase III TRANSFORM trials.
		June 2022	Announced that the EMA validated its Type II Variation application for extension of the indication for <i>Breyanzi</i> in second-line treatment of adult patients with diffuse large B-cell lymphoma, high grade B-cell lymphoma, primary mediastinal large B-cell lymphoma and follicular lymphoma grade 3B, who are refractory or have relapsed within 12 months of initial therapy and are candidates for hematopoietic stem cell transplant. The application is based on the Phase III TRANSFORM study.
		April 2022	Announced EC approval of <i>Breyanzi</i> for the treatment of adult patients with relapsed or refractory diffuse large B-cell lymphoma, primary mediastinal large B-cell lymphoma, and follicular lymphoma grade 3B after two or more lines of systemic therapy. The approval is based on results from the TRANSCEND WORLD and TRANSCEND NHL 001 trials.
<i>Opdualag</i>	Melanoma	September 2022	Announced EC approval of the fixed-dose combination of <i>Opdualag</i> for the first-line treatment of advanced unresectable or metastatic melanoma in adults and adolescents 12 years of age and older with tumor cell PD-L1 expression < 1%. The approval is based on results from the Phase II/III RELATIVITY -047 trial.
		March 2022	Announced FDA approval of <i>Opdualag</i> (nivolumab and relatlimab-rmbw), a fixed-dose combination of nivolumab and relatlimab, a novel LAG-3 inhibitor, for the treatment of adult and pediatric patients 12 years of age or older with unresectable or metastatic melanoma. The approval is based on results from the Phase II/III RELATIVITY-047 trial.
<i>Camzyos</i> (mavacamten)	Obstructive HCM	October 2022	Announced that the FDA accepted the supplemental NDA for <i>Camzyos</i> for an expanded indication to reduce the need for septal reduction therapy. The FDA has set a target action date of June 16, 2023. The supplemental NDA is based on results from the Phase III VALOR-HCM trial.
		April 2022	Announced FDA approval of <i>Camzyos</i> for the treatment of adults with symptomatic New York Heart Association class II-III obstructive HCM to improve functional capacity and symptoms. The approval is based on results from the Phase III EXPLORER-HCM trial.
		April 2022	Announced that interim results from the EXPLORER-LTE cohort of the MAVA-LTE trial in patients with symptomatic obstructive HCM showed sustained improvements in cardiovascular function and patient symptoms at 48 and 84 weeks, no new safety signals were observed.

Product	Indication	Date	Developments
<i>Sotyktu</i>	Plaque Psoriasis	January 2023	The CHMP of the EMA has recommended the approval of <i>Sotyktu</i> for the treatment of adults with moderate-to-severe plaque psoriasis. The CHMP recommendation will now be reviewed by the EC which has the authority to approve medicines of the EC.
		September 2022	Announced Japan's Ministry of Health, Labour and Welfare approval of <i>Sotyktu</i> for treatment of plaque psoriasis, generalized pustular psoriasis, or erythrodermic psoriasis, for patients who have had an inadequate response to conventional therapies. The approval is based on the results from the Phase III POETYK PSO-1 trial.
		September 2022	Announced FDA approval of <i>Sotyktu</i> for the treatment of adults with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy. The approval is based on results from the Phase III POETYK PSO-1 and POETYK PSO-2 clinical trials.
		September 2022	Announced two-year results from the POETYK PSO long-term extension trial demonstrating that clinical efficacy was maintained with continuous <i>Sotyktu</i> treatment in adult patients with moderate-to-severe plaque psoriasis.
	SLE	June 2022	Announced results from the Phase II PAISLEY trial that showed statistically significant efficacy at the primary endpoint of SLE Responder Index-4 responses at week 32 among patients with moderate-to-severe SLE who were treated with <i>Sotyktu</i> versus placebo. Secondary endpoints demonstrated clinically meaningful improvements at week 48. The safety profile of <i>Sotyktu</i> was consistent with previously reported studies in patients with psoriasis and psoriatic arthritis with no new safety signals observed. Data demonstrated favorable risk-benefit profile supportive of progressing into Phase III.

Special Note Regarding Forward-Looking Statements

This 2022 Annual Report on 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, 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 our 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 business development strategy and in relation to our ability to realize the projected benefits of our acquisitions of Celgene, MyoKardia, and Turning Point, the impact of the COVID-19 pandemic on our operations and the development and commercialization of our products, potential laws and regulations to lower drug prices, market actions taken by private and government payers to manage drug utilization and contain costs, the expiration of patents or data protection on certain products, including assumptions about our ability to retain marketing exclusivity of certain products, 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 2022 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 that 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 2022 Annual Report on Form 10-K not to occur. Except as otherwise required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, changed circumstances or otherwise after the date of this 2022 Annual Report on 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 and purchased local currency put option contracts are used to manage risk primarily arising from certain intercompany sales and purchases 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 contracts by \$782 million and \$678 million as of December 31, 2022 and December 31, 2021, respectively, reducing earnings over the remaining life of the contracts.

Cross-currency interest rate swap contracts are used to manage risk arising from long-term debt denominated in euros and to hedge the Company's net investment in its foreign subsidiaries. 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 cross-currency interest swap contracts by \$73 million and \$58 million as of December 31, 2022 and December 31, 2021.

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 international 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 manage risk arising from long-term debt denominated in euros and to hedge the Company's net investment in its foreign subsidiaries. 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 was a 1% increase in short-term or long-term interest rates as of December 31, 2022 and December 31, 2021, the expected adverse impact on our earnings would not be material.

We estimate that an increase of 1% in long-term interest rates as of December 31, 2022 and December 31, 2021 would decrease the fair value of long-term debt by \$2.6 billion and \$3.8 billion, 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

EARNINGS	Year Ended December 31,		
	2022	2021	2020
Net product sales	\$ 44,671	\$ 45,055	\$ 41,321
Alliance and other revenues	1,488	1,330	1,197
Total Revenues	46,159	46,385	42,518
Cost of products sold ^(a)	10,137	9,940	11,773
Marketing, selling and administrative	7,814	7,690	7,661
Research and development	9,509	10,195	10,048
Acquired IPRD	815	1,159	12,533
Amortization of acquired intangible assets	9,595	10,023	9,688
Other (income)/expense, net	576	(720)	(2,314)
Total Expenses	38,446	38,287	49,389
Earnings/(Loss) Before Income Taxes	7,713	8,098	(6,871)
Provision for Income Taxes	1,368	1,084	2,124
Net Earnings/(Loss)	6,345	7,014	(8,995)
Noncontrolling Interest	18	20	20
Net Earnings(Loss) Attributable to BMS	\$ 6,327	\$ 6,994	\$ (9,015)
Earnings/(Loss) per Common Share			
Basic	\$ 2.97	\$ 3.15	\$ (3.99)
Diluted	2.95	3.12	(3.99)

(a) Excludes amortization of acquired intangible assets.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME/(LOSS)

Dollars in Millions

COMPREHENSIVE INCOME/(LOSS)	Year Ended December 31,		
	2022	2021	2020
Net Earnings/(Loss)	\$ 6,345	\$ 7,014	\$ (8,995)
Other Comprehensive Income/(Loss), net of taxes and reclassifications to earnings:			
Derivatives qualifying as cash flow hedges	54	415	(256)
Pension and postretirement benefits	145	206	(75)
Marketable debt securities	(2)	(9)	5
Foreign currency translation	(210)	(41)	7
Total Other Comprehensive Income/(Loss)	(13)	571	(319)
Comprehensive Income/(Loss)	6,332	7,585	(9,314)
Comprehensive Income Attributable to Noncontrolling Interest	18	20	20
Comprehensive Income/(Loss) Attributable to BMS	\$ 6,314	\$ 7,565	\$ (9,334)

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

CONSOLIDATED BALANCE SHEETS

Dollars in Millions, Except Share and Per Share Data

ASSETS	December 31,	
	2022	2021
Current Assets:		
Cash and cash equivalents	\$ 9,123	\$ 13,979
Marketable debt securities	130	2,987
Receivables	9,886	9,369
Inventories	2,339	2,095
Other current assets	5,795	4,832
Total Current Assets	27,273	33,262
Property, plant and equipment	6,255	6,049
Goodwill	21,149	20,502
Other intangible assets	35,859	42,527
Deferred income taxes	1,344	1,439
Other non-current assets	4,940	5,535
Total Assets	\$ 96,820	\$ 109,314
LIABILITIES		
Current Liabilities:		
Short-term debt obligations	\$ 4,264	\$ 4,948
Accounts payable	3,040	2,949
Other current liabilities	14,586	13,971
Total Current Liabilities	21,890	21,868
Deferred income taxes	2,166	4,501
Long-term debt	35,056	39,605
Other non-current liabilities	6,590	7,334
Total Liabilities	65,702	73,308
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 2,991 in 2022 and 3,484 in 2021, liquidation value of \$50 per share	—	—
Common stock, par value of \$0.10 per share: Authorized 4.5 billion shares; 2.9 billion issued in 2022 and 2021	292	292
Capital in excess of par value of stock	45,165	44,361
Accumulated other comprehensive loss	(1,281)	(1,268)
Retained earnings	25,503	23,820
Less cost of treasury stock — 825 million common shares in 2022 and 747 million common shares in 2021	(38,618)	(31,259)
Total Bristol-Myers Squibb Company Shareholders' Equity	31,061	35,946
Noncontrolling interest	57	60
Total Equity	31,118	36,006
Total Liabilities and Equity	\$ 96,820	\$ 109,314

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

Dollars in Millions

	Year Ended December 31,		
	2022	2021	2020
Cash Flows From Operating Activities:			
Net earnings/(loss)	\$ 6,345	\$ 7,014	\$ (8,995)
Adjustments to reconcile net earnings/(loss) to net cash provided by operating activities:			
Depreciation and amortization, net	10,276	10,686	10,380
Deferred income taxes	(2,738)	(1,393)	983
Stock-based compensation	457	583	779
Impairment charges	179	1,207	1,203
Divestiture gains and royalties	(1,063)	(684)	(699)
Acquired IPRD	815	1,159	12,533
Equity investment losses/(gains), net	801	(745)	(1,228)
Contingent consideration fair value adjustments	(9)	(542)	(1,757)
Other adjustments	232	183	(134)
Changes in operating assets and liabilities:			
Receivables	(663)	(1,054)	(646)
Inventories	(69)	13	2,672
Accounts payable	109	245	188
Rebates and discounts	427	863	1,189
Income taxes payable	(1,423)	(1,063)	(2,305)
Other	(610)	(265)	(111)
Net Cash Provided by Operating Activities	13,066	16,207	14,052
Cash Flows From Investing Activities:			
Sale and maturities of marketable debt securities	6,411	4,196	6,280
Purchase of marketable debt securities	(3,592)	(5,478)	(4,172)
Proceeds from sales of equity investment securities	218	2,579	129
Capital expenditures	(1,118)	(973)	(753)
Divestiture and other proceeds	1,305	748	741
Acquisition and other payments, net of cash acquired	(4,286)	(1,610)	(13,084)
Net Cash Used in Investing Activities	(1,062)	(538)	(10,859)
Cash Flows From Financing Activities:			
Short-term debt obligations, net	194	(160)	(267)
Issuance of long-term debt	5,926	—	6,945
Repayment of long-term debt	(11,431)	(6,022)	(2,750)
Repurchase of common stock	(8,001)	(6,287)	(1,546)
Dividends	(4,634)	(4,396)	(4,075)
Stock option proceeds and other, net	984	641	542
Net Cash Used in Financing Activities	(16,962)	(16,224)	(1,151)
Effect of Exchange Rates on Cash, Cash Equivalents and Restricted Cash	(33)	(102)	111
(Decrease)/Increase in Cash, Cash Equivalents and Restricted Cash	(4,991)	(657)	2,153
Cash, Cash Equivalents and Restricted Cash at Beginning of Year	14,316	14,973	12,820
Cash, Cash Equivalents and Restricted Cash at End of Year	\$ 9,325	\$ 14,316	\$ 14,973

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

Note 1. ACCOUNTING POLICIES AND RECENTLY ISSUED ACCOUNTING STANDARDS

Nature of Operations and Basis of Consolidation

Bristol-Myers Squibb Company (“BMS”, or “the Company”) is a global biopharmaceutical company whose mission is to discover, develop and deliver innovative medicines that help patients prevail over serious diseases.

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 2022 Annual Report on Form 10-K for definitions of capitalized 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. Consistent with BMS’s operational structure, the Chief Executive Officer (“CEO”), as the chief operating decision maker, manages and allocates resources at the global corporate level. Managing and allocating resources at the global corporate level enables the CEO to assess both the overall level of resources available and how to best deploy these resources across functions, therapeutic areas, regional commercial organizations and research and development projects in line with our overarching long-term corporate-wide strategic goals, rather than on a product or franchise basis. The determination of a single segment is consistent with the financial information regularly reviewed by the CEO 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 used in determining accounting for acquisitions; impairments of intangible assets; charge-backs, cash discounts, sales rebates, returns and other adjustments; legal contingencies; and income taxes. Actual results may differ from estimates.

Reclassifications

Certain reclassifications were made to conform the prior period consolidated financial statements to the current period presentation. Upfront and contingent milestone charges in connection with asset acquisitions or licensing of third-party intellectual property rights previously presented in Research and development are now presented in Acquired IPRD in the consolidated statements of earnings.

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.

Equity Investments

Equity investments with readily determinable fair values are recorded at fair value with changes in fair value recorded in Other (income)/expense, net. Equity investments 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 equity investments without readily determinable fair values are recorded in Other (income)/expense, net.

BMS holds investments in limited partnerships, which primarily invest in early-stage life sciences companies. Such limited partnership investments are measured by using our proportionate share of the net asset values of the underlying investments held by the limited partnerships as a practical expedient. These investments are typically redeemable only through distributions upon liquidation of the underlying assets. Investments in 50% or less owned companies, as well as limited partnerships, 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 proportional share of the investee's net income or losses of equity investments accounted for using the equity method are included in Other (income)/expense, net.

Equity investments without readily determinable fair values and equity investments 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 net realizable value.

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 ranging from three to ten years.

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 excluded for asset acquisitions.

If the assets acquired do not meet the definition of a business, primarily because no significant processes were acquired or substantially all of the relative fair value was allocated to a single asset, the transaction is accounted for as an asset acquisition rather than a business combination and no goodwill is recorded. In addition, in an asset acquisition, acquired in-process research and development ("IPRD") assets with no alternative future use are charged to Acquired IPRD.

Goodwill, IPRD and Other Intangible Assets

The fair value of acquired intangible assets is determined using an income-based approach referred to as the excess earnings method utilizing Level 3 fair value inputs. 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.

Finite-lived intangible assets, including licenses, marketed product 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 assets are expected to contribute to future cash flows. 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.

Goodwill is tested at least annually for impairment by assessing qualitative factors in determining whether it is more likely than not that the fair value of net assets is below their carrying amounts. Examples of qualitative factors assessed include BMS's 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 at least annually or 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.

Derivatives

All derivative instruments are recognized as either assets or liabilities at fair value on the consolidated balance sheets and are classified as current or long-term based on the scheduled maturity of the instrument. Derivatives designated as hedges, are assessed at inception and quarterly thereafter, to determine whether they are highly effective in offsetting changes or cash flows of the hedged item. The changes in fair value of a derivative designated as a fair value hedge and of the hedged item attributable to the hedged risk are recognized in earnings immediately. The effective portions of changes in the fair value of a derivative designated as a cash flow hedge are reported in Accumulated other comprehensive loss and are subsequently recognized in earnings consistent with the underlying hedged item. If a derivative is no longer highly effective as a hedge, the Company discontinues hedge accounting prospectively. The earnings impact related to discontinued cash flow hedges and hedge ineffectiveness was not material during all periods presented. If a hedged forecasted transaction becomes probable of not occurring, any gains or losses are reclassified from Accumulated other comprehensive loss to earnings. Derivatives that are not designated as hedges are adjusted to fair value through current earnings. The Company also uses derivative instruments or foreign currency denominated debt to hedge its net investments in certain foreign subsidiaries and affiliates. Realized and unrealized gains and losses from these hedges are included in foreign currency translation in Accumulated other comprehensive loss. Derivative cash flows, with the exception of net investment hedges, are principally classified in the operating section of the consolidated statements of cash flows, consistent with the underlying hedged item. Cash flows related to net investment hedges are classified in investing activities.

Restructuring

Restructuring charges are recognized as a result of actions to streamline operations, realize synergies from acquisitions and reduce the number of facilities. Estimating the impact of restructuring plans, including future termination benefits, integration expenses and other exit costs, requires judgment. Actual results could vary from these estimates. Restructuring charges are recognized upon meeting certain criteria, including finalization of committed plans, reliable estimates and discussions with local works councils in certain markets.

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.

Revenue Recognition

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 details regarding alliances.

Research and Development and Acquired IPRD

Research and development costs are expensed as incurred. Clinical study and certain research costs are recognized 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.

Nonrefundable advance payments for services to be received in the future for use in research and development activities are recorded as prepaid assets and expensed in the period when the services are performed.

Acquired IPRD expenses include upfront payments, contingent milestone payments in connection with asset acquisitions or in-license arrangements of third-party intellectual property rights, as well as any upfront and contingent milestones payable by BMS to alliance partners prior to regulatory approval.

The Company's Acquired IPRD by type of transaction was as follows:

Type of transaction Dollars in Millions	Year ended December 31,		
	2022	2021	2020
Alliance (Note 3)	\$ 100	\$ 730	\$ 258
In-license arrangements and other (Note 4)	715	429	659
Asset acquisitions (Note 4)	—	—	11,616
Acquired IPRD	\$ 815	\$ 1,159	\$ 12,533

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 \$1.3 billion in 2022 and 2021 and \$990 million in 2020.

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 Income/(Loss).

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. The tax effects of global intangible low-taxed income from certain foreign subsidiaries is recognized in the income tax provision in the period the tax arises.

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.

Recently Issued Accounting Standards Not Yet Adopted

Business Combinations

In October 2021, the FASB issued amended guidance on accounting for contract assets and contract liabilities from contracts with customers in a business combination. The guidance is intended to address inconsistency related to recognition of an acquired contract liability and payment terms and their effect on subsequent revenue recognized. At the acquisition date, an entity should account for the related revenue contracts in accordance with existing revenue recognition guidance generally by assessing how the acquiree applied recognition and measurement in their financial statements. The amended guidance is effective January 1, 2023 on a prospective approach.

Fair Value Measurements

In June 2022, the FASB issued amended guidance on measuring the fair value of an equity security subject to contractual restrictions that prohibit the sale of an equity security. The guidance clarifies that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The guidance also clarifies that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. The amendment requires the following disclosures for equity securities subject to contractual sale restrictions: the fair value of equity securities subject to contractual sale restrictions reflected in the balance sheet; the nature and remaining duration of the restriction(s); and the circumstances that could cause a lapse in the restriction(s). The amended guidance is effective January 1, 2024 on a prospective basis. Early adoption is permitted.

Note 2. REVENUE

The following table summarizes the disaggregation of revenue by nature:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Net product sales	\$ 44,671	\$ 45,055	\$ 41,321
Alliance revenues	742	716	615
Other revenues	746	614	582
Total Revenues	\$ 46,159	\$ 46,385	\$ 42,518

Net product sales represent more than 95% of total revenues for all periods presented. Products are sold principally to wholesalers, distributors, specialty pharmacies, and to a lesser extent, directly to retailers, hospitals, clinics and government agencies. 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, upon receipt of the product after considering when the customer obtains legal title to the product, or upon infusion for cell therapies and when BMS 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 U.S. gross revenues was as follows:

	Year Ended December 31,		
	2022	2021	2020
McKesson Corporation	32 %	32 %	31 %
AmerisourceBergen Corporation	25 %	25 %	25 %
Cardinal Health, Inc.	21 %	20 %	19 %

Wholesalers are initially invoiced at contractual list prices. Payment terms are typically 30 to 90 days based on customary practices in each country. Revenue is reduced from wholesaler list price at the time of recognition for expected charge-backs, discounts, rebates, sales allowances and product returns ("GTN adjustments"). These GTN adjustments are attributed to various commercial arrangements, managed healthcare organizations and government programs such as Medicare, Medicaid and the 340B 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,		
	2022	2021	2020
Gross product sales	\$ 69,633	\$ 67,897	\$ 60,016
GTN adjustments ^(a)			
Charge-backs and cash discounts	(7,469)	(7,253)	(5,827)
Medicaid and Medicare rebates	(11,362)	(9,374)	(7,595)
Other rebates, returns, discounts and adjustments	(6,131)	(6,215)	(5,273)
Total GTN adjustments	(24,962)	(22,842)	(18,695)
Net product sales	\$ 44,671	\$ 45,055	\$ 41,321

(a) Includes adjustments for provisions for product sales made in prior periods resulting from changes in estimates of \$229 million in 2022, \$319 million in 2021 and \$106 million in 2020.

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 upfront 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: (i) arrangements when BMS out-licenses intellectual property to another party and has no further performance obligations; (ii) arrangements that include a license and an additional performance obligation to supply product upon the request of the third party; and (iii) 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. Upfront fees are recognized immediately and included in Other (income)/expense, 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)/expense, net. Sales-based milestones and royalties are recognized when the milestone is achieved or the subsequent sales occur. Sales-based milestones and royalties are included in Alliance and other revenues.

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, upfront 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 revenues. The above fee allocation between the license and the supply represents the amount of consideration expected 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 the obligation to jointly develop and commercialize the product with the third party. As a result, upfront fees are recognized ratably over time throughout the expected period of the collaboration activities and included in Other (income)/expense, 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 revenues. 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,		
	2022	2021	2020
In-Line Products			
<i>Eliquis</i>	\$ 11,789	\$ 10,762	\$ 9,168
<i>Opdivo</i>	8,249	7,523	6,992
<i>Pomalyst/Imnovid</i>	3,497	3,332	3,070
<i>Orencia</i>	3,464	3,306	3,157
<i>Sprycel</i>	2,165	2,117	2,140
<i>Yervoy</i>	2,131	2,026	1,682
<i>Empliciti</i>	296	334	381
Mature and other brands	1,749	1,900	2,217
New Product Portfolio			
<i>Reblozyl</i>	717	551	274
<i>Abecma</i>	388	164	—
<i>Opdualag</i>	252	—	—
<i>Zeposia</i>	250	134	12
<i>Breyanzi</i>	182	87	—
<i>Onureg</i>	124	73	17
<i>Inrebic</i>	85	74	55
<i>Camzyos</i>	24	—	—
<i>Sotyktu</i>	8	—	—
Recent LOE Products^(a)			
<i>Revlimid</i>	9,978	12,821	12,106
<i>Abraxane</i>	811	1,181	1,247
Total Revenues	\$ 46,159	\$ 46,385	\$ 42,518
Geographic			
United States	\$ 31,828	\$ 29,214	\$ 26,577
International	13,497	16,319	15,310
Other ^(b)	834	852	631
Total Revenues	\$ 46,159	\$ 46,385	\$ 42,518

(a) Recent LOE Products include products with significant decline in revenue from the prior reporting period as a result of a loss of exclusivity.

(b) Other include royalties and alliance-related revenues for products not sold by BMS's regional commercial organizations.

Contract assets are primarily estimated future royalties and termination fees not eligible for the licensing exclusion and therefore recognized under ASC 606 and ASC 610. Contract assets are reduced and receivables are increased in the period the underlying sales occur. Cumulative catch-up adjustments to revenue affecting contract assets or contract liabilities were not material during the years ended December 31, 2022, 2021 and 2020. Revenue recognized from performance obligations satisfied in prior periods was \$556 million in 2022, \$561 million in 2021 and \$338 million in 2020 consisting primarily of revised estimates for GTN adjustments related to prior period sales and royalties from out-licensing arrangements.

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. BMS refers to these collaborations as alliances and its 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 regulatory 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)/expense, 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 regulatory 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.
- Upfront and contingent milestones payable by BMS to alliance partners prior to regulatory approval are expensed as incurred and included in Acquired IPRD expense.
- Royalties and other contingent consideration payable to BMS by alliance partners related to the divestiture of such businesses are included in Other (income)/expense, net when earned.
- All payments between BMS and its alliance partners are presented in Cash Flows From Operating Activities except for upfront and milestone payments which are presented in Cash Flows From Investing Activities.

Selected financial information pertaining to 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.

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Revenues from alliances:			
Net product sales	\$ 12,001	\$ 10,840	\$ 9,364
Alliance revenues	742	716	615
Total Revenues	\$ 12,743	\$ 11,556	\$ 9,979
Payments to/(from) alliance partners:			
Cost of products sold	\$ 5,768	\$ 5,227	\$ 4,485
Marketing, selling and administrative	(223)	(183)	(128)
Research and development	49	42	91
Acquired IPRD	100	730	258
Other (income)/expense, net	(53)	(62)	(74)
Selected alliance balance sheet information:			
Dollars in Millions	December 31,		
	2022	2021	
Receivables – from alliance partners	\$ 317	\$ 320	
Accounts payable – to alliance partners	1,249	1,229	
Deferred income from alliances ^(a)	289	330	

(a) Includes unamortized upfront and milestone payments.

Specific information pertaining to significant alliances is discussed below, including their nature and purpose; the significant rights and obligations of the parties; specific accounting policy elections; and the statements of earnings 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.

The co-exclusive license rights granted to Pfizer in exchange for an upfront payment and potential milestone payments were recorded to Deferred income and are being amortized in Other (income)/expense, net, as *Eliquis* was not a commercial product at the commencement of the alliance. The upfront payment and any subsequent contingent milestone proceeds are amortized over the expected period of BMS's co-promotion obligation through the market exclusivity period. 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 certain smaller countries, Pfizer has full commercialization rights and 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.

Summarized financial information related to this alliance was as follows:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Revenues from Pfizer alliance:			
Net product sales	\$ 11,488	\$ 10,431	\$ 8,942
Alliance revenues	301	331	226
Total Revenues	\$ 11,789	\$ 10,762	\$ 9,168
Payments to/(from) Pfizer:			
Cost of products sold – Profit sharing	\$ 5,604	\$ 5,064	\$ 4,331
Other (income)/expense, net – Amortization of deferred income	(42)	(36)	(55)
Selected alliance balance sheet information:			
Dollars in Millions	December 31,		
	2022	2021	
Receivables	\$ 191	\$ 235	
Accounts payable	1,208	1,195	
Deferred income	222	264	

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.

Summarized financial information related to this alliance was as follows:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Revenues from Ono alliances:			
Net product sales	\$ 216	\$ 251	\$ 194
Alliance revenues	441	385	382
Total Revenues	\$ 657	\$ 636	\$ 576

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.

Nektar

In 2022, BMS and Nektar discontinued the global clinical development program for bempegaldesleukin (NKTR-214) in combination with *Opdivo* based on results from pre-planned analyses of three late-stage clinical studies in RCC and bladder cancer. These studies and all other ongoing studies in the program are being discontinued. Research and development cost reimbursements were not material in 2022, 2021 and 2020.

BridgeBio

In May 2022, BMS and BridgeBio commenced a collaboration to develop and commercialize BBP-398, a SHP2 inhibitor, in oncology. The transaction included an upfront payment of \$90 million which was expensed to Acquired IPRD. BridgeBio is eligible to receive contingent development, regulatory and sales-based milestones up to \$815 million, as well as royalties on global net sales, excluding certain markets. BridgeBio is responsible for funding and completing ongoing BBP-398 Phase I monotherapy and combination therapy trials. BMS will lead and fund all other development and commercial activities. BridgeBio has an option to co-develop BBP-398 and receive higher royalties in the U.S.

2seventy bio

BMS and 2seventy bio jointly develop and commercialize novel disease-altering gene therapy product candidates targeting BCMA. The collaboration includes (i) a right for BMS to license any anti-BCMA products resulting from the collaboration, (ii) a right for 2seventy bio to participate in the development and commercialization of any licensed products resulting from the collaboration through a 50/50 co-development and profit share in the U.S. in exchange for a reduction of milestone payments, and (iii) sales-based milestones and royalties payable to 2seventy bio upon the commercialization of any licensed products resulting from the collaboration should 2seventy bio decline to exercise their co-development and profit sharing rights. The option to license idecabtagene vicleucel (*Abecma*) was exercised in 2016.

All profits and losses relating to developing, commercializing and manufacturing ide-cel within the U.S. are shared equally. BMS is exclusively responsible for the development and commercialization of ide-cel outside the U.S.

In 2021, the FDA approved *Abecma* for the treatment of relapsed or refractory multiple myeloma. Net product sales of *Abecma* were \$297 million and \$158 million; and the related profit sharing costs were \$49 million and \$42 million in 2022 and 2021, respectively. Cost reimbursements were not material.

In 2020, terms of the collaboration were amended including certain manufacturing obligations. Both parties were also released from future exclusivity related to BCMA-directed T cell therapies. BMS paid \$200 million to extinguish its obligation for future ex-U.S. milestones and royalties on ide-cel, which was expensed to Acquired IPRD in 2020.

Eisai

In 2021, BMS and Eisai commenced an exclusive global strategic collaboration for the co-development and co-commercialization of MORAb-202, a selective folate receptor alpha antibody-drug conjugate being investigated in endometrial, ovarian, lung and breast cancers. MORAb-202 is currently in Phase I/II clinical trials for solid tumors.

The parties will jointly develop and commercialize MORAb-202 in the U.S., Canada, Europe, Russia, Japan, China and certain other countries in the Asia-Pacific region (the “collaboration territory”). Eisai will be responsible for the global manufacturing and supply. Profits, research and development and commercialization costs are shared in the collaboration territories. BMS will be responsible for development and commercialization outside of the collaboration territory and will pay a royalty on those sales.

A \$650 million upfront collaboration fee was expensed to Acquired IPRD in 2021. BMS is also obligated to pay up to \$2.5 billion upon the achievement of contingent development, regulatory and sales-based milestones. Cost reimbursements were not material.

Note 4. ACQUISITIONS, DIVESTITURES, LICENSING AND OTHER ARRANGEMENTS

Acquisitions

Turning Point

On August 17, 2022, BMS acquired Turning Point for \$4.1 billion of cash (or \$3.3 billion net of cash acquired). Turning Point was a clinical-stage precision oncology company with a pipeline of investigational medicines designed to target the common mutations and alterations that drive cancer growth. The acquisition provided BMS rights to Turning Point's lead asset, repotrectinib, and other clinical and pre-clinical stage assets. The transaction was accounted for as a business combination requiring all assets acquired and liabilities assumed to be recognized at their fair value as of the acquisition date.

The total consideration for the acquisition consisted of the following:

Dollars in Millions	Total Consideration
Cash consideration for outstanding shares	\$ 3,811
Cash consideration for equity awards	302
Consideration paid	4,113
Less: Unvested stock awards ^(a)	153
Total consideration to be allocated	\$ 3,960

(a) Includes unvested equity awards of \$73 million expensed in Marketing, selling, and administrative and \$80 million expensed in Research and development in 2022.

The purchase price allocation resulted in the following amounts being allocated to the assets acquired and liabilities assumed as of the acquisition date based upon their respective fair values summarized below:

Dollars in Millions	Purchase Price Allocation
Cash and cash equivalents	\$ 795
Other current assets	14
Intangible assets ^(a)	2,971
Deferred income tax assets	229
Other non-current assets	10
Deferred income tax liabilities	(643)
Other current liabilities	(111)
Identifiable net assets acquired	\$ 3,265
Goodwill ^(b)	695
Total consideration allocated	\$ 3,960

(a) Intangible assets primarily consist of IPRD allocated to repotrectinib (\$2.8 billion), a potential best-in-class tyrosine kinase inhibitor targeting the ROS1 and NTRK oncogenic drivers in NSCLC and other advanced solid tumors. Repotrectinib is currently in registrational Phase II study in adults and a Phase I/II study in pediatric patients. The estimated fair value of IPRD assets was determined using an income approach valuation method.

(b) Goodwill resulted primarily from the recognition of deferred tax liabilities and is not deductible for tax purposes.

The results of Turning Point's operations were included in the consolidated financial statements commencing August 18, 2022, and were not material. Historical financial results of the acquired entity were not significant.

MyoKardia

In November 2020, BMS acquired MyoKardia for \$13.1 billion, including cash settlements of equity stock awards. MyoKardia was a clinical-stage biopharmaceutical company pioneering a precision medicine approach to discover, develop and commercialize targeted therapies for the treatment of serious cardiovascular diseases. The acquisition provided BMS with rights to MyoKardia's lead asset, mavacamten, a potential first-in-class cardiovascular medicine for the treatment of obstructive hypertrophic cardiomyopathy. Mavacamten was approved by FDA in April 2022 under the brand name *Camzyos*.

BMS funded the transaction through a combination of cash on hand from its operations and net proceeds received in connection with the 2020 senior unsecured notes offering. The transaction was accounted for as an asset acquisition since mavacamten represented substantially all of the fair value of the gross assets acquired (excluding cash and deferred income taxes). As a result, \$11.4 billion was expensed to Acquired IPRD during 2020. Additionally, in connection with this acquisition, BMS recorded approximately \$1.4 billion of assets primarily consisting of cash, deferred income taxes, licenses; liabilities assumed were \$226 million. Total consideration paid also included \$482 million of unvested stock awards expensed to Marketing, selling and administrative (\$241 million) and Research and development (\$241 million).

Forbius

In 2020, BMS acquired all of the outstanding shares of Forbius for \$185 million and contingent development, regulatory and sales-based milestone payments up to \$815 million. Forbius was a privately held, clinical-stage protein engineering company that designed and developed biotherapeutics for the treatment of cancer and fibrotic diseases. The acquisition provided BMS with full rights to Forbius' TGF-beta program, including the program's lead investigational asset, AVID200, which was in Phase I development. BMS accounted for the transaction as an asset acquisition since AVID200 represented substantially all of the fair value of the gross assets acquired. As a result, \$178 million was expensed to Acquired IPRD and \$7 million was allocated to deferred tax assets.

Divestitures

The following table summarizes the financial impact of divestitures including royalty income, which is included in Other (income)/expense, net. Revenue and pretax earnings related to all divestitures were not material in all periods presented (excluding divestiture gains or losses).

Dollars in Millions	Net Proceeds ^(a)			Divestiture (Gains)/Losses			Royalty Income		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
Diabetes business	\$ 767	\$ 612	\$ 558	\$ —	\$ —	\$ —	\$ (810)	\$ (622)	\$ (567)
Mature products and other	390	136	157	(211)	(9)	(55)	(22)	(44)	(77)
Total	\$ 1,157	\$ 748	\$ 715	\$ (211)	\$ (9)	\$ (55)	\$ (832)	\$ (666)	\$ (644)

(a) Includes proceeds from 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. Consideration for the transaction included tiered royalty payments ranging from 10% to 25% based on net sales through 2025. Royalties were \$924 million in 2022, \$725 million in 2021 and \$673 million in 2020.

In 2015 and 2017, BMS transferred a percentage of its future royalty rights on *Amelyn*, *Onglyza** and *Farxiga** net product sales to third parties. As a result of these transfers, the royalty income associated with these products was reduced by \$114 million in 2022, \$103 million in 2021 and \$106 million in 2020.

Mature Products and Other

Manufacturing Operations

In January 2023, BMS sold its manufacturing facility in Syracuse, New York to LOTTE Corporation resulting in cash proceeds of \$159 million, which was received in December 2022. The business was accounted for as held-for-sale as of December 31, 2022, and its assets were reduced to the estimated relative fair value resulting in a \$63 million impairment charge recorded to Cost of products sold in 2022. Assets and liabilities reclassified to held-for-sale and included within Other current assets and Other current liabilities were \$172 million and \$20 million, respectively, as of December 31, 2022.

Other

In 2022, product rights to several mature products were sold to Cheplapharm, resulting in cash proceeds of \$221 million and a divestiture gain of \$211 million.

In 2020, the product rights to a mature brand were sold resulting in proceeds of \$50 million and divestiture gain of \$49 million.

Licensing and Other Arrangements

Royalty and Licensing Income

The following table summarizes the financial impact of *Keytruda** royalties, *Tecentriq** royalties, upfront licensing fees and milestones for products that have not obtained commercial approval, which are included in Other (income)/expense, net.

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
<i>Keytruda</i> * royalties	\$ (1,001)	\$ (841)	\$ (681)
<i>Tecentriq</i> * royalties	(93)	(90)	(19)
Upfront licensing fees	—	(34)	(30)
Contingent milestone income	(50)	(18)	(72)
Amortization of deferred income	(53)	(39)	(58)
Biohaven sublicense income	(55)	—	—
Other royalties	(31)	(45)	(23)
Total	\$ (1,283)	\$ (1,067)	\$ (883)

Keytruda* Patent License Agreement

In 2017, BMS and Ono entered a global patent license agreement with Merck related to Merck's PD-1 antibody *Keytruda**. In accordance with the agreement, Merck is obligated to pay ongoing royalties on global sales of *Keytruda** of 6.5% from January 1, 2017 through December 31, 2023, and 2.5% from January 1, 2024 through December 31, 2026. The companies also granted certain rights to each other under their respective patent portfolios pertaining to PD-1. Payments and royalties are shared between BMS and Ono on a 75/25 percent allocation, respectively after adjusting for each parties' legal fees.

Tecentriq* Patent License Agreement

In 2020, BMS and Ono entered a global patent license agreement with Roche Group related to *Tecentriq**, Roche's anti-PD-L1 antibody. Under the agreement, Roche paid \$324 million, which included royalties in 2020, and will pay single-digit royalties on worldwide net sales of *Tecentriq** through December 31, 2026. The upfront payment and royalties are shared between BMS and Ono consistent with existing agreements. BMS recorded \$239 million in Other (income)/expense, net for the settlement in 2020.

In-license and other arrangements

Immunatics

In 2022, BMS obtained a global exclusive license to Immunatics' TCR bispecific IMA401 program. IMA401 is being studied in oncology and a Clinical Trial Application has been approved by the German federal regulatory authority. The trial commenced in May 2022. BMS and Immunatics collaborate on the development and BMS will be responsible for the commercialization of IMA401 worldwide, including strategic decisions, regulatory responsibilities, funding and manufacturing. Immunatics has the option to co-fund U.S. development in exchange for enhanced U.S. royalty payments and/or to co-promote IMA401 in the U.S. The transaction included an upfront payment of \$150 million which was expensed to Acquired IPRD in 2022. In addition, Immunatics is eligible to receive contingent development, regulatory and sales-based milestones up to \$770 million, as well as royalties on global net sales.

Agenus

In 2021, BMS obtained a global exclusive license to Agenus' proprietary AGEN1777 bispecific antibody program that blocks TIGIT and an additional target. AGEN1777 is being studied in oncology and a Phase I clinical trial was initiated in October 2021. BMS is responsible for the development and any subsequent commercialization of AGEN1777 and its related products worldwide, including strategic decisions, regulatory responsibilities, funding and manufacturing. The transaction included a payment of \$200 million which was included in Acquired IPRD. In addition, Agenus is eligible to receive contingent development, regulatory and sales-based milestones up to \$1.4 billion as well as royalties on global net sales.

Dragonfly

In 2020, BMS obtained a global exclusive license to Dragonfly's interleukin-12 ("IL-12") investigational immunotherapy program, including its extended half-life cytokine DF6002. BMS is responsible for the development and any subsequent commercialization of DF6002 and its related products worldwide, including strategic decisions, regulatory responsibilities, funding and manufacturing. Dragonfly continues to be involved in the development of DF6002 in current and certain future Phase I/II clinical trials. BMS paid \$475 million to Dragonfly for the rights in 2020, which was expensed to Acquired IPRD. The payment included \$75 million following the commencement of a Phase I combination clinical study. Dragonfly is eligible to receive additional contingent consideration comprised of development, regulatory and sales-based milestone payments up to \$2.7 billion and royalties on global net sales. In 2022, a Phase I development milestone for IL-12 was achieved resulting in a \$175 million payment to Dragonfly which was included in Acquired IPRD. The parties also amended the terms of three future milestones by requiring the achievement of certain criteria by specified dates unless BMS notifies Dragonfly that it will discontinue development of IL-12. These milestones continue to be considered substantive and contingent because the decision to proceed will be based on an assessment of clinical data prior to the specified dates.

In January 2023, BMS notified Dragonfly that it was terminating the global exclusive license that relates to Dragonfly's IL-12. The termination is effective 90 days after notification at which time all rights will revert back to Dragonfly.

Nimbus

BMS and Nimbus Therapeutics entered into a settlement resolving all legal claims and business interests pertaining to Nimbus' TYK2 inhibitor in 2022 resulting in \$40 million of income. The settlement also provides for BMS to receive additional amounts for contingent development, regulatory and sales-based milestones upon the occurrence of certain events and approximately 10% of any change in control proceeds received by Nimbus Therapeutics related to its TYK2 inhibitor. In February 2023, Takeda acquired 100% ownership of Nimbus Therapeutics' TYK2 inhibitor for approximately \$4.0 billion of upfront proceeds plus contingent sales-based milestones aggregating up to \$2.0 billion.

Other

In 2022, BMS amended the terms of a license arrangement and paid a third party \$295 million to extinguish a future royalty obligation related to mavacamten, prior to its FDA approval in April 2022, resulting in an Acquired IPRD charge.

Note 5. OTHER (INCOME)/EXPENSE, NET

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Interest expense	\$ 1,232	\$ 1,334	\$ 1,420
Royalty and licensing income (Note 4)	(1,283)	(1,067)	(883)
Royalty income - divestitures (Note 4)	(832)	(666)	(644)
Equity investment losses/(income), net (Note 9)	801	(745)	(1,228)
Integration expenses (Note 6)	440	564	717
Loss on debt redemption (Note 9)	266	281	—
Divestiture gains (Note 4)	(211)	(9)	(55)
Litigation and other settlements	178	82	(194)
Investment income	(171)	(39)	(121)
Provision for restructuring (Note 6)	75	169	530
Contingent consideration	(9)	(542)	(1,757)
Other	90	(82)	(99)
Other (income)/expense, net	\$ 576	\$ (720)	\$ (2,314)

Contingent Consideration

Contingent consideration in 2021 and 2020 primarily included fair value adjustments resulting from the change in the traded price of contingent value rights issued with the Celgene acquisition. The contractual obligation to pay the contingent value rights terminated in January 2021 because the FDA did not approve liso-cel (JCAR017) by December 31, 2020.

Note 6. RESTRUCTURING*Celgene Acquisition Plan*

In 2019, a restructuring and integration plan was implemented as an initiative to realize sustainable run rate synergies resulting from cost savings and avoidance from the Celgene acquisition ("Celgene Acquisition Plan") that have resulted in annual synergies of at least \$3.0 billion. The synergies realized are in Cost of products sold, Marketing, selling and administrative expense and Research and development expense. Charges of approximately \$3.5 billion are expected to be incurred including cash outlays of approximately \$3.1 billion. Cumulative charges of approximately \$3.1 billion have been recognized to date including integration planning and execution expenses, employee termination benefit costs and accelerated stock-based compensation, contract termination costs and other shutdown costs associated with site exits. The remaining charges are primarily related to IT system integration which are expected to be incurred through 2024. Employee workforce reductions were approximately 170 in 2022, 405 in 2021 and 1,565 in 2020.

Other Restructuring

Restructuring and integration plans were initiated to realize expected cost synergies resulting from the Turning Point acquisition on August 17, 2022, the MyoKardia acquisition in 2020 (acquisition-related initiatives), as well as other costs saving initiatives. Charges of approximately \$250 million are expected to be incurred through the end of 2023 for the acquisition-related initiatives, and consist of integration planning and execution expenses, employee termination benefit costs and other costs. Cumulative charges of approximately \$165 million have been recognized for these actions to date.

Company Transformation

In 2016, a restructuring plan was announced to evolve and streamline BMS's operating model. Cumulative charges of approximately \$1.5 billion were recognized for these actions since the announcement. Actions under the plan were completed as of December 31, 2020.

The following provides the charges related to restructuring initiatives by type of cost:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Celgene Acquisition Plan	\$ 472	\$ 673	\$ 1,244
Other Restructuring	48	78	39
Company Transformation	—	—	127
Total charges	\$ 520	\$ 751	\$ 1,410
Employee termination costs	\$ 69	\$ 159	\$ 457
Other termination costs	6	10	73
Provision for restructuring	75	169	530
Integration expenses	440	564	717
Accelerated depreciation	5	2	53
Asset impairments	—	24	103
Other shutdown costs, net	—	(8)	7
Total charges	\$ 520	\$ 751	\$ 1,410
Cost of products sold	\$ —	\$ 24	\$ 32
Marketing, selling and administrative	5	3	10
Research and development	—	—	113
Other (income)/expense, net	515	724	1,255
Total charges	\$ 520	\$ 751	\$ 1,410

The following summarizes the charges and spending related to restructuring plan activities:

Dollars in Millions	Year Ended December 31,	
	2022	2021
Liability at January 1	\$ 101	\$ 148
Provision for restructuring ^(a)	75	156
Foreign currency translation and other	(7)	(4)
Payments	(122)	(199)
Liability at December 31	\$ 47	\$ 101

(a) Includes reductions to the liability resulting from changes in estimates of \$7 million in 2022, \$19 million in 2021. Excludes \$13 million in 2021 of accelerated stock-based compensation relating to the Celgene Acquisition Plan.

Note 7. INCOME TAXES

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

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Current:			
U.S.	\$ 3,017	\$ 1,879	\$ 1,245
Non-U.S.	1,089	598	(104)
Total current	4,106	2,477	1,141
Deferred:			
U.S.	(2,889)	(1,255)	229
Non-U.S.	151	(138)	754
Total deferred	(2,738)	(1,393)	983
Total Provision for Income Taxes	\$ 1,368	\$ 1,084	\$ 2,124

Effective Tax Rate

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

Dollars in Millions	% of Earnings Before Income Taxes					
	2022		2021		2020	
Earnings/(Loss) before income taxes:						
U.S.	\$ (140)		\$ 1,593		\$ (10,106)	
Non-U.S.	7,853		6,505		3,235	
Total	7,713		8,098		(6,871)	
U.S. statutory rate	1,620	21.0 %	1,701	21.0 %	(1,443)	21.0 %
GILTI, net of foreign derived intangible income deduction	634	8.2 %	645	8.0 %	685	(10.0)%
Foreign tax effect of certain operations in Ireland, Puerto	(416)	(5.4)%	(143)	(1.8)%	(86)	1.3 %
Internal transfers of intangible and other assets	(93)	(1.2)%	(983)	(12.1)%	853	(12.4)%
U.S. Federal, state and foreign contingent tax matters	(297)	(3.9)%	154	1.9 %	136	(2.0)%
U.S. Federal research-based credits	(142)	(1.8)%	(165)	(2.0)%	(165)	2.4 %
Charitable contributions of inventory	(94)	(1.2)%	(42)	(0.5)%	(36)	0.5 %
Contingent value rights	—	—	(108)	(1.3)%	(363)	5.3 %
Non-deductible R&D charges	—	—	—	—	2,461	(35.8)%
Puerto Rico excise tax credit	(144)	(1.9)%	(152)	(1.9)%	(147)	2.1 %
State and local taxes (net of valuation allowance)	103	1.3 %	33	0.4 %	103	(1.5)%
Foreign and other	197	2.6 %	144	1.7 %	126	(1.8)%
Total	\$ 1,368	17.7 %	\$ 1,084	13.4 %	\$ 2,124	(30.9)%

Internal transfers of intangible and other assets to streamline our legal entity structure subsequent to the Celgene acquisition resulted in a tax benefit in 2022 and 2021 and in a tax charge in 2020 upon adjusting deferred taxes for the book and revalued tax basis differences of the related assets.

The 2022 U.S. Federal, state and foreign contingent tax matters include a \$522 million tax benefit with respect to lapse of statutes and effectively settled contingent tax matters.

Fair value adjustments for contingent value rights are not taxable or tax deductible.

Non-deductible R&D charges primarily resulted from the \$11.4 billion MyoKardia IPRD charge in 2020.

Puerto Rico imposes an excise tax on the gross company purchase price of goods sold from BMS's 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 BMS's provision for income taxes when the excise tax is incurred. As of December 31, 2022, BMS has amended its existing Puerto Rico decree, eliminating the excise tax and increasing its Puerto Rico tax rate to 10.5% effective for the tax year beginning January 1, 2023, and extending BMS's tax grants an additional 15 years to 2038.

Deferred Taxes and Valuation Allowance

The components of deferred income tax assets/(liabilities) were as follows:

Dollars in Millions	December 31,	
	2022	2021
Deferred tax assets		
Foreign net operating loss and other carryforwards	\$ 566	\$ 945
State net operating loss and credit carryforwards	329	304
U.S. Federal net operating loss and credit carryforwards	236	226
Milestone payments and license fees	1,030	887
Capitalized research expenditures	1,573	—
Other	1,284	1,390
Total deferred tax assets	5,018	3,752
Valuation allowance	(873)	(1,056)
Deferred tax assets net of valuation allowance	\$ 4,145	\$ 2,696
Deferred tax liabilities		
Acquired intangible assets	\$ (4,362)	\$ (4,867)
Goodwill and other	(605)	(891)
Total deferred tax liabilities	\$ (4,967)	\$ (5,758)
Deferred tax liabilities, net	\$ (822)	\$ (3,062)
Recognized as:		
Deferred income taxes assets – non-current	\$ 1,344	\$ 1,439
Deferred income taxes liabilities – non-current	(2,166)	(4,501)
Total	\$ (822)	\$ (3,062)

BMS is not indefinitely reinvested with respect to its undistributed earnings from foreign subsidiaries and has provided a deferred tax liability for foreign and state income and withholding tax that would apply. BMS 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.

The U.S. Federal net operating loss carryforwards were \$709 million at December 31, 2022. 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 2023. The foreign and state net operating loss carryforwards expire in varying amounts beginning in 2023 (certain amounts have unlimited lives).

At December 31, 2022, a valuation allowance of \$873 million exists for the following items: \$295 million primarily for foreign net operating loss and tax credit carryforwards, \$261 million for state deferred tax assets including net operating loss and tax credit carryforwards and \$317 million for U.S. Federal deferred tax assets including equity investment 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,		
	2022	2021	2020
Balance at beginning of year	\$ 1,056	\$ 2,809	\$ 2,844
Provision	213	201	62
Utilization	(68)	(1,087)	(488)
Foreign currency translation	(59)	(157)	212
Acquisitions/(dispositions)/(liquidations), net	(271)	(720)	179
Non U.S. rate change	2	10	—
Balance at end of year	\$ 873	\$ 1,056	\$ 2,809

In 2022 and 2021, certain foreign net operating losses and related valuation allowances were utilized or eliminated as a result of internal legal entity restructurings.

Income tax payments were \$5.4 billion in 2022, \$3.5 billion in 2021 and \$3.4 billion in 2020.

In connection with the enactment of the TCJA, we were required to pay a one-time transition tax and elected to pay over a period of eight years as permitted under the TCJA. The remaining amounts payable are as follows: \$567 million in 2023; \$799 million in 2024; \$1.0 billion in 2025; and \$244 million in 2026.

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 (excluding interest and penalties):

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of year	\$ 2,042	\$ 2,003	\$ 1,905
Gross additions to tax positions related to current year	53	66	76
Gross additions to tax positions related to prior years	137	75	325
Gross additions to tax positions assumed in acquisitions	15	—	51
Gross reductions to tax positions related to prior years	(381)	(22)	(352)
Settlements	(8)	(70)	(7)
Reductions to tax positions related to lapse of statute	(83)	(5)	(5)
Cumulative translation adjustment	(9)	(5)	10
Balance at end of year	\$ 1,766	\$ 2,042	\$ 2,003

Additional information regarding unrecognized tax benefits is as follows:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Unrecognized tax benefits that if recognized would impact the effective tax rate	\$ 1,736	\$ 1,957	\$ 1,900
Accrued interest	332	424	366
Accrued penalties	25	26	20

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 that 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. As previously disclosed, BMS received several notices of proposed adjustments from the IRS related to transfer pricing and other tax issues for the 2008 to 2012 tax years. BMS disagrees with the IRS's positions and continues to work cooperatively with the IRS to resolve these issues. In December 2022, BMS entered the IRS administrative appeals process to resolve these matters. Timing of the final resolution of these complex matters is uncertain and could have a material impact on BMS's financial statements. Tax positions for these years unrelated to matters that entered the administrative appeals process are considered effectively settled.

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.

It is also reasonably possible that the total amount of unrecognized tax benefits at December 31, 2022 could decrease in the range of approximately \$120 million to \$170 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. 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, 2016 to 2022
Canada	2012 to 2022
France	2020 to 2022
Germany	2015 to 2022
Italy	2019 to 2022
Japan	2018 to 2022
UK	2012 to 2022

Note 8. EARNINGS/(LOSS) PER SHARE

Amounts in Millions, Except Per Share Data	Year Ended December 31,		
	2022	2021	2020
Net Earnings/(Loss) Attributable to BMS Used for Basic and Diluted EPS Calculation	\$ 6,327	\$ 6,994	\$ (9,015)
Weighted-Average Common Shares Outstanding - Basic	2,130	2,221	2,258
Incremental Shares Attributable to Share-Based Compensation Plans	16	24	—
Weighted-Average Common Shares Outstanding - Diluted	2,146	2,245	2,258
Earnings/(Loss) per Common Share			
Basic	\$ 2.97	\$ 3.15	\$ (3.99)
Diluted	2.95	3.12	(3.99)

The total number of potential shares of common stock excluded from the diluted earnings per share computation because of the antidilutive impact was not material in 2022 and 2021 and was 106 million in 2020.

Note 9. FINANCIAL INSTRUMENTS AND FAIR VALUE MEASUREMENTS

Financial instruments include cash and cash equivalents, marketable debt securities, equity investments, 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. Level 3 financial liabilities consist of other acquisition related contingent consideration and success payments related to undeveloped product rights resulting from the Celgene acquisition.

There were no transfers between Levels 1, 2 and 3 during the year ended December 31, 2022.

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

Dollars in Millions	December 31, 2022			December 31, 2021		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Cash and cash equivalents - money market and other securities	\$ —	\$ 7,770	\$ —	\$ —	\$ 12,225	\$ —
Marketable debt securities:						
Certificates of deposit	—	32	—	—	2,264	—
Commercial paper	—	98	—	—	320	—
Corporate debt securities	—	—	—	—	403	—
Derivative assets	—	305	—	—	206	—
Equity investments	424	680	—	1,910	109	—
Derivative liabilities	—	213	—	—	25	—
Contingent consideration liability:						
Contingent value rights	5	—	—	8	—	—
Other acquisition related contingent consideration	—	—	24	—	—	35

Marketable Debt Securities

The following table summarizes marketable debt securities:

Dollars in Millions	December 31, 2022				December 31, 2021			
	Amortized Cost	Gross Unrealized		Fair Value	Amortized Cost	Gross Unrealized		Fair Value
		Gains	Losses			Gains	Losses	
Certificates of deposit	\$ 32	\$ —	\$ —	\$ 32	\$ 2,264	\$ —	\$ —	\$ 2,264
Commercial paper	98	—	—	98	320	—	—	320
Corporate debt securities	—	—	—	—	401	2	—	403
Total marketable debt securities	\$ 130	\$ —	\$ —	\$ 130	\$ 2,985	\$ 2	\$ —	\$ 2,987

Equity Investments

The following summarizes the carrying amount of equity investments at December 31, 2022 and 2021:

Dollars in Millions	2022	2021
Equity investments with readily determinable fair values	\$ 1,104	\$ 2,019
Equity investments without readily determinable fair values	537	283
Limited partnerships and other equity method investments	546	666
Total equity investments	\$ 2,187	\$ 2,968

The following summarizes the activity related to equity investments. Equity investment (gains)/loss are included in Other (income)/expense, net.

Dollars in Millions	2022	2021	2020
Equity investments with readily determined fair values			
Net loss/(gain) recognized	\$ 762	\$ 403	\$ (964)
Net loss/(gain) recognized on investments sold	(17)	(357)	12
Net unrealized loss/(gain) recognized on investments still held	779	760	(976)
Equity investments without readily determinable fair values			
Upward adjustments	(80)	(918)	(388)
Impairments and downward adjustments	11	1	204
Equity in net (income)/loss of limited partnerships and other equity method investments	108	(231)	(72)

Cumulative upwards adjustments and cumulative impairments and downward adjustments based on observable price changes in equity investments without readily determinable fair values still held as of December 31, 2022 were \$181 million and \$61 million, respectively.

Qualifying Hedges and Non-Qualifying Derivatives

Cash Flow Hedges — Foreign currency forward and purchased local currency put option 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. The net gain or loss on foreign exchange contracts is expected to be reclassified to net earnings (primarily included in Cost of products sold) within the next 24 months. The notional amount of outstanding foreign currency exchange contracts was primarily attributed to the euro of \$5.3 billion and Japanese yen of \$1.3 billion as of December 31, 2022.

In 2022, BMS entered into cross-currency interest rate swap contracts to hedge exposure to foreign currency exchange rate risk associated with its long-term debt denominated in euros. These contracts convert interest payments and principal repayment of the long-term debt to U.S. dollars from euros and are designated as cash flow hedges. The unrealized gains and losses on these contracts are reported in Accumulated other comprehensive loss and reclassified to Other (income)/expense, net, in the same periods during which the hedged debt affects earnings. The notional amount of cross-currency interest rate swap contracts associated with long-term debt denominated in euros was €575 million (\$584 million) as of December 31, 2022.

In 2020, Treasury lock hedge contracts were entered into with a total notional value of \$2.1 billion to hedge future interest rate risk associated with the anticipated issuance of long-term debt to fund the MyoKardia acquisition. The Treasury lock contracts were terminated upon the issuance of the 2020 unsecured senior notes and the \$51 million proceeds were included in Other Comprehensive Income/(Loss).

Net Investment Hedges — Non-U.S. dollar borrowings of €375 million (\$400 million) as of December 31, 2022 are designated as net investment hedges to hedge euro currency exposures of the net investment in certain foreign affiliates and are recognized in long-term debt. The effective portion of foreign exchange gain on the remeasurement of euro debt was included in the foreign currency translation component of Accumulated other comprehensive loss with the related offset in Long-term debt.

Cross-currency interest rate swap contracts of \$1.2 billion as of December 31, 2022 are designated to hedge currency exposure of BMS's net investment in its foreign subsidiaries. Contract fair value changes are recorded in the foreign currency translation component of Accumulated other comprehensive loss with a related offset in Other non-current assets or Other non-current liabilities. The notional amount of outstanding cross-currency interest rate swap contracts was primarily attributed to the Japanese yen of \$509 million and euro of \$584 million as of December 31, 2022.

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 (4.39% as of December 31, 2022) plus an interest rate spread of 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 align with 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. If the underlying swap is terminated prior to maturity, then 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:

Dollars in Millions	December 31, 2022				December 31, 2021			
	Asset ^(a)		Liability ^(b)		Asset ^(a)		Liability ^(b)	
	Notional	Fair Value	Notional	Fair Value	Notional	Fair Value	Notional	Fair Value
Derivatives designated as hedging instruments:								
Interest rate swap contracts	\$ —	\$ —	\$ 255	\$ (18)	\$ 255	\$ 10	\$ —	\$ —
Cross-currency interest rate swap contracts	72	1	1,741	(85)	600	26	—	—
Foreign exchange contracts	5,771	271	2,281	(80)	3,587	161	1,814	(20)
Derivatives not designated as hedging instruments:								
Foreign exchange contracts	1,564	33	1,703	(19)	883	9	568	(5)
Total return swap contracts ^(c)	—	—	322	(11)	—	—	—	—

(a) Included in Other current assets and Other non-current assets.

(b) Included in Other current liabilities and Other non-current liabilities.

(c) Total return swap contracts were entered into to hedge changes in fair value of certain deferred compensation liabilities.

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

Dollars in Millions	Year Ended December 31,					
	2022		2021		2020	
	Cost of products sold	Other (income)/expense, net	Cost of products sold	Other (income)/expense, net	Cost of products sold	Other (income)/expense, net
Interest rate swap contracts	\$ —	\$ (27)	\$ —	\$ (31)	\$ —	\$ (29)
Cross-currency interest rate swap contracts	—	(52)	—	(11)	—	(10)
Foreign exchange contracts	(492)	(96)	96	(21)	(18)	(23)

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

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Derivatives qualifying as cash flow hedges			
Foreign exchange contracts gain/(loss):			
Recognized in Other Comprehensive Income/(Loss)	\$ 592	\$ 364	\$ (267)
Reclassified to Cost of products sold	(492)	96	(54)
Cross-currency interest rate swap contracts gain/(loss):			
Recognized in Other Comprehensive Income	(7)	—	—
Reclassified to Other (income)/expense, net	(29)	—	—
Forward starting interest rate swap contract loss:			
Reclassified to Other (income)/expense, net	(3)	—	—
Treasury lock hedge contracts gain:			
Recognized in Other Comprehensive Income/(Loss)	—	—	51
Derivatives qualifying as net investment hedges			
Cross-currency interest rate swap contracts gain/(loss):			
Recognized in Other Comprehensive Income/(Loss)	30	38	(11)
Non-derivatives qualifying as net investment hedges			
Non U.S. dollar borrowings gain/(loss):			
Recognized in Other Comprehensive Income/(Loss)	91	83	(105)

Note 10. FINANCING ARRANGEMENTS

Short-term debt obligations include:

Dollars in Millions	December 31,	
	2022	2021
Non-U.S. short-term borrowings	\$ 176	\$ 105
Current portion of long-term debt	3,897	4,764
Other	191	79
Total	\$ 4,264	\$ 4,948

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

Dollars in Millions	December 31,	
	2022	2021
Principal Value:		
Floating Rate Notes due 2022	\$ —	\$ 500
2.000% Notes due 2022	—	750
2.600% Notes due 2022	—	1,500
3.250% Notes due 2022	—	1,000
3.550% Notes due 2022	—	1,000
0.537% Notes due 2023	1,500	1,500
2.750% Notes due 2023	750	750
3.250% Notes due 2023	500	500
3.250% Notes due 2023	890	890
7.150% Notes due 2023	239	239
2.900% Notes due 2024	2,478	2,478
3.625% Notes due 2024	395	395
0.750% Notes due 2025	1,000	1,000
1.000% Euro Notes due 2025	613	651
3.875% Notes due 2025	229	1,925
3.200% Notes due 2026	1,750	2,250
6.800% Notes due 2026	256	256
1.125% Notes due 2027	1,000	1,000
3.250% Notes due 2027	512	750
3.450% Notes due 2027	534	1,000
3.900% Notes due 2028	1,500	1,500
3.400% Notes due 2029	2,400	4,000
1.450% Notes due 2030	1,250	1,250
2.950% Notes due 2032	1,750	—
1.750% Euro Notes due 2035	613	651
5.875% Notes due 2036	279	279
6.125% Notes due 2038	219	219
4.125% Notes due 2039	2,000	2,000
2.350% Notes due 2040	750	750
5.700% Notes due 2040	153	193
3.550% Notes due 2042	1,250	—
3.250% Notes due 2042	500	500
5.250% Notes due 2043	226	280
4.500% Notes due 2044	342	500
4.625% Notes due 2044	748	748
5.000% Notes due 2045	758	1,768
4.350% Notes due 2047	1,250	1,250
4.550% Notes due 2048	1,272	1,486
4.250% Notes due 2049	3,750	3,750
2.550% Notes due 2050	1,500	1,500
3.700% Notes due 2052	2,000	—
3.900% Notes due 2062	1,000	—
6.875% Notes due 2097	63	86
0.13% - maturing through 2023	15	51
Total	\$ 38,234	\$ 43,095

Dollars in Millions	December 31,	
	2022	2021
Principal Value	\$ 38,234	\$ 43,095
Adjustments to Principal Value:		
Fair value of interest rate swap contracts	(18)	10
Unamortized basis adjustment from swap terminations	97	119
Unamortized bond discounts and issuance costs	(284)	(263)
Unamortized purchase price adjustments of Celgene debt	924	1,408
Total	\$ 38,953	\$ 44,369
Current portion of long-term debt	\$ 3,897	\$ 4,764
Long-term debt	35,056	39,605
Total	\$ 38,953	\$ 44,369

The fair value of long-term debt was \$34.9 billion and \$49.1 billion at December 31, 2022 and 2021, 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.

In 2022, BMS issued an aggregate principal amount of \$6.0 billion of fixed rate unsecured senior notes with net proceeds of \$5.9 billion. In 2020, BMS issued an aggregate principal amount of \$7.0 billion of fixed rate unsecured senior notes with proceeds, net of discount and deferred loan issuance costs, of \$6.9 billion. The notes rank equally in right of payment with all of BMS's existing and future senior unsecured indebtedness and are redeemable at any time, in whole, or in part, at varying specified redemption prices plus accrued and unpaid interest.

In 2022, BMS purchased aggregate principal amount of \$6.0 billion of certain of its debt securities for \$6.6 billion of cash in a series of tender offers and "make whole" redemptions. In connection with these transactions, a \$266 million loss on debt redemption was recognized based on the carrying value of the debt and included in Other (income)/expense, net.

In 2021, BMS purchased aggregate principal amount of \$3.5 billion of certain of its debt securities for approximately \$4.0 billion of cash in a series of tender offers and "make whole" redemptions. In connection with these transactions, a \$281 million loss on debt redemption was recognized based on the carrying value of the debt and included in Other (income)/expense, net.

Repayment of notes at maturity aggregated \$4.8 billion in 2022, \$2.0 billion in 2021 and \$2.8 billion in 2020. Interest payments were \$1.4 billion in 2022, \$1.5 billion in 2021 and \$1.6 billion in 2020.

The aggregate maturities of long-term debt for each of the next five years are as follows: \$3.9 billion in 2023; \$2.9 billion in 2024; \$1.8 billion in 2025; \$2.0 billion in 2026; \$2.0 billion in 2027. Interest payments related to long-term debt for each of the next five years are as follows: \$1.2 billion in 2023; \$1.1 billion in 2024; \$1.1 billion in 2025; \$1.0 billion in 2026; \$977 million in 2027.

Credit Facilities

As of December 31, 2022, BMS had a five-year \$5.0 billion facility expiring in January 2027 and extendable annually by one year with the consent of the lenders. This facility provides for customary terms and conditions with no financial covenants and may be used to provide backup liquidity for BMS' commercial paper borrowings. No borrowings were outstanding under any revolving credit facility as of December 31, 2022 or 2021.

Available financial guarantees provided in the form of bank overdraft facilities, stand-by letters of credit and performance bonds were \$1.4 billion as of December 31, 2022. Stand-by letters of credit and guarantees are issued through financial institutions in support of various obligations, including sale of products to hospitals and foreign ministries of health, bonds for customs, and duties and value added tax.

Note 11. RECEIVABLES

Dollars in Millions	December 31,	
	2022	2021
Trade receivables	\$ 8,848	\$ 8,723
Less charge-backs and cash discounts	(675)	(723)
Less allowance for expected credit loss	(22)	(21)
Net trade receivables	8,151	7,979
Alliance, royalties, VAT and other	1,735	1,390
Receivables	\$ 9,886	\$ 9,369

Non-U.S. receivables sold on a nonrecourse basis were \$1.0 billion in 2022, \$1.5 billion in 2021 and \$1.2 billion in 2020. In the aggregate, receivables from three pharmaceutical wholesalers in the U.S. represented approximately 66% and 59% of total trade receivables at December 31, 2022 and 2021, respectively.

Changes to the allowances for expected credit loss, charge-backs and cash discounts were as follows:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of year	\$ 744	\$ 663	\$ 412
Provision ^(a)	7,476	7,257	5,839
Utilization	(7,521)	(7,170)	(5,601)
Other	(2)	(6)	13
Balance at end of year	\$ 697	\$ 744	\$ 663

(a) Includes provision for expected credit loss of \$7 million in 2022, \$4 million in 2021 and \$12 million in 2020.

Note 12. INVENTORIES

Dollars in Millions	December 31,	
	2022	2021
Finished goods	\$ 509	\$ 543
Work in process	1,850	2,111
Raw and packaging materials	464	350
Total Inventories	\$ 2,823	\$ 3,004
Inventories	\$ 2,339	\$ 2,095
Other non-current assets	484	909

Total inventories include fair value adjustments resulting from the Celgene acquisition of approximately \$84 million as of December 31, 2022 and \$508 million as of December 31, 2021.

Note 13. PROPERTY, PLANT AND EQUIPMENT

Dollars in Millions	December 31,	
	2022	2021
Land	\$ 162	\$ 169
Buildings	5,920	5,897
Machinery, equipment and fixtures	3,284	3,252
Construction in progress	1,053	764
Gross property, plant and equipment	10,419	10,082
Less accumulated depreciation	(4,164)	(4,033)
Property, plant and equipment	\$ 6,255	\$ 6,049
United States	\$ 4,833	\$ 4,710
International	1,422	1,339
Total	\$ 6,255	\$ 6,049

Depreciation expense was \$587 million in 2022, \$559 million in 2021 and \$586 million in 2020.

Note 14. LEASES

Leased facilities for office, research and development, storage and distribution purposes comprise approximately 95% of the total lease obligation. 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 one year and 15 years. Most leases contain specific renewal options for periods ranging between one year and 10 years where notice to renew must be provided in advance of lease expiration or automatic renewals where no advance notice is required. Periods covered by an option to extend the lease were included in the non-cancellable lease term when exercise of the option was determined to be reasonably certain. Certain leases also contain termination options that provide the flexibility to terminate the lease ahead of its expiration with sufficient advance notice. Periods covered by an option to terminate the lease were included in the non-cancellable lease term when exercise of the option was determined not to be reasonably certain. Judgment is required in assessing whether renewal and termination options are reasonably certain to be exercised. Factors are considered such as contractual terms compared to current market rates, leasehold improvements expected to have significant value, costs to terminate a lease and the importance of the facility to operations. Costs determined to be variable and not based on an index or rate were not included in the measurement of real estate lease liabilities. These variable costs include real estate taxes, insurance, utilities, common area maintenance and other operating costs. As the implicit rate on most leases is not readily determinable, an incremental borrowing rate was applied on a portfolio approach to discount its real estate lease liabilities.

The remaining 5% of lease obligations are comprised of vehicles and a research and development facility operated by a third party under management's direction. Vehicle lease terms vary by country with terms generally between one year and four years.

The following table summarizes the components of lease expense:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Operating lease cost	\$ 224	\$ 220	\$ 194
Variable lease cost	55	44	50
Short-term lease cost	20	17	19
Sublease income	(6)	(7)	(4)
Total operating lease expense	\$ 293	\$ 274	\$ 259

Operating lease right-of-use assets and liabilities were as follows:

Dollars in Millions	December 31,	
	2022	2021
Other non-current assets	\$ 1,220	\$ 919
Other current liabilities	\$ 136	\$ 169
Other non-current liabilities	1,261	874
Total liabilities	\$ 1,397	\$ 1,043

Future lease payments for non-cancellable operating leases as of December 31, 2022 were as follows:

Dollars in Millions	
2023	\$ 187
2024	191
2025	169
2026	149
2027	145
Thereafter	933
Total future lease payments	1,774
Less imputed interest	(377)
Total lease liability	\$ 1,397

Right-of-use assets obtained in exchange for new operating lease obligations were \$492 million in 2022. Cash paid for amounts included in the measurement of operating lease liabilities was \$203 million in 2022, \$189 million in 2021 and \$164 million in 2020.

Undiscounted lease obligations for operating leases not yet commenced were \$754 million as of December 31, 2022. The obligation primarily relates to a research and development facility that is being constructed by the lessor and is expected to be ready for use in 2025.

A right-of-use asset impairment charge of \$31 million was incurred during 2020 due to a site vacancy and partial sublease. The fair value of the right-of-use asset was determined using an income approach incorporating potential future cash flows associated with the sublease of the building.

Supplemental balance sheet information related to leases was as follows:

	December 31,	
	2022	2021
Weighted average remaining lease term	11 years	10 years
Weighted average discount rate	4 %	3 %

Note 15. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

The changes in the carrying amounts in Goodwill were as follows:

Dollars in Millions	December 31,	
	2022	2021
Beginning balance	\$ 20,502	\$ 20,547
Turning Point acquisition	695	—
Currency translation and other adjustments	(48)	(45)
Ending balance	\$ 21,149	\$ 20,502

Other Intangible Assets

Other intangible assets consisted of the following:

Dollars in Millions		December 31,					
		2022			2021		
	Estimated Useful Lives	Gross carrying amounts	Accumulated amortization	Other intangible assets, net	Gross carrying amounts	Accumulated amortization	Other intangible assets, net
Other intangible assets ^(a) :							
Licenses	5 – 15 years	\$ 400	\$ (128)	\$ 272	\$ 307	\$ (102)	\$ 205
Acquired marketed product	3 – 15 years	60,477	(31,949)	28,528	60,454	(22,380)	38,074
Capitalized software	3 – 10 years	1,555	(1,056)	499	1,499	(1,001)	498
IPRD ^(a)		6,560	—	6,560	3,750	—	3,750
Total Other intangible assets		\$ 68,992	\$ (33,133)	\$ 35,859	\$ 66,010	\$ (23,483)	\$ 42,527

(a) Includes other intangible assets recognized as part of the Turning Point acquisition in 2022. Refer to “—Note 4. Acquisitions, Divestitures, Licensing and Other Arrangements” for further information related to the Turning Point acquisition.

Amortization expense of Other intangible assets was \$9.7 billion in 2022, \$10.2 billion in 2021 and \$9.9 billion in 2020. Future annual amortization expense of Other intangible assets is expected to be approximately \$9.2 billion in 2023, \$8.4 billion in 2024, \$2.9 billion in 2025, \$1.4 billion in 2026 and \$1.3 billion in 2027.

Other intangible asset impairment charges were \$101 million in 2022, \$1.2 billion in 2021 and \$1.1 billion in 2020.

In 2022, \$98 million IPRD impairment charges were recorded in Research and development expense resulting from decisions to discontinue development of investigational compounds in connection with the prioritization of current pipeline opportunities. The charges represented full write-downs.

In 2021, a \$610 million IPRD impairment charge for an investigational compound was recorded in Research and development expense primarily resulting from changes in clinical timelines, expected launch dates and competitive landscape. The compound is being studied as a potential treatment for hematologic diseases and was acquired in the acquisition of Celgene. The charge represented a partial write-down of its carrying value based on the estimated fair value determined using discounted cash flow projections. Additionally, a \$230 million IPRD impairment charge was recorded in Research and development expense following a decision to discontinue development of an investigational compound in connection with the prioritization of current pipeline opportunities. The compound was being studied as a potential treatment for fibrotic diseases and was acquired in the acquisition of Celgene. The charge represented a full write-down based on the estimated fair value determined using discounted cash flow projections.

In 2021, *Inrebic* EU regulatory approval milestones of \$300 million were achieved resulting in a \$385 million increase to the acquired marketed product rights intangible asset, after establishing the applicable deferred tax liability. An impairment charge of \$315 million was recognized in Cost of products sold as the carrying value of this asset exceeded the projected undiscounted cash flows of the asset. The charge was equal to the excess of the asset's carrying value over its estimated fair value using discounted cash flow projections.

In 2020, a \$575 million impairment charge was recorded in Cost of products sold resulting from the lower cash flow projections reflecting revised commercial forecasts for *Inrebic*, resulting in the full impairment of the asset. Additionally, a \$470 million impairment charge was recorded in Research and development expense following a decision to discontinue the orva-cel program development. *Inrebic* and orva-cel were obtained in connection with the acquisition of Celgene.

Note 16. SUPPLEMENTAL FINANCIAL INFORMATION

Dollars in Millions	December 31,	
	2022	2021
Income taxes	\$ 3,547	\$ 2,786
Research and development	579	514
Contract assets	504	361
Equity investments	—	255
Restricted cash ^(a)	148	140
Other	1,017	776
Other current assets	\$ 5,795	\$ 4,832

Dollars in Millions	December 31,	
	2022	2021
Equity investments	\$ 2,187	\$ 2,713
Inventories	484	909
Operating leases	1,220	919
Pension and postretirement	285	317
Research and development	496	248
Restricted cash ^(a)	54	197
Other	214	232
Other non-current assets	\$ 4,940	\$ 5,535

(a) Restricted cash consists of funds restricted for annual Company contributions to the defined contribution plan in the U.S. and escrow for litigation settlements. Cash is restricted when withdrawal or general use is contractually or legally restricted.

Dollars in Millions	December 31,	
	2022	2021
Rebates and discounts	\$ 6,702	\$ 6,399
Income taxes	942	754
Employee compensation and benefits	1,425	1,375
Research and development	1,359	1,373
Dividends	1,196	1,186
Interest	321	378
Royalties	431	410
Operating leases	136	169
Other	2,074	1,927
Other current liabilities	\$ 14,586	\$ 13,971

Dollars in Millions	December 31,	
	2022	2021
Income taxes	\$ 3,992	\$ 4,835
Pension and postretirement	402	654
Operating leases	1,261	874
Deferred income	283	326
Deferred compensation	349	427
Other	303	218
Other non-current liabilities	\$ 6,590	\$ 7,334

Note 17. EQUITY

Dollars and Shares in Millions	Common Stock		Capital in Excess of Par Value of Stock	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock		Noncontrolling Interest
	Shares	Par Value				Shares	Cost	
Balance at January 1, 2020	2,923	\$ 292	\$ 43,709	\$ (1,520)	\$34,474	672	\$(25,357)	\$ 100
Net loss	—	—	—	—	(9,015)	—	—	20
Other Comprehensive Income/(Loss)	—	—	—	(319)	—	—	—	—
Cash dividends declared ^(a)	—	—	—	—	(4,178)	—	—	—
Share repurchase program	—	—	1,400	—	—	43	(2,993)	—
Stock compensation	—	—	(784)	—	—	(36)	2,113	—
Distributions	—	—	—	—	—	—	—	(60)
Balance at December 31, 2020	2,923	292	44,325	(1,839)	21,281	679	(26,237)	60
Net earnings	—	—	—	—	6,994	—	—	20
Other Comprehensive Income/(Loss)	—	—	—	571	—	—	—	—
Cash dividends declared ^(a)	—	—	—	—	(4,455)	—	—	—
Share repurchase program	—	—	—	—	—	102	(6,240)	—
Stock compensation	—	—	36	—	—	(34)	1,218	—
Distributions	—	—	—	—	—	—	—	(20)
Balance at December 31, 2021	2,923	292	44,361	(1,268)	23,820	747	(31,259)	60
Net earnings	—	—	—	—	6,327	—	—	18
Other Comprehensive Income/(Loss)	—	—	—	(13)	—	—	—	—
Cash dividends declared ^(a)	—	—	—	—	(4,644)	—	—	—
Share repurchase program	—	—	—	—	—	109	(8,001)	—
Stock compensation	—	—	804	—	—	(31)	642	—
Distributions	—	—	—	—	—	—	—	(21)
Balance at December 31, 2022	2,923	\$ 292	\$ 45,165	\$ (1,281)	\$25,503	825	\$(38,618)	\$ 57

(a) Cash dividends declared per common share were \$2.19 in 2022, \$2.01 in 2021 and \$1.84 in 2020.

BMS has a share repurchase program, authorized by its Board of Directors, allowing for repurchases of its shares, effected in the open market or through privately negotiated transactions in compliance with Rule 10b-18 under the Exchange Act, including through Rule 10b5-1 trading plans. The share repurchase program does not obligate us to repurchase any specific number of shares, does not have a specific 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. The outstanding share repurchase authorization under the program was \$15.2 billion as of December 31, 2021.

In 2022, BMS entered into accelerated share repurchase ("ASR") agreements to repurchase an aggregate amount of \$5.0 billion of the Company's common stock. The ASR agreements were funded with cash on-hand. The Company received approximately 69 million shares of common stock during the year which were included in treasury stock. The total number of shares repurchased under the ASR agreements was based on volume-weighted average prices of BMS's common stock during the terms of the ASR transactions less a discount and subject to adjustments pursuant to the terms and conditions of the ASR agreements. In addition, as part of its share repurchase program, BMS repurchased approximately 40 million shares of its common stock for \$3.0 billion during the year ended December 31, 2022.

The remaining share repurchase capacity under the share repurchase program was \$7.2 billion as of December 31, 2022.

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

Dollars in Millions	Year Ended December 31,								
	2022			2021			2020		
	Pretax	Tax	After Tax	Pretax	Tax	After Tax	Pretax	Tax	After Tax
Derivatives qualifying as cash flow hedges:									
Unrealized gains/(losses)	\$ 585	\$ (79)	\$ 506	\$ 364	\$ (34)	\$ 330	\$ (216)	\$ 7	\$ (209)
Reclassified to net earnings ^(a)	(524)	72	(452)	95	(10)	85	(54)	7	(47)
Derivatives qualifying as cash flow hedges	61	(7)	54	459	(44)	415	(270)	14	(256)
Pension and postretirement benefits:									
Actuarial gains/(losses)	146	(25)	121	220	(40)	180	(134)	25	(109)
Amortization ^(b)	21	(6)	15	41	(10)	31	33	(6)	27
Settlements ^(b)	11	(2)	9	(6)	1	(5)	10	(3)	7
Pension and postretirement benefits	178	(33)	145	255	(49)	206	(91)	16	(75)
Marketable debt securities:									
Unrealized (losses)gains	(2)	—	(2)	(11)	2	(9)	7	(1)	6
Realized (gains)/losses ^(b)	—	—	—	—	—	—	(1)	—	(1)
Marketable debt securities	(2)	—	(2)	(11)	2	(9)	6	(1)	5
Foreign currency translation	(183)	(27)	(210)	(14)	(27)	(41)	(19)	26	7
Other Comprehensive Income/(Loss)	\$ 54	\$ (67)	\$ (13)	\$ 689	\$ (118)	\$ 571	\$ (374)	\$ 55	\$ (319)

(a) Included in Cost of products sold and Other (income)/expense, net. Refer to “—Note 9. Financial Instruments and Fair Value Measurements” for further information.

(b) Included in Other (income)/expense, net.

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

Dollars in Millions	December 31,	
	2022	2021
Derivatives qualifying as cash flow hedges	\$ 232	\$ 178
Pension and postretirement benefits	(623)	(768)
Marketable debt securities	—	2
Foreign currency translation ^(a)	(890)	(680)
Accumulated other comprehensive loss	\$ (1,281)	\$ (1,268)

(a) Included in foreign currency are net investment hedges gains of \$125 million and \$30 million as of December 31, 2022 and December 31, 2021.

Note 18. RETIREMENT BENEFITS

BMS sponsors defined benefit pension plans, defined contribution plans and termination indemnity plans for certain employees.

Defined Benefit Pension Plans

The net periodic benefit cost of defined benefit pension plans was \$27 million, \$28 million, and \$42 million during the years ended December 31, 2022, 2021 and 2020, respectively.

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

Dollars in Millions	Year Ended December 31,	
	2022	2021
Benefit obligations at beginning of year	\$ 2,935	\$ 3,242
Service cost—benefits earned during the year	36	51
Interest cost	42	35
Settlements and curtailments	(58)	(101)
Actuarial (gains)/losses	(760)	(153)
Benefits paid	(68)	(46)
Foreign currency and other	(151)	(93)
Benefit obligations at end of year	\$ 1,976	\$ 2,935
Fair value of plan assets at beginning of year	\$ 2,815	\$ 2,807
Actual return on plan assets	(570)	125
Employer contributions	76	87
Settlements	(53)	(83)
Benefits paid	(68)	(46)
Foreign currency and other	(173)	(75)
Fair value of plan assets at end of year	\$ 2,027	\$ 2,815
Funded status	\$ 51	\$ (120)
Assets/(Liabilities) recognized:		
Other non-current assets	\$ 285	\$ 317
Other current liabilities	(21)	(24)
Other non-current liabilities	(213)	(413)
Funded status	\$ 51	\$ (120)
Recognized in Accumulated other comprehensive loss:		
Net actuarial losses	\$ 869	\$ 1,015
Prior service credit	(25)	(29)
Total	\$ 844	\$ 986

The accumulated benefit obligation for defined benefit pension plans was \$2.0 billion and \$2.9 billion at December 31, 2022 and 2021, respectively.

Additional information related to pension plans was as follows:

Dollars in Millions	December 31,	
	2022	2021
Pension plans with projected benefit obligations in excess of plan assets:		
Projected benefit obligation	\$ 728	\$ 1,274
Fair value of plan assets	495	836
Pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	728	1,245
Fair value of plan assets	495	832

Actuarial Assumptions

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

	December 31,	
	2022	2021
Discount rate	4.0 %	1.6 %
Rate of compensation increase	1.2 %	1.0 %
Interest crediting rate	2.5 %	2.1 %

Weighted-average actuarial assumptions used to determine defined benefit pension plan net periodic benefit cost were as follows:

	Year Ended December 31,		
	2022	2021	2020
Discount rate	1.6 %	1.2 %	1.6 %
Expected long-term return on plan assets	3.6 %	3.6 %	4.1 %
Rate of compensation increase	1.0 %	1.3 %	1.3 %
Interest crediting rate	2.1 %	2.2 %	2.2 %

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

The expected return on plan assets assumption for each plan is based on management's expectations of long-term average rates of return to be achieved by the underlying investment portfolio. 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.

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 and losses related to plan benefit obligations primarily resulted from changes in discount rates.

Postretirement Benefit Plans

Comprehensive medical and group life benefits are provided for substantially all BMS 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. Postretirement benefit plan obligations were \$187 million and \$237 million at December 31, 2022 and 2021, respectively. The weighted-average discount rate used to determine benefit obligations was 5.0% and 2.5% at December 31, 2022 and 2021, respectively. The net periodic benefit credits were not material.

As a result of the Bristol Myers Squibb Retirement Income Plan's termination in 2019, \$381 million of assets held in a separate account within the Pension Trust used to fund retiree medical plan payments was reverted back to the Company in 2020, resulting in an excise tax of \$76 million.

Plan Assets

The fair value of pension plan assets by asset category at December 31, 2022 and 2021 was as follows:

Dollars in Millions	December 31, 2022				December 31, 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Plan Assets								
Equity securities	\$ 1	\$ —	\$ —	\$ 1	\$ 44	\$ —	\$ —	\$ 44
Equity funds	—	368	—	368	—	625	—	625
Fixed income funds	—	697	—	697	—	815	—	815
Corporate debt securities	—	376	—	376	—	485	—	485
U.S. Treasury and agency securities	—	75	—	75	—	67	—	67
Insurance contracts	—	—	123	123	—	—	130	130
Cash and cash equivalents	43	—	—	43	47	—	—	47
Other	—	15	35	50	—	224	42	266
Plan assets subject to leveling	\$ 44	\$ 1,531	\$ 158	\$ 1,733	\$ 91	\$ 2,216	\$ 172	\$ 2,479
Plan assets measured at NAV as a practical expedient				294				336
Net plan assets				\$ 2,027				\$ 2,815

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 and fixed income 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.

There were no transfers between Levels 1, 2 and 3 during the year ended December 31, 2022. Investments using the practical expedient consist primarily of multi-asset funds which are redeemable on either a daily, 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. Individual plan investment allocations are determined by local fiduciary committees and the composition of total assets for all pension plans at December 31, 2022 was broadly characterized as an allocation between equity securities (23%), debt securities (66%) and other investments (11%).

Contributions and Estimated Future Benefit Payments

The Company's estimated annual contributions and future benefits payments are not expected to be material.

Savings Plans

The principal defined contribution plan is the Bristol-Myers Squibb Savings and Investment Program. The contributions are based on employee contributions and the level of Company match. The U.S. defined contribution plan expense was approximately \$360 million in 2022, \$350 million in 2021 and \$290 million in 2020.

Note 19. EMPLOYEE STOCK BENEFIT PLANS

On May 4, 2021, the shareholders approved the 2021 Stock Award and Incentive Plan (the "2021 Plan") replacing our previous equity plans. The 2021 Plan authorizes awards in the form of incentive stock options, nonqualified stock options, stock appreciation rights ("SARs"), restricted stock, restricted stock units ("RSUs"), dividend equivalents, performance share units ("PSUs"), market share units ("MSUs") and other stock-based awards. As of December 31, 2022, the 2021 Plan was the only plan under which we were authorized to grant equity awards.

The 2021 Plan provides for 85 million shares to be authorized for grants plus shares recaptured upon forfeitures or other terminations of awards under our previous equity awards plans, subject to adjustments in accordance with the terms of the 2021 Plan. As of December 31, 2022, 81 million shares were available for award and 44 million equity awards were outstanding (stock options, RSUs, MSUs and PSUs). Shares generally are issued from treasury stock to satisfy BMS's obligations under the 2021 Plan and our prior equity award plans.

Under the 2021 Plan, executive officers and other 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 10 years. The 2021 Plan provides for the granting of SARs 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 award's exercise price. BMS did not grant stock options or SARs during the years ended December 31, 2022, 2021 and 2020. Options that were outstanding during those years generally vested ratably over four years (some options granted as replacements for options held by Celgene option holders upon the acquisition of Celgene in 2019 provided for cliff vesting and/or longer or shorter vesting periods).

RSUs are granted to executive officers and other employees, subject to restrictions as to continuous employment. Generally, vesting occurs ratably over a three- to four-year period from grant date, subject to accelerated vesting in specified circumstances. A stock unit is a right to receive stock at the end of the specified vesting and/or deferral period; stock units have no voting rights. BMS grants non-forfeitable stock units to its non-employee directors.

MSUs are granted to executive officers. Vesting is conditioned upon continuous employment and occurs ratably over four years, subject to accelerated vesting in specified circumstances. The number of shares issued upon vesting of MSUs is determined based on a specified payout factor requiring that the market price per share at a specified measurement date be at least 80% of the grant-date share price (market condition) for awards granted in 2022 (60% prior to 2022). Attainment of a higher payout factor, calculated as the share price on measurement date divided by share price on award date, results in a higher percentage payout of MSUs, up to a maximum of 225% of the target number of MSUs for awards granted in 2022 (200% prior to 2022). The share price used in the payout factor is calculated using an average of the closing prices on the grant date or measurement date, and the nine trading days immediately preceding the grant date or measurement date.

PSUs are granted to executive officers, have a three-year performance cycle and are granted as a target number of stock units subject to adjustment. The number of shares issued when PSUs vest is determined based on the achievement of specified performance goals (a performance condition) and based on BMS's three-year total shareholder return relative to a peer group of companies (a market condition) and can range from 0% to a maximum of 200% of the target number of PSUs. Vesting is conditioned upon continuous employment and occurs on the third anniversary of the grant date, subject to accelerated vesting in specified circumstances.

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. Stock-based compensation expense was as follows:

Dollars in Millions	Year Ended December 31,		
	2022	2021	2020
Cost of products sold	\$ 41	\$ 57	\$ 37
Marketing, selling and administrative	195	241	332
Research and development	221	272	339
Other (income)/expense, net	—	13	71
Total stock-based compensation expense	\$ 457	\$ 583	\$ 779
Income tax benefit ^(a)	\$ 91	\$ 120	\$ 158

(a) Income tax benefit excludes excess tax benefits from share-based compensation awards that were vested or exercised of \$74 million in 2022, \$38 million in 2021 and \$35 million in 2020.

The total stock-based compensation expense for the years ended December 31, 2022, 2021 and 2020 includes \$96 million, \$192 million and \$382 million, respectively, related to Celgene post-combination service period. The expense for the accelerated vesting of awards related to the Celgene acquisition was not material in 2022 and was \$13 million and \$71 million in 2021 and 2020, respectively.

The following table summarizes the stock compensation activity for the year ended December 31, 2022:

Shares in Millions	Stock Options		RSUs		MSUs		PSUs	
	Number of Options	Weighted-Average Exercise Price of Shares	Number of Nonvested RSUs	Weighted-Average Grant-Date Fair Value	Number of Nonvested MSUs	Weighted-Average Grant-Date Fair Value	Number of Nonvested PSUs	Weighted-Average Grant-Date Fair Value
Balance at January 1, 2022	47.0	\$ 53.00	19.1	\$ 54.92	1.8	\$ 56.51	3.4	\$ 55.38
Granted	—	—	8.7	64.12	1.0	60.74	1.4	66.76
Released/Exercised	(24.3)	50.79	(8.2)	55.12	(0.8)	56.95	(1.3)	49.99
Adjustments for actual payout	—	—	—	—	0.1	54.26	0.4	49.99
Forfeited/Canceled	(0.8)	58.70	(2.7)	57.43	(0.3)	57.63	(0.4)	60.26
Balance at December 31, 2022	21.9	55.25	16.9	59.17	1.8	58.25	3.5	60.88
Expected to vest			14.9	58.97	1.6	58.12	3.2	60.45

Dollars in Millions	Restricted Stock Units	Market Share Units	Performance Share Units
Unrecognized compensation cost	\$ 734	\$ 49	\$ 89
Expected weighted-average period in years of compensation cost to be recognized	2.5	2.8	1.7

Amounts in Millions, except per share data	2022	2021	2020
Weighted-average grant date fair value (per share):			
RSUs	\$ 64.12	\$ 56.58	\$ 53.65
MSUs	60.74	58.04	53.92
PSUs	66.76	59.04	55.61

Fair value of awards that vested:			
RSUs - replacement awards	\$ 152	\$ 519	\$ 777
RSUs	300	246	122
MSUs	44	37	37
PSUs	68	61	59
Total intrinsic value of stock options exercised	526	512	556

The fair value of RSUs approximates the closing market price of BMS's common stock on the grant date after adjusting for the units not eligible for accrual of dividend equivalents. The fair value of MSUs is estimated as of the grant date using a Monte Carlo simulation. The fair value of PSUs is estimated as of the grant date for the portion related to the relative total shareholder return measure, using a Monte Carlo simulation and, for the remaining portion, based on the closing market price of BMS's common stock on the grant date after adjusting for the units not eligible for accrual of dividend equivalents, and taking into account the probability of satisfying the performance condition as of the grant date.

The following table summarizes significant outstanding and exercisable options at December 31, 2022:

Range of Exercise Prices	Number of Options (in millions)	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price Per Share	Aggregate Intrinsic Value (in millions)
\$10 - \$40	2.2	1.0	\$ 35.02	\$ 80
\$40 - \$55	7.7	3.3	48.92	177
\$55 - \$65	8.0	2.7	59.45	100
\$65 +	4.0	3.2	70.02	9
Outstanding	21.9	2.8	55.25	\$ 366
Exercisable	21.9	2.8	55.25	\$ 366

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the closing stock price of \$71.95 on December 30, 2022, which was the last trading day of 2022.

Note 20. LEGAL PROCEEDINGS AND CONTINGENCIES

BMS 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. These matters may 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, 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. Legal proceedings that are significant or that BMS believes could become significant or material are described below.

While BMS does not believe that any of these matters, except as otherwise specifically noted below, will have a material adverse effect on its financial position or liquidity as BMS believes it has substantial defenses in the matters, the outcomes of BMS's legal proceedings and other contingencies are inherently unpredictable and subject to significant uncertainties. There can be no assurance that there will not be an increase in the scope of one or more of these pending matters or any other or future lawsuits, claims, government investigations or other legal proceedings will not be material to BMS's financial position, results of operations or cash flows for a particular period. Furthermore, failure to successfully enforce BMS's patent rights would likely result in substantial decreases in the respective product revenues from generic competition.

Unless otherwise noted, BMS is unable to assess the outcome of the respective matters nor is it able to estimate the possible loss or range of losses that could potentially result for such matters. Contingency accruals are recognized when it is probable that a liability will be incurred and the amount of the related loss can be reasonably estimated. Developments in legal proceedings and other matters that could cause changes in the amounts previously accrued are evaluated each reporting period. For a discussion of BMS's tax contingencies, see "—Note 7. Income Taxes."

INTELLECTUAL PROPERTY**Anti-PD-1 and Anti-PD-L1 — U.S.**

In September 2015, Dana-Farber Cancer Institute ("Dana-Farber") filed a complaint in the U.S. District Court for the District of Massachusetts seeking to correct the inventorship on up to six related U.S. patents directed to methods of treating cancer using PD-1 and PD-L1 antibodies. Specifically, Dana-Farber sought to add two scientists as inventors to these patents. In October 2017, Pfizer was allowed to intervene in the 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 May 2019, the District Court issued a decision ruling that the two scientists should be added as inventors to the patents, which decision was affirmed on appeal. In June 2019, Dana-Farber filed a new lawsuit in the District of Massachusetts against BMS seeking damages as a result of the decision adding the scientists as inventors. In February 2021, BMS filed a motion to dismiss that complaint. In August 2021, the Court denied the motion to dismiss, but ruled that Dana-Farber's claims for damages before May 17, 2019—the date of the District Court's ruling that Dana-Farber was a co-inventor of the patents—are preempted by federal patent law. On January 25, 2023, the Court held a hearing on a motion filed by BMS requesting that the Court enter summary judgment in BMS' favor. A trial has been scheduled for May 2023.

On March 17, 2022, BMS filed a lawsuit in U.S. District Court for the District of Delaware against AstraZeneca Pharmaceuticals LP and AstraZeneca UK Ltd (collectively, "AZ") alleging that AZ's marketing of the PD-L1 antibody Imfinzi infringes certain claims of U.S. Patent Nos. 9,580,505, 9,580,507, 10,138,299, 10,308,714, 10,266,594, 10,266,595, 10,266,596 and 10,323,092. A trial has been scheduled to begin on April 22, 2024.

CAR-T — U.S.

In October 2017, Juno and Sloan Kettering Institute for Cancer Research (“SKI”) filed a complaint for patent infringement against Kite Pharma, Inc. (“Kite”) in the U.S. District Court for the Central District of California. The complaint alleged that Kite’s *Yescarta** product infringes certain claims of U.S. Patent No. 7,446,190 (the “’190 Patent”) concerning CAR-T cell technologies. Kite filed an answer and counterclaims asserting non-infringement and invalidity of the ’190 Patent. In December 2019, following an eight-day trial, the jury rejected Kite’s defenses, finding that Kite willfully infringed the ’190 Patent and awarding to Juno and SKI a reasonable royalty consisting of a \$585 million upfront payment and a 27.6% running royalty on Kite’s sales of *Yescarta** through the expiration of the ’190 Patent in August 2024. In January 2020, Kite renewed its previous motion for judgment as a matter of law and also moved for a new trial, and Juno filed a motion seeking enhanced damages, supplemental damages, ongoing royalties, and prejudgment interest. In March 2020, the Court denied both of Kite’s motions in their entirety. In April 2020, the Court granted in part Juno’s motion and entered a final judgment awarding to Juno and SKI approximately \$1.2 billion in royalties, interest and enhanced damages and a 27.6% running royalty on Kite’s sales of *Yescarta** from December 13, 2019 through the expiration of the ’190 Patent in August 2024. In April 2020, Kite appealed the final judgment to the U.S. Court of Appeals for the Federal Circuit and the Court held an oral hearing on July 6, 2021. In August 2021, a Federal Circuit panel reversed the jury verdict and district court decision and found the ’190 Patent to be invalid. In October 2021, Juno and SKI filed a petition with the Federal Circuit for panel and en banc rehearing, which the Federal Circuit denied on January 14, 2022. On June 13, 2022, Juno and SKI filed a petition for a writ of certiorari with the U.S. Supreme Court, which the Court denied on November 7, 2022. On November 23, 2022, Juno and SKI filed a petition for rehearing with the Court, which the Court denied on January 9, 2023.

CTLA-4 — U.S.

On January 23, 2023, BMS filed a lawsuit in U.S. District Court for the District of Delaware against AstraZeneca Pharmaceuticals LP and AstraZeneca AB (collectively, “AZ AB”) alleging that AZ AB’s marketing of the CTLA-4 antibody Imjudo infringes certain claims of U.S. Patent Nos. 9,320,811 and 9,273, 135. No trial date has been scheduled.

***Eliquis* - Europe**

In November 2020 and January 2021, Sandoz Limited (“Sandoz”) and Teva Pharmaceutical Industries Ltd. (“Teva Limited”), respectively, filed lawsuits in the United Kingdom seeking revocation of the UK apixaban composition of matter patent and related Supplementary Protection Certificate (“SPC”). BMS subsequently filed counterclaims for infringement in both actions. A trial took place in February 2022 and in a judgment issued on April 7, 2022, the judge found the UK apixaban composition of matter patent and related SPC invalid. On November 2, 2022, BMS was granted permission from the Court of Appeal to appeal the judgment and a hearing is scheduled to take place on April 18-19, 2023.

Similar lawsuits have been filed in various other countries in Europe seeking revocation of our composition of matter patents and SPCs relating to *Eliquis*, and trials have been scheduled in certain of those cases, including in Norway and France in early 2023. In May 2022, a Dutch court issued a decision denying a request by BMS for a preliminary injunction that would have prevented an at-risk generic launch in the Netherlands by Sandoz prior to a full trial on the validity of the Dutch composition of matter patent and SPC.

Following the above decisions in the UK and the Netherlands, generic manufacturers have begun marketing generic versions of *Eliquis* in the UK and the Netherlands, and may seek to market generic versions of *Eliquis* in additional countries in Europe, prior to the expiration of our patents, which may lead to additional infringement and invalidity actions involving *Eliquis* patents being filed in various countries in Europe.

In September 2022, a trial was held in Sweden regarding Teva’s challenge to the validity of the Swedish apixaban composition of matter patent and related SPC, and a decision was issued on November 2, 2022, confirming their validity and rejecting Teva’s claims. In September 2022, BMS filed a request for a preliminary injunction against Teva in Denmark, but the request was denied in December 2022, based on the finding that there is no imminent threat of a launch by Teva in Denmark. In December 2022, BMS filed a request for a preliminary injunction in Finland against Teva, which request was granted in January 2023, prohibiting Teva from offering, storing or selling generic *Eliquis* products in Finland that have obtained price and reimbursement. BMS has also requested that a preliminary injunction be entered against Teva in Ireland, for which a hearing occurred in February 2023.

***Onureg* – U.S.**

In November 2021, BMS received a Notice Letter from Accord notifying BMS that Accord had filed an ANDA containing a paragraph IV certification seeking approval of a generic version of *Onureg* in the U.S. and challenging the one FDA Orange Book-listed formulation patent expiring in 2030. In response, BMS filed a patent infringement action against Accord in the U.S. District Court for the District of Delaware. A trial has been scheduled to begin on March 18, 2024.

Plavix* - Australia

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., subsequently changed its name to Apotex (“GenRx-Apotex”). In August 2007, GenRx-Apotex filed an application in the Federal Court of Australia 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 of Australia granted Sanofi’s injunction. A subsidiary of BMS 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 GenRx-Apotex case. 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. BMS 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. GenRx-Apotex appealed. On September 29, 2009, the Full Court held all of the claims of Patent No. 597784 invalid. In March 2010, the High Court of Australia denied a request by BMS and Sanofi to hear an appeal of the Full Court decision. The case was remanded to the Federal Court for further proceedings related to damages sought by GenRx-Apotex. BMS and GenRx-Apotex settled, and the GenRx-Apotex case was dismissed. The Australian government intervened in this matter seeking maximum damages up to 449 million AUD (\$304 million), plus interest, which would be split between BMS and Sanofi, for alleged losses experienced for paying a higher price for branded *Plavix** during the period when the injunction was in place. BMS and Sanofi dispute that the Australian government is entitled to any damages. A trial was concluded in September 2017. In April 2020, the Federal Court issued a decision dismissing the Australian government’s claim for damages. In May 2020, the Australian government appealed the Federal Court’s decision and an appeal hearing concluded in February 2021.

Sprycel - U.S.

In January 2022, BMS received a Notice Letter from Xspray Pharma AB (“Xspray”), Nanocopoeia, LLC (“Nanocopoeia”) and Handa Oncology, LLC (“Handa”), respectively, notifying BMS that each had filed a 505(b)(2) NDA application containing paragraph IV certifications seeking approval of a dasatinib product in the U.S. and challenging two FDA Orange Book-listed monohydrate form patents expiring in 2025 and 2026. In February 2022, BMS filed a patent infringement action against Xspray in the U.S. District Court for the District of New Jersey. In May 2022, BMS filed a patent infringement action against Nanocopoeia in the U.S. District Court for the District of Minnesota. In November 2022, BMS filed a patent infringement action against Handa in the U.S. District Court for the Northern District of California. No trial dates have been scheduled in any of these actions. Both Xspray and Nanocopoeia have filed motions for a judgment based on the pleadings, and a hearing on Nanocopoeia’s motion took place on January 5, 2023.

Zeposia - U.S.

On October 15, 2021, Actelion Pharmaceuticals LTD and Actelion Pharmaceuticals US, INC (“Actelion”) filed a complaint for patent infringement in the United States District Court for the District of New Jersey against BMS and Celgene for alleged infringement of U.S. Patent No. 10,251,867 (the “’867 Patent”). The Complaint alleges that the sale of *Zeposia* infringes certain claims of the ’867 Patent and Actelion is seeking damages and injunctive relief. No trial date has been scheduled.

PRICING, SALES AND PROMOTIONAL PRACTICES LITIGATION***Plavix* State Attorneys General Lawsuits***

BMS and certain Sanofi entities are defendants in consumer protection actions brought by the attorneys general of Hawaii and New Mexico relating to the labeling, sales and/or promotion of *Plavix**. A trial in the Hawaii matter occurred in 2020. In February 2021, the Court issued a decision against Sanofi and BMS, imposing penalties in the total amount of \$834 million, with \$417 million attributed to BMS. Sanofi and BMS disagree with the decision and are appealing it. An oral argument before the Hawaii Supreme Court occurred in December 2022. BMS remains confident in the merits of its case and its likelihood of success on appeal and does not believe establishing a reserve is warranted for this matter. In September 2022, the parties settled the New Mexico matter.

PRODUCT LIABILITY LITIGATION

BMS 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, BMS also faces unfiled claims involving its products.

Abilify*

BMS 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. Cases have been filed in state and federal courts and additional cases are pending in Canada. The Judicial Panel on Multidistrict Litigation consolidated the federal court cases for pretrial purposes in the U.S. District Court for the Northern District of Florida. In February 2019, BMS 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 various state courts, including California and New Jersey. To date, approximately 2,700 cases, comprising approximately 3,900 plaintiffs, have been dismissed based on participation in the settlement program or failure to comply with settlement related court orders and all remaining cases in the U.S. MDL litigation have since been resolved. Three inactive cases remain in New Jersey State court. There are eleven cases pending in Canada (four class actions, seven individual injury claims). Out of the eleven cases, only two are active (the class actions in Quebec and Ontario), both of which class actions have now been certified.

Byetta*

Amylin, a former subsidiary of BMS, and Lilly are co-defendants in product liability litigation related to *Byetta**. This litigation involved lawsuits on behalf of plaintiffs, 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 were pending in Federal Court in San Diego in an MDL or in a coordinated proceeding in California Superior Court in Los Angeles (“JCCP”). In April 2020 the defendants filed a motion for summary judgment based on federal preemption and a motion for summary judgment based on the absence of general causation evidence in the MDL and JCCP. Both motions were granted in March 2021 and April 2021, respectively. The MDL and JCCP decisions are both final and all claims in the MDL and JCCP have since been dismissed. All thyroid cancer claims that were pending in these courts have been dismissed as well.

Onglyza*

BMS 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**. In February 2018, the Judicial Panel on Multidistrict Litigation ordered all the federal *Onglyza** cases to be transferred to an MDL in the U.S. District Court for the Eastern District of Kentucky. A significant majority of the claims are pending in the MDL, with others pending in a coordinated proceeding in California Superior Court in San Francisco (“JCCP”). On September 24, 2021, the JCCP court granted defendants’ motion to exclude plaintiffs’ only general causation expert and on January 5, 2022, the MDL court likewise granted defendants’ motion to exclude plaintiffs’ expert. On March 30, 2022, the JCCP court granted summary judgment to defendants, thus effectively dismissing the 18 claims previously pending in California state court. Plaintiffs have filed an appeal. Defendants filed a summary judgment motion in the MDL as well, which the MDL court granted on August 2, 2022. Plaintiffs in the MDL then moved to alter or amend the MDL court’s order, and defendants opposed. On November 3, 2022, the MDL court denied plaintiffs’ motion to alter or amend its summary judgment order. Plaintiffs filed their Notice of Appeal on December 2, 2022. As part of BMS’s global diabetes business divestiture, BMS sold *Onglyza** to AstraZeneca in February 2014 and any potential liability with respect to *Onglyza** is expected to be shared with AstraZeneca.

SECURITIES LITIGATION**Celgene Securities Litigations**

Beginning in March 2018, two putative class actions were filed against Celgene and certain of its officers in the U.S. District Court for the District of New Jersey (the “Celgene Securities Class Action”). The complaints allege that the defendants violated federal securities laws by making misstatements and/or omissions concerning (1) trials of GED-0301, (2) Celgene’s 2020 outlook and projected sales of *Otezla**, and (3) the new drug application for *Zeposia*. The Court consolidated the two actions and appointed a lead plaintiff, lead counsel, and co-liaison counsel for the putative class. In February 2019, the defendants filed a motion to dismiss plaintiff’s amended complaint in full. In December 2019, the Court denied the motion to dismiss in part and granted the motion to dismiss in part (including all claims arising from alleged misstatements regarding GED-0301). Although the Court gave the plaintiff leave to re-plead the dismissed claims, it elected not to do so, and the dismissed claims are now dismissed with prejudice. In November 2020, the Court granted class certification with respect to the remaining claims.

In April 2020, certain Schwab management investment companies on behalf of certain Schwab funds filed an individual action in the U.S. District Court for the District of New Jersey asserting largely the same allegations as the Celgene Securities Class Action against the same remaining defendants in that action (the “Schwab Action”). In July 2020, the defendants filed a motion to dismiss the plaintiffs’ complaint in full. In March 2021, the Court granted in part and denied in part defendants’ motion to dismiss consistent with its decision in the Celgene Securities Class Action.

The California Public Employees' Retirement System in April 2021 (the "CalPERS Action"); DFA Investment Dimensions Group Inc., on behalf of certain of its funds; and American Century Mutual Funds, Inc., on behalf of certain of its funds, in July 2021 (respectively the "DFA Action" and the "American Century Action"), and GIC Private Limited in September 2021 (the "GIC Action"), filed separate individual actions in the U.S. District Court for the District of New Jersey asserting largely the same allegations as the Celgene Securities Class Action and the Schwab individual action against the same remaining defendants in those actions. In October 2021, these actions were consolidated for pre-trial proceedings with the Schwab Action. The court also consolidated any future direct actions raising common questions of law and fact with the Schwab Action.

No trial dates have been scheduled in any of the above Celgene Securities Litigations.

Contingent Value Rights Litigations

In June 2021, an action was filed against BMS in the U.S. District Court for the Southern District of New York asserting claims of alleged breaches of a Contingent Value Rights Agreement ("CVR Agreement") entered into in connection with the closing of BMS's acquisition of Celgene Corporation in November 2019. The successor trustee under the CVR Agreement alleges that BMS breached the CVR Agreement by allegedly failing to use "diligent efforts" to obtain FDA approval of liso-cel (*Breyanzi*) before a contractual milestone date, thereby avoiding a \$6.4 billion potential obligation to holders of the contingent value rights governed by the CVR Agreement and by allegedly failing to permit inspection of records in response to a request by the successor trustee. The successor trustee seeks damages in an amount to be determined at trial and other relief, including interest and attorneys' fees. BMS disputes the successor trustee's allegations and filed a motion to dismiss on July 23, 2021. On June 24, 2022, the court denied BMS's motion to dismiss.

In October 2021, alleged former Celgene stockholders filed a complaint in the U.S. District Court for the Southern District of New York asserting claims on behalf of a putative class of Celgene stockholders who received CVRs in the BMS merger with Celgene for violations of sections 14(a) and 20(a) of the Securities Exchange Act of 1934 relating to the joint proxy statement. That action later was consolidated with another action filed in the same court, and a consolidated complaint thereafter was filed asserting claims on behalf of a class of CVR acquirers, whether in the BMS merger with Celgene or otherwise, for violations of sections 11, 12(a)(2), and 15 of the Securities Act of 1933 and sections 10(b), 14(a) and 20(2) of the Securities Exchange Act of 1934. The complaint alleges that the February 22, 2019 joint proxy statement was materially false or misleading because it failed to disclose that BMS allegedly had no intention to obtain FDA approval for liso-cel (*Breyanzi*) by the applicable milestone date in the CVR Agreement and that certain statements made by BMS or certain BMS officers in periodic SEC filings, earnings calls, press releases, and investor presentations between December 2019 and November 2020 were materially false or misleading for the same reason. Defendants have moved to dismiss the complaint.

In November 2021, an alleged purchaser of CVRs filed a complaint in the Supreme Court of the State of New York for New York County asserting claims on behalf of a putative class of CVR acquirers for violations of sections 11(a) and 12(a)(2) of the Securities Act of 1933. The complaint alleges that the registration statement filed in connection with the proposed merger transaction between Celgene and BMS was materially false or misleading because it failed to disclose that allegedly BMS had no intention at the time to obtain FDA approval for liso-cel (*Breyanzi*) by the contractual milestone date. The complaint asserts claims against BMS, the members of its board of directors at the time of the joint proxy statement, and certain BMS officers who signed the registration statement. BMS removed the action to the U.S. District Court for the Southern District of New York. The plaintiff filed a motion to remand the action to the state court, which the court granted on September 19, 2022. Defendants have moved to stay the action pending resolution of the federal action and, in the alternative, to dismiss the complaint.

In November 2021, an alleged Celgene stockholder filed a complaint in the Superior Court of New Jersey, Union County asserting claims on behalf of two separate putative classes, one of acquirers of CVRs and one of acquirers of BMS common stock, for violations of sections 11(a), 12(a)(2), and 15 of the Securities Act of 1933. The complaint alleges that the registration statement filed in connection with the proposed merger transaction between Celgene and BMS was materially false or misleading because it failed to disclose that allegedly BMS had no intention at the time to obtain FDA approval for liso-cel (*Breyanzi*) by the contractual milestone date. The complaint asserts claims against BMS, the members of its board of directors at the time of the joint proxy statement, certain BMS officers who signed the registration statement and Celgene's former chairman and chief executive officer. BMS removed the action to the U.S. District Court for the District of New Jersey and filed a motion to transfer the action to the U.S. District Court for the Southern District of New York. The plaintiff filed a motion to remand the action to the state court, which the court granted on September 22, 2022. Defendants have moved to stay the action pending resolution of the federal action and, in the alternative, to dismiss the complaint.

No trial dates have been scheduled in any of the above CVR Litigations.

OTHER LITIGATION

HIV Medication Antitrust Litigations

BMS was sued with three other manufacturers of HIV medications in related lawsuits in the Northern District of California. The initial lawsuits, filed on behalf of indirect purchasers, alleged that the defendants' agreements to develop and sell fixed-dose combination products for the treatment of HIV, including *Atripla** and *Evotaz*, violate antitrust laws. In July 2020, the Court granted in part defendants' motion to dismiss, including dismissing with prejudice plaintiffs' claims as to an overarching conspiracy and plaintiffs' theories based on the alleged payment of royalties after patent expiration. Other claims, however, remained. In October 2021, BMS entered a settlement agreement with the indirect purchasers. On May 6, 2022, the Court granted final approval of that settlement.

In September and October 2020, two purported class actions were also filed asserting similar claims on behalf of direct purchasers. In March 2021, the Court dismissed one of the direct purchaser cases and limited the claims of the remaining direct purchaser case to those arising in 2016 or later. However, the Court gave plaintiffs leave to amend their complaints, and one plaintiff filed an amended complaint on March 16, 2021. In March 2022, BMS entered into a settlement agreement with the direct purchasers (excluding the retailers discussed below). On November 18, 2022, the Court granted final approval of that settlement.

On September 22, 2021, two additional non-class action direct purchaser complaints were filed by a number of retail pharmacy and grocery store chains against BMS and two other manufacturers of HIV medications. Those complaints made allegations similar to those raised in the other federal court cases and the New Mexico state court case described below. In January 2022, BMS entered into an agreement to settle the cases filed against it by the retail pharmacy and grocery store chains, and those cases were dismissed.

In February 2021, BMS and two other manufacturers of HIV medications were sued in State Court in New Mexico by the Attorney General of the State of New Mexico in a case alleging that the defendants' agreements to develop and sell various fixed-dose combination products for the treatment of HIV, including *Atripla**, and agreements to settle certain patent litigation violate the antitrust laws of the State of New Mexico. On October 26, 2022, BMS and the State of New Mexico entered into an agreement to settle New Mexico's case against BMS. The case against BMS was dismissed by stipulation on November 7, 2022.

In December 2021, five additional non-class-action indirect purchaser cases were filed in the Northern District of California, and one additional non-class-action indirect purchaser case was filed in California state court naming BMS and two other manufacturers as defendants. Those complaints made allegations similar to those in the other federal court cases. In February 2022, BMS reached a settlement agreement with one of the non-class-action indirect purchaser plaintiffs and that case was dismissed. In April 2022, two additional indirect purchaser plaintiffs filed non-class suits against BMS and other defendants. In July 2022, BMS entered into a settlement agreement resolving these seven remaining indirect purchaser cases.

Accordingly, all of the HIV Medication Antitrust Litigations that were pending against BMS have been resolved.

Thalomid and *Revlimid* Litigations

Beginning in November 2014, certain putative class action lawsuits were filed against Celgene in the U.S. District Court for the District of New Jersey alleging that Celgene violated various antitrust, consumer protection, and unfair competition laws by (a) allegedly securing an exclusive supply contract for the alleged purpose of preventing a generic manufacturer from securing its own supply of thalidomide active pharmaceutical ingredient, (b) allegedly refusing to sell samples of *Thalomid* and *Revlimid* brand drugs to various generic manufacturers for the alleged purpose of bioequivalence testing necessary for ANDAs to be submitted to the FDA for approval to market generic versions of these products, (c) allegedly bringing unjustified patent infringement lawsuits in order to allegedly delay approval for proposed generic versions of *Thalomid* and *Revlimid*, and/or (d) allegedly entering into settlements of patent infringement lawsuits with certain generic manufacturers that allegedly have had anticompetitive effects. The plaintiffs, on behalf of themselves and putative classes of third-party payers, sought injunctive relief and damages. The various lawsuits were consolidated into a master action for all purposes. In March 2020, Celgene reached a settlement with the class plaintiffs. In October 2020, the Court entered a final order approving the settlement and dismissed the matter. That settlement did not resolve the claims of certain entities that opted out of the settlement.

In March 2019, Humana Inc. (“Humana”), which opted out of the above settlement, filed a lawsuit against Celgene in the U.S. District Court for the District of New Jersey. Humana’s complaint makes largely the same claims and allegations as were made in the now settled *Thalomid* and *Revlimid* antitrust class action litigation. The complaint purports to assert claims on behalf of Humana and its subsidiaries in several capacities, including as a direct purchaser and as an indirect purchaser, and seeks, among other things, treble and punitive damages, injunctive relief and attorneys’ fees and costs. In May 2019, Celgene filed a motion to dismiss Humana’s complaint. In April 2022, the Court issued an order denying Celgene’s motion to dismiss. That order addressed only Celgene’s argument that certain of Humana’s claims were barred by the statute of limitations. The Court’s order did not address Celgene’s other grounds for dismissal and instead directed Celgene to present those arguments in a renewed motion to dismiss following the filing of amended complaints. In May 2022, Humana filed an amended complaint against Celgene and BMS asserting the same claims based on additional factual allegations. Celgene and BMS have filed a motion to dismiss Humana’s amended complaint, which was fully briefed in November 2022. No trial date has been scheduled.

United HealthCare Services, Inc. (“UHS”), Blue Cross Blue Shield Association (“BCBSA”), BCBSM Inc., Health Care Service Corporation (“HCSC”), Blue Cross and Blue Shield of Florida Inc., Cigna Corporation (“Cigna”), Molina Healthcare, Inc. (“Molina”) and several MSP related entities (MSP Recovery Claims, Series LLC; MSPA Claims 1, LLC; MAO-MSO Recovery II, LLC, Series PMPI, a segregated series of MAO-MSO Recovery II, LLC; MSP Recovery Claims Series 44, LLC; MSP Recovery Claims PROV, Series LLC; and MSP Recovery Claims CAID, Series LLC (together, “MSP”)) filed lawsuits making largely the same claims and allegations as were made in the now settled class action litigation and in the *Humana* opt-out action. Certain of the matters have made additional claims related to copay assistance for *Thalomid* and *Revlimid*. These cases are now pending in the U.S. District Court for the District of New Jersey. Celgene and BMS’s motion to dismiss the *Humana* amended complaint applies to these other opt-out actions as well, and these other opt-out actions will proceed as described above with respect to that *Humana* opt-out action. No trial dates have been scheduled.

In May 2021, Molina sued Celgene and BMS in San Francisco Superior Court. Molina’s complaint makes largely the same claims and allegations as were made in the now settled class action litigation. In June 2022, the San Francisco Superior Court dismissed 63 of Molina’s claims, which Molina later reasserted in the District of New Jersey as described above, and stayed the remaining 4 claims. No activity is expected in this case until disposition of the New Jersey actions.

Certain other entities that opted out of the now-settled class action have also filed summonses related to two actions in the Philadelphia County Court of Common Pleas in connection with the allegations made by Humana and other opt-out entities. Those actions have been placed in deferred status pending further developments in the above opt-out cases.

In November 2022, certain direct purchasers filed an action against Celgene, BMS, and certain generic manufacturers in the U.S. District Court for the District of New Jersey. The action makes largely the same claims and allegations against Celgene and BMS as were made with respect to *Revlimid* in the now settled class action litigation, and seek injunctive relief and damages under the Sherman Antitrust Act. No trial date has been scheduled.

In November 2022, certain indirect purchasers filed a putative class action lawsuit against Celgene, BMS and various generic manufacturers in the U.S. District Court for the District of New Jersey. The action alleges anticompetitive conduct and seeks injunctive relief and damages in connection with settlements of *Revlimid*-related patent infringement lawsuits. No trial date has been scheduled.

In May 2018, Humana filed a lawsuit against Celgene in the Pike County Circuit Court of the Commonwealth of Kentucky. Humana’s complaint alleges Celgene engaged in unlawful off-label marketing in connection with sales of *Thalomid* and *Revlimid* and asserts claims against Celgene for fraud, breach of contract, negligent misrepresentation, unjust enrichment and violations of New Jersey’s Racketeer Influenced and Corrupt Organizations Act. Humana subsequently dismissed its claims for breach of contract voluntarily. The complaint seeks, among other things, treble and punitive damages, injunctive relief and attorneys’ fees and costs. A trial for this matter began on January 31, 2023.

In May 2020, Celgene filed suit against Humana Pharmacy, Inc. (“HPI”), a Humana subsidiary, in Delaware Superior Court. Celgene’s complaint alleges that HPI breached its contractual obligations to Celgene by assigning claims to Humana that Humana is now asserting. The complaint seeks damages for HPI’s breach as well as a declaratory judgment. A trial has been scheduled for March 2023.

BeiGene Arbitration Matter

On July 5, 2017, Celgene Logistics Sàrl (“Celgene Logistics”) and BeiGene, Ltd. (together with its assignees, “BeiGene”), entered into a License and Supply Agreement (the “LSA”) pursuant to which BeiGene was granted, among other things, an exclusive license to distribute and commercialize *Revlimid*, *Vidaza* and *Abraxane* in China.

BeiGene initiated an arbitration proceeding against Celgene Logistics and BMS at the International Chamber of Commerce in June 2020, asserting various claims, including breach of contract under the LSA. In October 2021, Celgene Logistics delivered notice to BeiGene terminating the LSA with respect to *Abraxane*. A final hearing on the merits was held in June 2022, and the parties have completed post-hearing briefing and closing arguments.

MSK Contract Litigation

On April 1, 2022, Memorial Sloan Kettering Cancer Center and Eureka Therapeutics, Inc. (collectively, “Plaintiffs”) filed a complaint against BMS, Celgene and Juno (collectively, “Defendants”). In June 2022, Plaintiffs filed an amended complaint. Plaintiffs allege that Defendants breached a license agreement by allegedly failing to use commercially reasonable efforts to develop, manufacture, and commercialize a certain chimeric antigen receptor product and by failing to pay Plaintiffs a running royalty of at least 1.5% of worldwide sales of *Abecma* allegedly owed to Plaintiffs under the license agreement. Defendants disagree with plaintiffs’ claims and filed a motion to dismiss the amended complaint in July 2022. No trial date has been scheduled.

GOVERNMENT INVESTIGATIONS

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

ENVIRONMENTAL PROCEEDINGS

As previously reported, BMS 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 BMS’s current or former sites or at waste disposal or reprocessing facilities operated by third parties.

CERCLA and Other Remediation Matters

With respect to CERCLA and other remediation matters for which BMS is responsible under various state, federal and international laws, BMS 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 BMS accrues liabilities when they are probable and reasonably estimable. BMS estimated its share of future costs for these sites to be \$91 million as of December 31, 2022, 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.

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, 2022 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, 2022 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, 2022, which is included herein.



Giovanni Caforio, M.D.
Chief Executive Officer



David V. Elkins
Chief Financial Officer

February 14, 2023

CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2022, 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 Annual Report on Form 10-K. Based on this evaluation, management has concluded that as of December 31, 2022, 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, 2022 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, 2022 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 Annual 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, 2022, 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, 2022 that have materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

OTHER INFORMATION

None.

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, 2022 and 2021, the related consolidated statements of earnings, comprehensive income/(loss), and cash flows, for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, 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 14, 2023, 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Gross-to-Net U.S. Rebate Accruals for U.S. Medicaid, Medicare Part D, and managed healthcare — Refer to "Note 2 – Revenue" to the financial statements

Critical Audit Matter Description

As more fully disclosed in Note 2 to the financial statements, the Company reduces gross product sales from list price at the time revenue is recognized for expected charge-backs, discounts, rebates, sales allowances and product returns, which are referred to as gross-to-net ("GTN") adjustments. These reductions are attributed to various commercial arrangements, managed healthcare organizations, and government programs that mandate various reductions from list price. Charge-backs and cash discounts are reflected as a reduction to receivables and settled through the issuance of credits to the customer. All other rebates, discounts and adjustments, are reflected as a liability and settled through cash payments.

Certain of the GTN liabilities related to U.S. Medicaid, Medicare Part D, and managed healthcare organizations rebate programs (the "GTN U.S. rebate accruals") involve the use of significant assumptions and judgments in their calculation. These significant assumptions and judgments include consideration of legal interpretations of applicable laws and regulations, historical claims experience, payer channel mix, current contract prices, unbilled claims, claims submission time lags, and inventory levels in the distribution channel.

Given the complexity involved in determining the significant assumptions used in calculating certain GTN U.S. rebate accruals, auditing these estimates involved especially subjective judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to GTN U.S. rebate accruals included the following, among others:

- We evaluated the appropriateness and consistency of the Company's methods and assumptions used to calculate GTN U.S. rebate accruals.
- We tested the effectiveness of internal controls over the review of the Company's estimation model, including underlying assumptions and key inputs into the Company's process to calculate GTN U.S. rebate accruals.
- We tested the mathematical accuracy of GTN U.S. rebate accruals.
- We tested significant assumptions and key inputs used to calculate GTN U.S. rebate accruals.
- We evaluated the Company's ability to estimate GTN U.S. rebate accruals accurately by comparing actual amounts incurred for GTN U.S. rebate accruals to historical estimates.
- We tested the overall reasonableness of the GTN U.S. rebate accruals recorded at period end by developing an expectation for comparison to actual recorded balances.
- We involved audit professionals with industry and quantitative analytics experience to assist us in performing our auditing procedures.

Taxes — Unrecognized Tax Benefit Liabilities for U.S. Transfer Pricing — Refer to "Note 7- Income Taxes" to the financial statements

Critical Audit Matter Description

As more fully disclosed in Note 7 to the financial statements, the Company recognizes certain income tax benefits associated with transactions between its U.S. operating companies and related foreign affiliates. These income tax benefits are estimated based on transfer pricing agreements, third-party transfer pricing studies, and the Company's judgment as to whether it is more-likely-than-not the benefits will be realized. Tax benefits that may not ultimately be realized by the Company, as determined by its judgment, are accrued for as unrecognized tax benefit liabilities. The amounts recognized as unrecognized tax benefit liabilities related to U.S. transfer pricing may be significantly affected in subsequent periods due to various factors, such as changes in tax law, identification of additional relevant facts, or a change in the Company's judgment regarding measurement of the tax benefits upon ultimate settlement with the taxing authorities.

Given the complexity associated with significant assumptions used and judgments made to calculate unrecognized tax benefit liabilities related to U.S. transfer pricing auditing these estimates involved especially subjective judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to unrecognized tax benefit liabilities related to U.S. transfer pricing included the following, among others:

- We evaluated the appropriateness and consistency of the Company's methods and assumptions used in the identification, recognition, measurement, and disclosure of unrecognized tax benefit liabilities.
- We tested the effectiveness of internal controls over the review of the underlying assumptions and key inputs into the Company's process to calculate unrecognized tax benefit liabilities.
- We obtained an understanding of the Company's related party transactions and transfer pricing policies.
- We tested the mathematical accuracy of the unrecognized tax benefit liabilities.
- We tested the completeness of unrecognized tax benefit liabilities.
- We tested the reasonableness of the underlying tax positions and amounts accrued for a selection of unrecognized tax benefit liabilities by reviewing the Company's evaluation of the relevant facts and tax law associated with the tax position, and testing the significant assumptions and inputs used to calculate the unrecognized tax benefit liabilities by reference to third party data, information produced by the entity, our understanding of transfer pricing principles and tax laws, and inquiries of management.
- We evaluated whether the Company had appropriately considered new information that could significantly change the recognition, measurement or disclosure of the unrecognized tax benefit liabilities.
- We involved income tax specialists and audit professionals with industry experience to assist us in performing our auditing procedures.

Deloitte & Touche LLP

Morristown, New Jersey
February 14, 2023

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, 2022, 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, 2022, 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, 2022, of the Company and our report dated February 14, 2023, expressed an unqualified opinion on those financial statements.

Basis for Opinion

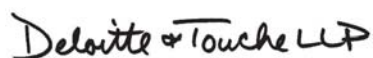
The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility 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.

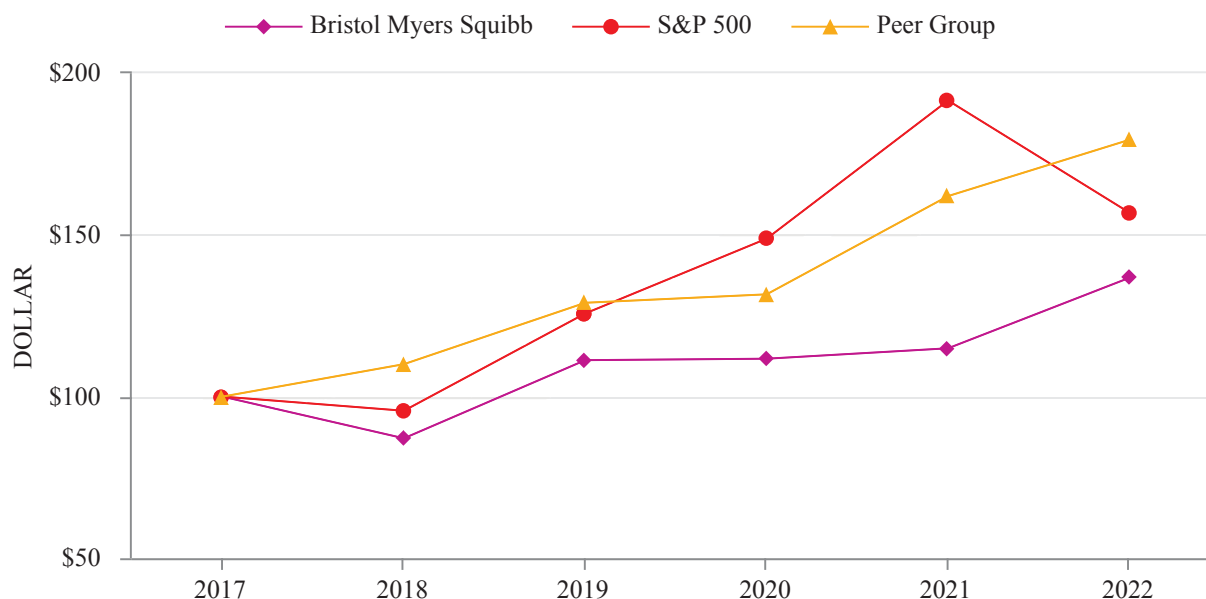
Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree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



Morristown, New Jersey
February 14, 2023

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 ("S&P 500 Index") and a composite peer group of major pharmaceutical companies comprised of AbbVie, Amgen, AstraZeneca, Biogen, Gilead, GlaxoSmithKline, Johnson & Johnson, Lilly, Merck, Novartis, Pfizer, Roche and Sanofi. The graph assumes \$100 investment on December 31, 2017 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, 2018, 2019, 2020, 2021 and 2022. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



	2017	2018	2019	2020	2021	2022
Bristol Myers Squibb	\$ 100.00	\$ 87.10	\$ 111.27	\$ 111.72	\$ 114.94	\$ 136.75
S&P 500	100.00	95.62	125.72	148.85	191.58	156.88
Peer Group	100.00	110.03	129.02	131.63	162.01	179.43

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 2022 Annual Report on Form 10-K, unless the context otherwise indicates. Throughout this 2022 Annual Report on Form 10-K, we have used terms which are defined below:

2022 Form 10-K	Annual Report on Form 10-K for the fiscal year ended December 31, 2022	LIBOR	London Interbank Offered Rate
2021 Plan	2021 Stock Award and Incentive Plan	Lilly	Eli Lilly and Company
2seventy bio	2seventy bio, Inc.	LOE	loss of exclusivity
340B Program	340B Drug Pricing Program	MAA	Marketing Authorization Application
AbbVie	AbbVie Inc.	MCOs	Managed Care Organizations
ACA	Patient Protection and Affordable Care Act	MDL	multi-district litigation
Agenus	Agenus Inc.	MDS	myelodysplastic syndromes
aGVHD	acute graft-versus-host disease	Mead Johnson	Mead Johnson Nutrition Company
ALL	acute lymphoblastic leukemia	Merck	Merck & Co., Inc.
Amgen	Amgen Inc.	MF	myelofibrosis
Amylin	Amylin Pharmaceuticals, Inc.	MPM	Malignant Pleural Mesothelioma
ANDA	abbreviated New Drug Application	MSI-H	high microsatellite instability
AstraZeneca	AstraZeneca PLC	MyoKardia	MyoKardia, Inc.
ASC	Accounting Standards Codification	NASH	Non alcoholic steatohepatitis
BCMA	B-cell maturation antigen	NAV	net asset value
Biogen	Biogen, Inc.	NDA	New Drug Application
Biohaven	Biohaven Pharmaceutical Holding Company Ltd.	Nektar	Nektar Therapeutics
BLA	Biologics License Application	NKT	natural killer T
bluebird	bluebird bio, inc.	Nimbus	Nimbus Therapeutics, LLC
BridgeBio	BridgeBio Pharma Inc.	Novartis	Novartis Pharmaceutical Corporation
CAR-T	Chimeric Antigen Receptor T cells	NSCLC	non-small cell lung cancer
Celgene	Celgene Corporation acquired by BMS on November 20, 2019	NVAF	non-valvular atrial fibrillation
CERCLA	U.S. Comprehensive Environmental Response, Compensation and Liability Act	OCE	Oncology Center of Excellence
cGMP	current Good Manufacturing Practices	OECD	Organization for Economic Co-operation and Development
Cheplapharm	Cheplapharm Arzneimittel GmbH	OIG	Office of Inspector General of the U.S. Department of Health and Human Services
CML	chronic myeloid leukemia	Ono	Ono Pharmaceutical Co., Ltd.
COSO	Committee of Sponsoring Organizations of the Treadway Commission	OTC	over-the-counter
CRC	colorectal cancer	Otsuka	Otsuka Pharmaceutical Co., Ltd.
DMC	Data Monitoring Committee	PBMs	Pharmacy Benefit Managers
Dragonfly	Dragonfly Therapeutics, Inc.	PBRGs	People and Business Resource Groups
DSA	Distribution Services Agreement	PCAOB	Public Company Accounting Oversight Board
EC	European Commission	PD-1	programmed death receptor-1
EGFR	estimated glomerular filtration rate	PDMA	Prescription Drug Marketing Act
Eisai	Eisai Co., Ltd.	PDUFA	Prescription Drug User Fee Act
ELA	excess loss account	Pfizer	Pfizer, Inc.
EMA	European Medicines Agency	Prothena	Prothena Corporation
EPO	European Patent Office	PhRMA Code	Pharmaceutical Research and Manufacturers of America's Professional Practices Code
EPS	earnings per share	PRP	potentially responsible party
ESA	erythropoiesis-stimulating agent	PsA	psoriatic arthritis
ESCC	esophageal squamous cell carcinoma	PTR	patent term restoration
Evotec	Evotec SE	R&D	research and development
EU	except as otherwise noted, EU refers to the United Kingdom plus the countries that are members of the European Union	RA	rheumatoid arthritis
FASB	Financial Accounting Standards Board	RCC	renal cell carcinoma
FDA	U.S. Food and Drug Administration	RDP	Regulatory Data Protection
FL	follicular lymphoma	REMS	Risk Evaluation and Mitigation Strategy
GAAP	U.S. generally accepted accounting principles	Roche	Roche Holding AG
Gilead	Gilead Sciences, Inc.	RS	ring sideroblast
GILTI	global intangible low taxed income	Sanofi	Sanofi S.A.
GlaxoSmithKline	GlaxoSmithKline PLC	sBLA	supplemental Biologics License Application
GTN	gross-to-net	SEC	U.S. Securities and Exchange Commission
Halozyne	Halozyne Therapeutics, Inc.	SLE	systemic lupus erythematosus
HCC	hepatocellular carcinoma	SPC	Supplementary Protection Certificate

HCM	hypertrophic cardiomyopathy	TCJA	the Tax Cuts and Jobs Act of 2017
HIV	human immunodeficiency virus	UC	ulcerative colitis
Immatics	Immatics N.V.	U.S.	United States
IO	immuno-oncology	UK	United Kingdom
IPRD	in-process research and development	VAT	value added tax
IRS	Internal Revenue Services	VTE	venous thromboembolic
JIA	Juvenile Idiopathic Arthritis	WTO	World Trade Organization

Bristol Myers Squibb | Board of Directors

Giovanni Caforio, M.D.

Board Chair and Chief Executive Officer,
Bristol Myers Squibb

Theodore R. Samuels

Lead Independent Director, Bristol Myers Squibb
Retired President of Capital Guardian Trust
Company
(a, b)

Peter J. Arduini

President and Chief Executive Officer,
GE Healthcare
(c, d)

Deepak L. Bhatt, M.D., M.P.H.

Director of Mount Sinai Heart and the
Dr. Valentin Fuster Professor of Cardiovascular
Medicine at the Icahn School of Medicine
(d)

Julia A. Haller, M.D.

Ophthalmologist-in-Chief, Wills Eye Hospital
(b, d)

Manuel Hidalgo Medina, M.D., Ph.D.

Chief, Division of Hematology and Medical
Oncology, Weill Cornell Medicine and New York-
Presbyterian /Weill Cornell Medical Center
(b, d)

Paula A. Price

Former Executive Vice President
and Chief Financial Officer, Macy's, Inc.
(a, b)

Derica W. Rice

Former EVP, CVS Health and President,
Pharmacy Benefits Business
CVS Caremark.
Former Executive Vice President and Chief
Financial Officer, Eli Lilly Company
(a, c)

Gerald L. Storch

Chief Executive Officer, Storch Advisors.
Former Chief Executive Officer,
Hudson's Bay Company
(b, c)

Karen H. Vousden, Ph.D.

Principal Group Leader,
The Francis Crick Institute
Former Chief Scientist, Cancer Research UK
(c, d)

Phyllis R. Yale

Advisory Partner, Bain & Company
(a, b)

Members of the Board of Directors and Committee memberships as of March 9, 2023

(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.

Board Chair and
Chief Executive Officer

Chris Boerner, Ph.D.

Executive Vice President,
Chief Commercialization Officer

David V. Elkins

Executive Vice President,
Chief Financial Officer

Pamela Fisher

Vice President,
Chief Diversity and Inclusion Officer

Cari Gallman

Senior Vice President,
Chief Compliance and Ethics Officer

Samit Hirawat, M.D.

Executive Vice President,
Chief Medical Officer,
Global Drug Development

Sandra Leung

Executive Vice President,
General Counsel

Greg Meyers

Executive Vice President,
Chief Digital & Technology Officer

Elizabeth A. Mily

Executive Vice President,
Strategy & Business Development

Ann M. Powell

Executive Vice President,
Chief Human Resources Officer

Karin Shanahan

Executive Vice President,
Global Product Development & Supply

Wendy Short Bartie

Senior Vice President,
Chief of Staff to the CEO

Rupert Vessey, M.A., B.M., B.Ch., F.R.C.P., D.Phil

Executive Vice President and President,
Research

Estelle Vester-Blokland, M.D.

Senior Vice President,
Global Medical Affairs

Michelle Weese

Executive Vice President,
Corporate Affairs

BRISTOL MYERS SQUIBB Stockholder Information

Common Stock

Ticker symbol: BMJ
New York Stock Exchange

Contingent Value Right

Ticker Symbol: CELG-RT
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 PlanSM – 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 PlanSM
The Shareowner Services Plus PlanSM 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, 2022, 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 30 of 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. Copies of Bristol Myers Squibb's EEO-1 reports are available to shareholders upon request

*As we plan to relocate our principal executive offices, effective July 1, 2023, at such time, please contact Corporate Secretary, Bristol-Myers Squibb Company, Route 206 & Province Line Road, Princeton, NJ 08543.

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.

Atripla is a trademark of Gilead Sciences, Inc.

Byetta is a trademark of Amylin Pharmaceuticals, LLC

CABOMETYX is a trademark of Exelixis, Inc.

Farxiga and *Onglyza* are trademarks of AstraZeneca AB

Gleevec is a trademark of Novartis AG

Keytruda is a trademark of Merck Sharp & Dohme Corp.

Otezla is a trademark of Amgen Inc.

Plavix is a trademark of Sanofi S.A.

Yescarta is a trademark of Kite Pharma, Inc.

Tecentriq is a trademark of Genentech, Inc.

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.





Transforming patients' lives through science™



bms.com

430 E 29th Street, New York, NY 10016 • 212-546-4200



PRINTED WITH WIND POWER



This report is printed on 100% post-consumer recycled paper.