# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
# Washington, D.C. 20549
# FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE AC 1934**

**For the quarterly period ended June 30, 2023**

**or**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE AC 1934**

**Commission File Number: 001-37702**

# Amgen Inc.

(Exact name of registrant as specified in its charter)

| | |
|---|---|
| **Delaware** | **95-3540776** |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| **One Amgen Center Drive** | |
| **Thousand Oaks** | |
| **California** | **91320-1799** |
| (Address of principal executive offices) | (Zip Code) |

**(805) 447-1000**
(Registrant's telephone number, including area code)

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

| Title of each class | Trading Symbol(s) | Name of each exchange on which registered |
|---|---|---|
| **Common stock, $0.0001 par value** | **AMGN** | **The Nasdaq Stock Market LLC** |
| **2.00% Senior Notes due 2026** | **AMGN26** | **The Nasdaq Stock Market LLC** |

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No ☐

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

| | | |
|---|---|---|
| Large accelerated filer ☑ | Accelerated filer ☐ | Non-accelerated filer ☐ |
| Smaller reporting company ☐ | Emerging growth company ☐ | |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☑

As of July 31, 2023, the registrant had 534,901,181 shares of common stock, $0.0001 par value, outstanding.

**AMGEN INC.**

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**Defined Terms and Products**

*Defined terms*

We use several terms in this Form 10-Q, including but not limited to those that are finance, regulation and disease-state related as well as names of other companies, which are given below.

| Term | Description |
|---|---|
| AOCI | accumulated other comprehensive income (loss) |
| ASR | accelerated share repurchase |
| BeiGene | BeiGene, Ltd. |
| Bergamo | Laboratorio Quimico Farmaceutico Bergamo Ltda |
| ChemoCentryx | ChemoCentryx, Inc. |
| CMS | Centers for Medicare & Medicaid Services |
| COVID-19 | coronavirus disease 2019 |
| Eczacıbaşı | EIS Eczacıbaşı İlaç, Sınai ve Finansal Yatırımlar Sanayi ve Ticaret A.Ş. |
| EPS | earnings per share |
| ESG | environmental, social and governance |
| EU | European Union |
| FDA | U.S. Food and Drug Administration |
| Fitch | Fitch Ratings, Inc. |
| FTC | Federal Trade Commission |
| GAAP | U.S. generally accepted accounting principles |
| Gensenta | Gensenta İlaç Sanayi ve Ticaret A.Ş. |
| HHS | U.S. Department of Health & Human Services |
| Horizon | Horizon Therapeutics plc |
| IPR&D | in-process research and development |
| IRA | Inflation Reduction Act of 2022 |
| IRS | Internal Revenue Service |
| ISDA | International Swaps and Derivatives Association, Inc. |
| LIBOR | London Interbank Offered Rate |
| MD&A | management's discussion and analysis |
| Moody's | Moody's Investors Service, Inc. |
| Neumora | Neumora Therapeutics, Inc. |
| OECD | Organisation for Economic Co-operation and Development |
| PBM | pharmacy benefit manager |
| R&D | research and development |
| RAR | Revenue Agent Report |
| ROW | rest of world |
| S&P | Standard & Poor's Financial Services LLC |
| SEC | U.S. Securities and Exchange Commission |
| SG&A | selling, general and administrative |
| SOFR | Secured Overnight Financing Rate |
| Teneobio | Teneobio, Inc. |
| U.S. Treasury | U.S. Department of Treasury |
| UTB | unrecognized tax benefit |

*Products*

The brand names of our products, our delivery devices and certain of our product candidates and their associated generic names are given below.

| Term | Description |
|---|---|
| Aimovig | Aimovig® (erenumab-aooe) |
| AMJEVITA/AMGEVITA | AMJEVITA®(adalimumab-atto)/AMGEVITA™ (adalimumab) |
| Aranesp | Aranesp® (darbepoetin alfa) |
| AVSOLA | AVSOLA® (infliximab-axxq) |
| BEKEMV | BEKEMV™ (eculizumab) |
| BLINCYTO | BLINCYTO® (blinatumomab) |
| Corlanor | Corlanor® (ivabradine) |
| ENBREL | Enbrel® (etanercept) |
| EPOGEN | EPOGEN® (epoetin alfa) |
| EVENITY | EVENITY® (romosozumab-aqqg) |
| IMLYGIC | IMLYGIC® (talimogene laherparepvec) |
| KANJINTI | KANJINTI® (trastuzumab-anns) |
| KYPROLIS | KYPROLIS® (carfilzomib) |
| LUMAKRAS/LUMYKRAS | LUMAKRAS®/LUMYKRAS™ (sotorasib) |
| MVASI | MVASI® (bevacizumab-awwb) |
| Neulasta | Neulasta® (pegfilgrastim) |
| NEUPOGEN | NEUPOGEN® (filgrastim) |
| Nplate | Nplate® (romiplostim) |
| Otezla | Otezla® (apremilast) |
| Parsabiv | Parsabiv® (etelcalcetide) |
| Prolia | Prolia® (denosumab) |
| Repatha | Repatha® (evolocumab) |
| RIABNI | RIABNI® (rituximab-arrx) |
| Sensipar/Mimpara | Sensipar®/Mimpara™ (cinacalcet) |
| TAVNEOS | TAVNEOS® (avacopan) |
| TEZSPIRE | TEZSPIRE® (tezepelumab-ekko) |
| Vectibix | Vectibix® (panitumumab) |
| XGEVA | XGEVA® (denosumab) |

PART I—FINANCIAL INFORMATION

**Item 1.** **FINANCIAL STATEMENTS**

**AMGEN INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF INCOME**
**(In millions, except per-share data)**
**(Unaudited)**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| Revenues: | | | | |
| Product sales | $ 6,683 | $ 6,281 | $ 12,529 | $ 12,012 |
| Other revenues | 303 | 313 | 562 | 820 |
| Total revenues | 6,986 | 6,594 | 13,091 | 12,832 |
| Operating expenses: | | | | |
| Cost of sales | 1,813 | 1,510 | 3,533 | 3,071 |
| Research and development | 1,113 | 1,039 | 2,171 | 1,998 |
| Selling, general and administrative | 1,294 | 1,327 | 2,552 | 2,555 |
| Other | 82 | 542 | 230 | 532 |
| Total operating expenses | 4,302 | 4,418 | 8,486 | 8,156 |
| Operating income | 2,684 | 2,176 | 4,605 | 4,676 |
| Other income (expense): | | | | |
| Interest expense, net | (752) | (328) | (1,295) | (623) |
| Other (expense) income, net | (318) | (317) | 1,746 | (847) |
| Income before income taxes | 1,614 | 1,531 | 5,056 | 3,206 |
| Provision for income taxes | 235 | 214 | 836 | 413 |
| Net income | $ 1,379 | $ 1,317 | $ 4,220 | $ 2,793 |
| Earnings per share: | | | | |
| Basic | $ 2.58 | $ 2.46 | $ 7.90 | $ 5.16 |
| Diluted | $ 2.57 | $ 2.45 | $ 7.86 | $ 5.13 |
| Shares used in calculation of earnings per share: | | | | |
| Basic | 535 | 535 | 534 | 541 |
| Diluted | 537 | 537 | 537 | 544 |

See accompanying notes.

**AMGEN INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**
**(In millions)**
**(Unaudited)**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | **2023** | **2022** | **2023** | **2022** |
| Net income | $ 1,379 | $ 1,317 | $ 4,220 | $ 2,793 |
| Other comprehensive (loss) income, net of reclassification adjustments and taxes: | | | | |
| Foreign currency translation | 11 | (65) | 39 | (116) |
| Cash flow hedges | (22) | 156 | (108) | 240 |
| Other | (1) | — | 20 | — |
| Other comprehensive (loss) income, net of reclassification adjustments and taxes | (12) | 91 | (49) | 124 |
| Comprehensive income | $ 1,367 | $ 1,408 | $ 4,171 | $ 2,917 |

See accompanying notes.

**AMGEN INC.**
**CONDENSED CONSOLIDATED BALANCE SHEETS**
**(In millions, except per-share data)**

| | June 30, 2023 (Unaudited) | December 31, 2022 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 34,248 | $ 7,629 |
| Marketable securities | — | 1,676 |
| Trade receivables, net | 5,830 | 5,563 |
| Inventories | 4,978 | 4,930 |
| Other current assets | 2,324 | 2,388 |
| Total current assets | 47,380 | 22,186 |
| | | |
| Property, plant and equipment, net | 5,532 | 5,427 |
| Intangible assets, net | 14,633 | 16,080 |
| Goodwill | 15,531 | 15,529 |
| Other noncurrent assets | 7,193 | 5,899 |
| Total assets | $ 90,269 | $ 65,121 |
| | | |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Accounts payable | $ 1,212 | $ 1,572 |
| Accrued liabilities | 13,718 | 12,524 |
| Current portion of long-term debt | 2,167 | 1,591 |
| Total current liabilities | 17,097 | 15,687 |
| | | |
| Long-term debt | 59,377 | 37,354 |
| Long-term tax liabilities | 4,478 | 5,757 |
| Other noncurrent liabilities | 2,536 | 2,662 |
| | | |
| Contingencies and commitments | | |
| | | |
| Stockholders' equity: | | |
| Common stock and additional paid-in capital; $0.0001 par value; 2,750.0 shares authorized; outstanding—534.9 shares in 2023 and 534.0 shares in 2022 | 32,601 | 32,514 |
| Accumulated deficit | (25,540) | (28,622) |
| Accumulated other comprehensive loss | (280) | (231) |
| Total stockholders' equity | 6,781 | 3,661 |
| Total liabilities and stockholders' equity | $ 90,269 | $ 65,121 |

See accompanying notes.

**AMGEN INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**
**(In millions, except per-share data)**
**(Unaudited)**

| | Number of shares of common stock | Common stock and additional paid-in capital | Accumulated deficit | Accumulated other comprehensive loss | Total |
|---|---|---|---|---|---|
| Balance as of December 31, 2022 | 534.0 | $ 32,514 | $ (28,622) | $ (231) | $ 3,661 |
| Net income | — | — | 2,841 | — | 2,841 |
| Other comprehensive loss, net of taxes | — | — | — | (37) | (37) |
| Dividends declared on common stock ($2.13 per share) | — | — | (1,138) | — | (1,138) |
| Issuance of common stock in connection with the Company's equity award programs | 0.3 | 11 | — | — | 11 |
| Stock-based compensation expense | — | 47 | — | — | 47 |
| Tax impact related to employee stock-based compensation expense | — | (37) | — | — | (37) |
| Balance as of March 31, 2023 | 534.3 | 32,535 | (26,919) | (268) | 5,348 |
| Net income | — | — | 1,379 | — | 1,379 |
| Other comprehensive loss, net of taxes | — | — | — | (12) | (12) |
| Issuance of common stock in connection with the Company's equity award programs | 0.6 | 16 | — | — | 16 |
| Stock-based compensation expense | — | 119 | — | — | 119 |
| Tax impact related to employee stock-based compensation expense | — | (69) | — | — | (69) |
| Balance as of June 30, 2023 | 534.9 | $ 32,601 | $ (25,540) | $ (280) | $ 6,781 |

**AMGEN INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (continued)**
**(In millions, except per-share data)**
**(Unaudited)**

| | Number of shares of common stock | Common stock and additional paid-in capital | Accumulated deficit | Accumulated other comprehensive loss | Total |
|---|---|---|---|---|---|
| Balance as of December 31, 2021 | 558.3 | $ 32,096 | $ (24,600) | $ (796) | $ 6,700 |
| Net income | — | — | 1,476 | — | 1,476 |
| Other comprehensive income, net of taxes | — | — | — | 33 | 33 |
| Dividends declared on common stock ($1.94 per share) | — | — | (1,034) | — | (1,034) |
| Issuance of common stock in connection with the Company's equity award programs | 0.5 | 18 | — | — | 18 |
| Stock-based compensation expense | — | 78 | — | — | 78 |
| Tax impact related to employee stock-based compensation expense | — | (45) | — | — | (45) |
| Repurchases of common stock | (24.6) | (900) | (5,410) | — | (6,310) |
| Balance as of March 31, 2022 | 534.2 | 31,247 | (29,568) | (763) | 916 |
| Net income | — | — | 1,317 | — | 1,317 |
| Other comprehensive income, net of taxes | — | — | — | 91 | 91 |
| Issuance of common stock in connection with the Company's equity award programs | 0.7 | 45 | — | — | 45 |
| Stock-based compensation expense | — | 120 | — | — | 120 |
| Tax impact related to employee stock-based compensation expense | — | (69) | — | — | (69) |
| Other | — | — | (1) | — | (1) |
| Balance as of June 30, 2022 | 534.9 | $ 31,343 | $ (28,252) | $ (672) | $ 2,419 |

See accompanying notes.

**AMGEN INC.**
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(In millions)**
**(Unaudited)**

| | Six months ended June 30, 2023 | Six months ended June 30, 2022 |
|---|---|---|
| Cash flows from operating activities: | | |
| Net income | $ 4,220 | $ 2,793 |
| Depreciation, amortization and other | 1,796 | 1,669 |
| Deferred income taxes | (203) | (514) |
| Adjustments for equity method investments | (3) | 497 |
| Loss on divestiture | — | 560 |
| (Gains) losses on equity securities | (1,169) | 322 |
| Other items, net | 171 | 114 |
| Changes in operating assets and liabilities, net of acquisitions: | | |
| Trade receivables, net | (240) | (504) |
| Inventories | (28) | (410) |
| Other assets | (69) | 198 |
| Accounts payable | (371) | (98) |
| Accrued income taxes, net | 471 | (685) |
| Long-term tax liabilities | 196 | 108 |
| Other liabilities | 402 | 44 |
| Net cash provided by operating activities | 5,173 | 4,094 |
| Cash flows from investing activities: | | |
| Purchases of marketable securities | — | (1,976) |
| Proceeds from sales of marketable securities | 1,125 | — |
| Proceeds from maturities of marketable securities | 550 | 47 |
| Purchases of property, plant and equipment | (615) | (436) |
| Other | 87 | 61 |
| Net cash provided by (used in) investing activities | 1,147 | (2,304) |
| Cash flows from financing activities: | | |
| Net proceeds from issuance of debt | 23,780 | 3,954 |
| Extinguishment of debt | (420) | — |
| Repayment of debt | (704) | — |
| Repurchases of common stock | — | (6,360) |
| Dividends paid | (2,276) | (2,118) |
| Other | (81) | (52) |
| Net cash provided by (used in) financing activities | 20,299 | (4,576) |
| Increase (decrease) in cash and cash equivalents | 26,619 | (2,786) |
| Cash and cash equivalents at beginning of period | 7,629 | 7,989 |
| Cash and cash equivalents at end of period | $ 34,248 | $ 5,203 |

See accompanying notes.

**AMGEN INC.**
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**
**June 30, 2023**
**(Unaudited)**

## 1. Summary of significant accounting policies

*Business*

Amgen Inc. (including its subsidiaries, referred to as “Amgen,” “the Company,” “we,” “our” or “us”) is a global biotechnology pioneer that discovers, develops, manufactures and delivers innovative human therapeutics. We operate in one business segment: human therapeutics.

*Basis of presentation*

The financial information for the three and six months ended June 30, 2023 and 2022, is unaudited but includes all adjustments (consisting of only normal, recurring adjustments unless otherwise indicated), which Amgen considers necessary for a fair presentation of its condensed consolidated results of operations for those periods. Interim results are not necessarily indicative of results for the full fiscal year.

The condensed consolidated financial statements should be read in conjunction with our consolidated financial statements and the notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2022, and with our condensed consolidated financial statements and the notes thereto contained in our Quarterly Report on Form 10-Q for the period ended March 31, 2023.

*Principles of consolidation*

The condensed consolidated financial statements include the accounts of Amgen as well as its majority-owned subsidiaries. In determining whether we are the primary beneficiary of a variable interest entity, we consider whether we have both the power to direct activities of the entity that most significantly impact the entity’s economic performance and the obligation to absorb losses of or the right to receive benefits from the entity that could potentially be significant to that entity. We do not have any significant interests in any variable interest entities of which we are the primary beneficiary. All material intercompany transactions and balances have been eliminated in consolidation.

*Use of estimates*

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

*Property, plant and equipment, net*

Property, plant and equipment is recorded at historical cost, net of accumulated depreciation and amortization, of $9.5 billion and $9.3 billion as of June 30, 2023 and December 31, 2022, respectively.

*Recent accounting pronouncements*

No new accounting pronouncements were issued or adopted for the six months ended June 30, 2023, that materially impacted the Company.

## 2. Restructuring

In the first quarter of 2023, we initiated a restructuring plan to enhance continued innovation, including investments in first-in-class medicines, while improving our cost structure. As part of the plan, we are reallocating resources to the areas of the business that will enable long-term growth.

We estimate that we will incur $300 million to $400 million of pretax charges in 2023 in connection with our restructuring plan, including (i) separation and other headcount-related costs with respect to staff reductions and (ii) asset-related charges that consist primarily of asset impairments, accelerated depreciation and other related costs resulting from rationalization of our geographic footprint.

The following tables summarize recorded charges related to the restructuring plan by type of activity and the locations recognized within the Condensed Consolidated Statements of Income (in millions):

| | Three months ended June 30, 2023 | | |
|---|---|---|---|
| | Separation costs | Asset impairments and other charges | Total |
| Cost of sales | $ — | $ — | $ — |
| Research and development | — | 17 | 17 |
| Other | 25 | — | 25 |
| Total | $ 25 | $ 17 | $ 42 |

| | Six months ended June 30, 2023 | | |
|---|---|---|---|
| | Separation costs | Asset impairments and other charges | Total |
| Cost of sales | $ — | $ 35 | $ 35 |
| Research and development | — | 17 | 17 |
| Other | 166 | 3 | 169 |
| Total | $ 166 | $ 55 | $ 221 |

As of June 30, 2023, total restructuring liability decreased to $82 million primarily due to payments related to separation costs. The total restructuring liability was included in Accrued liabilities in the Condensed Consolidated Balance Sheets.

## 3. Acquisitions and divestitures

*Proposed acquisition of Horizon Therapeutics plc*

On December 12, 2022, we announced that we had entered into a transaction agreement under which Amgen will acquire all shares of Horizon for $116.50 per share in cash for a transaction equity value of approximately $27.8 billion. Horizon is a global biotechnology company headquartered in Dublin, Ireland and is focused on the discovery, development and commercialization of medicines that address critical needs for people impacted by rare, autoimmune and severe inflammatory diseases. Horizon has 12 marketed medicines and a pipeline with more than 20 development programs.

In May 2023, the FTC filed a complaint in the U.S. District Court for the Northern District of Illinois seeking a temporary restraining order and preliminary injunction enjoining our proposed acquisition of Horizon. See Note 14, Contingencies and commitments.

In connection with our proposed acquisition of Horizon, we entered into several debt and financing arrangements. See Note 10, Financing arrangements.

*Acquisition of ChemoCentryx, Inc.*

On October 20, 2022, we acquired all of the outstanding stock of ChemoCentryx, a publicly traded biotechnology company focused on orally administered therapeutics to treat autoimmune diseases, inflammatory disorders and cancer, for $52.00 per share in cash, representing a total consideration of $3.9 billion. The acquisition, which was accounted for as a business combination, includes TAVNEOS, an orally administered selective complement 5a receptor inhibitor that was approved by the FDA in October 2021 as an adjunctive therapy for adults with severe active anti-neutrophil cytoplasmic autoantibody-associated vasculitis (ANCA-associated vasculitis). TAVNEOS is commercialized by us in the United States; for markets outside the United States, TAVNEOS is commercialized by a collaboration partner, and Amgen is entitled to royalties and milestones based on future sales of the product. Upon its acquisition, ChemoCentryx became a wholly owned subsidiary of Amgen, and its operations became included in our consolidated financial statements commencing on the acquisition date.

Measurement period adjustments during the six months ended June 30, 2023, included changes in the purchase price allocation and total consideration, resulting in a net decrease of approximately $4 million to goodwill. The measurement period adjustments resulted primarily from valuation inputs pertaining to the TAVNEOS intangible assets and adjustments to vendor payables based on facts and circumstances that existed as of the acquisition date and did not result from events subsequent to the acquisition date. The adjustments did not have a significant impact on Amgen’s results of operations during the six months ended June 30, 2023, and would not have had a significant impact on prior-period results if the adjustments had been made as of the acquisition date.

The following table summarizes the total consideration and allocated acquisition date fair values of assets acquired and liabilities assumed, inclusive of measurement period adjustments (in millions):

| | Amounts |
|---|---|
| Cash and cash equivalents | $ 86 |
| Marketable securities | 235 |
| Inventories | 41 |
| Finite-lived intangible assets—developed-product-technology rights | 3,499 |
| Goodwill | 663 |
| Other liabilities, net | (83) |
| Deferred tax liability, net | (516) |
| Total assets acquired, net | $ 3,925 |

The $3.9 billion total consideration consisted of (i) a $3.7 billion cash payment to outstanding common stockholders of ChemoCentryx and (ii) a $181 million cash payment to equity award holders of ChemoCentryx for services rendered prior to the acquisition date of October 20, 2022, under the ChemoCentryx equity award plans.

The developed-product-technology rights acquired relates to TAVNEOS, which is approved in the United States and the EU for ANCA-associated vasculitis. The estimated fair values of $3.5 billion were determined by using a multi-period excess earnings income approach that discounts expected future cash flows to present value by applying a discount rate that represents the estimated rate that market participants would use to value the intangible assets. The developed-product-technology rights are being amortized on a straight-line basis over a weighted-average period of approximately 11 years using the straight-line method.

The estimated fair value of the acquired inventory of $41 million was determined using the comparative sales method, which uses actual or expected selling prices of inventory as the base amount to which adjustments for selling effort and a profit on the buyer's effort are applied. The inventory fair value adjustment is being amortized as inventory turns over, which we estimate to be approximately 13 months.

A net deferred tax liability of $516 million was recognized on the temporary differences related to the book bases and tax bases of the acquired identifiable assets and assumed liabilities, primarily driven by the intangible assets acquired.

The excess of the acquisition date consideration over the fair values assigned to the assets acquired and the liabilities assumed of $663 million was recorded as goodwill, which is not deductible for tax purposes. The goodwill value is primarily attributable to the expected synergies from the TAVNEOS asset.

Our accounting for this acquisition is preliminary and will be finalized upon completion of our analysis to determine the acquisition date fair values of certain assets acquired, liabilities assumed and tax-related items as we obtain additional information during the measurement period of up to one year from the acquisition date.

*Divestiture of Gensenta İlaç Sanayi ve Ticaret A.Ş.*

On November 2, 2022, we sold our shares in Gensenta, a subsidiary in Turkey, to Eczacıbaşı for net cash proceeds of approximately $130 million. The transaction was accounted for as a sale of a business and did not meet the criteria to be classified as discontinued operations. Upon closing of this transaction, net assets related to Gensenta of $86 million were divested, and during the year ended December 31, 2022, we recognized a loss on divestiture of $567 million recorded in Other operating expenses in the Consolidated Statements of Income, primarily due to the reclassification of $615 million of cumulative foreign currency translation losses from AOCI into earnings.

**4. Revenues**

We operate in one business segment: human therapeutics. Therefore, results of our operations are reported on a consolidated basis for purposes of segment reporting, consistent with internal management reporting. Revenues by product and by geographic area, based on customers' locations, are presented below. The majority of ROW revenues relates to products sold in Europe.

Revenues were as follows (in millions):

| | Three months ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2023 | | | 2022 | | |
| | U.S. | ROW | Total | U.S. | ROW | Total |
| Prolia | $ 691 | $ 337 | $ 1,028 | $ 611 | $ 311 | $ 922 |
| ENBREL | 1,055 | 13 | 1,068 | 1,036 | 15 | 1,051 |
| XGEVA | 387 | 143 | 530 | 391 | 142 | 533 |
| Otezla | 495 | 105 | 600 | 487 | 107 | 594 |
| Repatha | 212 | 212 | 424 | 154 | 171 | 325 |
| Aranesp | 123 | 242 | 365 | 132 | 225 | 357 |
| KYPROLIS | 234 | 112 | 346 | 213 | 104 | 317 |
| Nplate | 176 | 134 | 310 | 156 | 128 | 284 |
| EVENITY | 192 | 89 | 281 | 130 | 61 | 191 |
| Other products(1) | 1,171 | 560 | 1,731 | 1,136 | 571 | 1,707 |
| Total product sales(2) | $ 4,736 | $ 1,947 | 6,683 | $ 4,446 | $ 1,835 | 6,281 |
| Other revenues | | | 303 | | | 313 |
| Total revenues | | | $ 6,986 | | | $ 6,594 |

| | Six months ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2023 | | | 2022 | | |
| | U.S. | ROW | Total | U.S. | ROW | Total |
| Prolia | $ 1,314 | $ 641 | $ 1,955 | $ 1,193 | $ 581 | $ 1,774 |
| ENBREL | 1,619 | 28 | 1,647 | 1,879 | 34 | 1,913 |
| XGEVA | 771 | 295 | 1,066 | 759 | 276 | 1,035 |
| Otezla | 789 | 203 | 992 | 837 | 208 | 1,045 |
| Repatha | 409 | 403 | 812 | 319 | 335 | 654 |
| Aranesp | 238 | 482 | 720 | 269 | 446 | 715 |
| KYPROLIS | 468 | 236 | 704 | 409 | 195 | 604 |
| Nplate | 422 | 250 | 672 | 312 | 238 | 550 |
| EVENITY | 356 | 179 | 535 | 240 | 121 | 361 |
| Other products(1) | 2,325 | 1,101 | 3,426 | 2,266 | 1,095 | 3,361 |
| Total product sales(2) | $ 8,711 | $ 3,818 | 12,529 | $ 8,483 | $ 3,529 | 12,012 |
| Other revenues | | | 562 | | | 820 |
| Total revenues | | | $ 13,091 | | | $ 12,832 |

(1) Consists of product sales of our non-principal products as well as our Bergamo and Gensenta subsidiaries.

(2) Hedging gains and losses, which are included in product sales, were not material for the three and six months ended June 30, 2023 and 2022.

**5. Income taxes**

The effective tax rates for the three and six months ended June 30, 2023, were 14.6% and 16.5%, respectively, compared with 14.0% and 12.9%, respectively, for the corresponding periods in the prior year.

The increase in our effective tax rate for the three months ended June 30, 2023, was primarily due to the new Puerto Rico income tax beginning in 2023, partially offset by the current period change in the fair value of our equity investments and net favorable items. The increase in our effective tax rate for the six months ended June 30, 2023, was primarily due to the new Puerto Rico income tax beginning in 2023, current year change in the fair value of our equity investments and an increase in interest expense on tax reserves, partially offset by net favorable items. The effective tax rates differ from the federal statutory rate primarily as a result of foreign earnings from the Company's operations conducted in Puerto Rico, a territory of the United States treated as a foreign jurisdiction for U.S. tax purposes, that are currently subject to a tax incentive grant through 2050. In addition, the Company's operations conducted in Singapore are subject to a tax incentive grant through 2036. These foreign earnings are also subject to U.S. tax at a reduced rate of 10.5%.

We are no longer subject to a 4% excise tax in the U.S. territory of Puerto Rico on the gross intercompany purchase price of goods and services from our manufacturer in Puerto Rico. As of January 1, 2023, we qualify for the alternative income tax rate on industrial development income of our Puerto Rico affiliate. In the United States, this income tax qualifies for foreign tax credits. Both this income tax and the associated foreign tax credits are generally recognized in our provision for income taxes. We account for the 2022 excise tax that was capitalized in Inventories as an expense in Cost of sales when the related products are sold in 2023, and a foreign tax credit will not be recognized in 2023 with respect to the excise tax.

One or more of our legal entities file income tax returns in the U.S. federal jurisdiction, various U.S. state jurisdictions and certain foreign jurisdictions. Our income tax returns are routinely examined by tax authorities in those jurisdictions. Significant disputes can and have arisen with tax authorities involving issues regarding the timing and amount of deductions, the use of tax credits and allocations of income and expenses among various tax jurisdictions because of differing interpretations of tax laws, regulations and relevant facts. Tax authorities, including the IRS, are becoming more aggressive and are particularly focused on such matters.

In 2017, we received an RAR and a modified RAR from the IRS for the years 2010–2012, proposing significant adjustments that primarily relate to the allocation of profits between certain of our entities in the United States and the U.S. territory of Puerto Rico. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office but were unable to reach resolution. In July 2021, we filed a petition in the U.S. Tax Court to contest two duplicate Statutory Notices of Deficiency (Notices) for the years 2010–2012 that we received in May and July 2021, which seek to increase our U.S. taxable income for the years 2010–2012 by an amount that would result in additional federal tax of approximately $3.6 billion plus interest. Any additional tax that could be imposed for the years 2010–2012 would be reduced by up to approximately $900 million of repatriation tax previously accrued on our foreign earnings.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013–2015, also proposing significant adjustments that primarily relate to the allocation of profits between certain of our entities in the United States and the U.S. territory of Puerto Rico similar to those proposed for the years 2010–2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office but were unable to reach resolution. In July 2022, we filed a petition in the U.S. Tax Court to contest a Notice for the years 2013–2015 that we previously reported receiving in April 2022 that seeks to increase our U.S. taxable income for the years 2013–2015 by an amount that would result in additional federal tax of approximately $5.1 billion, plus interest. In addition, the Notice asserts penalties of approximately $2.0 billion. Any additional tax that could be imposed for the years 2013–2015 would be reduced by up to approximately $2.2 billion of repatriation tax previously accrued on our foreign earnings.

We firmly believe that the IRS positions set forth in the 2010–2012 and 2013–2015 Notices are without merit. We are contesting the 2010–2012 and 2013–2015 Notices through the judicial process. The two cases were consolidated in the U.S. Tax Court on December 19, 2022. On February 10, 2023, the U.S. Tax Court entered an order setting a trial date of November 4, 2024.

We are currently under examination by the IRS for the years 2016–2018 with respect to issues similar to those for the 2010 through 2015 period. In addition, we are under examination by a number of state and foreign tax jurisdictions.

Final resolution of these complex matters is not likely within the next 12 months. We continue to believe our accrual for income tax liabilities is appropriate based on past experience, interpretations of tax law, application of the tax law to our facts and judgments about potential actions by tax authorities; however, due to the complexity of the provision for income taxes and uncertain resolution of these matters, the ultimate outcome of any tax matters may result in payments substantially greater than amounts accrued and could have a material adverse impact on our condensed consolidated financial statements.

We are no longer subject to U.S. federal income tax examinations for years ended on or before December 31, 2009.

See our Annual Report on Form 10-K for the year ended December 31, 2022, Part I, Item 1A, Risk Factors—*The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability,* for further discussion.

During the three and six months ended June 30, 2023, the gross amounts of our UTBs increased by $50 million and $110 million, respectively, as a result of tax positions taken during the current year. Substantially all of the UTBs as of June 30, 2023, if recognized, would affect our effective tax rate.

**6. Earnings per share**

The computation of basic EPS is based on the weighted-average number of our common shares outstanding. The computation of diluted EPS is based on the weighted-average number of our common shares outstanding and dilutive potential common shares, which primarily include shares that may be issued under our stock option, restricted stock and performance unit award programs (collectively, dilutive securities), as determined by using the treasury stock method.

The computations for basic and diluted EPS were as follows (in millions, except per-share data):

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| Income (Numerator): | | | | |
| Net income for basic and diluted EPS | $ 1,379 | $ 1,317 | $ 4,220 | $ 2,793 |
| Shares (Denominator): | | | | |
| Weighted-average shares for basic EPS | 535 | 535 | 534 | 541 |
| Effect of dilutive securities | 2 | 2 | 3 | 3 |
| Weighted-average shares for diluted EPS | 537 | 537 | 537 | 544 |
| Basic EPS | $ 2.58 | $ 2.46 | $ 7.90 | $ 5.16 |
| Diluted EPS | $ 2.57 | $ 2.45 | $ 7.86 | $ 5.13 |

For the three and six months ended June 30, 2023 and 2022, the number of antidilutive employee stock-based awards excluded from the computation of diluted EPS was not significant.

## 7. Investments

*Available-for-sale investments*

The amortized cost, gross unrealized gains, gross unrealized losses and fair values of interest-bearing securities, which are considered available-for-sale, by type of security were as follows (in millions):

| Types of securities as of June 30, 2023 | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair values |
|---|---|---|---|---|
| U.S. Treasury bills | $ — | $ — | $ — | $ — |
| Money market mutual funds | 33,618 | — | — | 33,618 |
| Total interest-bearing securities | $ 33,618 | $ — | $ — | $ 33,618 |

| Types of securities as of December 31, 2022 | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair values |
|---|---|---|---|---|
| U.S. Treasury bills | $ 1,676 | $ — | $ — | $ 1,676 |
| Money market mutual funds | 2,659 | — | — | 2,659 |
| Total interest-bearing securities | $ 4,335 | $ — | $ — | $ 4,335 |

The fair values of interest-bearing securities by location in the Condensed Consolidated Balance Sheets were as follows (in millions):

| Condensed Consolidated Balance Sheets locations | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Cash and cash equivalents | $ 33,618 | $ 2,659 |
| Marketable securities | — | 1,676 |
| Total interest-bearing securities | $ 33,618 | $ 4,335 |

Cash and cash equivalents in the above table excludes bank account cash of $630 million and $4,970 million as of June 30, 2023 and December 31, 2022, respectively.

Cash and cash equivalents as of June 30, 2023 was $34.2 billion, of which $27.8 billion is anticipated to be used for the proposed acquisition of Horizon. See Note 3, Acquisitions and divestitures.

All interest-bearing securities as of June 30, 2023 and December 31, 2022, mature in one year or less.

For the three and six months ended June 30, 2023 and 2022, realized gains and losses on interest-bearing securities were not material. Realized gains and losses on interest-bearing securities are recorded in Other (expense) income, net, in the Condensed Consolidated Statements of Income. The cost of securities sold is based on the specific-identification method.

The primary objective of our investment portfolio is to maintain safety of principal, prudent levels of liquidity and acceptable levels of risk. Our investment policy limits interest-bearing security investments to certain types of debt and money market instruments issued by institutions with investment-grade credit ratings, and it places restrictions on maturities and concentration by asset class and issuer.

*Equity securities*

*BeiGene, Ltd.*

Effective January 30, 2023, we relinquished our right to appoint a director to BeiGene’s Board of Directors. We no longer have the ability to exert significant influence over BeiGene. As a result, in the first quarter of 2023, we began to account for our ownership interest as an equity security with a readily determinable fair value, with changes in fair value recorded in Other (expense) income, net. See Note 12, Fair value measurement. During the three and six months ended June 30, 2023, we recognized an unrealized loss of $705 million and an unrealized gain of $1.2 billion, respectively, recorded in Other (expense) income, net, in our Condensed Consolidated Statements of Income. As of June 30, 2023, the carrying and fair value of our investment in BeiGene was $3.4 billion and was included in Other noncurrent assets in the Condensed Consolidated Balance Sheets.

As of December 31, 2022, under the equity method of accounting, the carrying value of our investment in BeiGene was $2.2 billion and was included in Other noncurrent assets in the Condensed Consolidated Balance Sheets, and our ownership percentage was 18.2%. During the three and six months ended June 30, 2022, under the equity method of accounting, our carrying value in BeiGene was adjusted by our share of BeiGene's net losses of $80 million and $188 million, respectively, and amortization of the basis difference of $48 million and $95 million, respectively, recorded in Other (expense) income, net, in our Condensed Consolidated Statements of Income.

*Other equity securities*

Excluding our equity investment in BeiGene, we held investments in other equity securities with readily determinable fair values (publicly traded securities) of $397 million and $480 million as of June 30, 2023 and December 31, 2022, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. During the three months ended June 30, 2023 and 2022, net unrealized gains and losses on these publicly traded securities were a gain of $3 million and a loss of $106 million, respectively. During the six months ended June 30, 2023 and 2022, net unrealized gains and losses on these publicly traded securities were a net gain of $8 million and a net loss of $276 million, respectively. Realized gains and losses on sales of publicly traded securities for the three and six months ended June 30, 2023 and 2022, were not material.

We held investments of $291 million and $233 million in equity securities without readily determinable fair values as of June 30, 2023 and December 31, 2022, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. During the three and six months ended June 30, 2023 and 2022, upward and downward adjustments on these securities were not material. Adjustments were based on observable price transactions.

*Equity method investments*

*Neumora Therapeutics, Inc.*

On September 30, 2021, we acquired an approximately 25.9% ownership interest in Neumora, a privately held company, for $257 million, which is included in Other noncurrent assets in the Condensed Consolidated Balance Sheets, in exchange for a $100 million cash payment and $157 million in noncash consideration primarily related to future services. Although our equity investment provides us with the ability to exercise significant influence over Neumora, we have elected the fair value option to account for our equity investment. Under the fair value option, changes in the fair value of the investment are recognized through earnings in Other (expense) income, net, in our Condensed Consolidated Statements of Income each reporting period. We believe the fair value option best reflects the economics of the underlying transaction. As of June 30, 2023 and December 31, 2022, our ownership interest in Neumora was approximately 24.5% and 24.9%, respectively, and the fair values of our investment were $316 million and $335 million, respectively. During the three months ended June 30, 2023 and 2022, we recognized a gain of $28 million and a loss of $39 million, respectively, and during the six months ended June 30, 2023 and 2022, we recognized losses of $19 million and $89 million, respectively. For information on determination of fair values, see Note 12, Fair value measurement.

*Limited partnerships*

We held limited partnership investments of $226 million and $249 million as of June 30, 2023 and December 31, 2022, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. These investments, primarily investment funds of early-stage biotechnology companies, are accounted for by using the equity method of accounting and 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. As of June 30, 2023, unfunded additional commitments to be made for these investments during the next several years amounted to $157 million. For the three months ended June 30, 2023 and 2022, net unrealized losses from our limited partnership investments were $29 million and $60 million, respectively. For the six months ended June 30, 2023 and 2022, net unrealized losses from our limited partnership investments were $9 million and $220 million, respectively.

**8. Inventories**

Inventories consisted of the following (in millions):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Raw materials | $ 855 | $ 828 |
| Work in process | 3,048 | 3,098 |
| Finished goods | 1,075 | 1,004 |
| Total inventories | $ 4,978 | $ 4,930 |

**9. Goodwill and other intangible assets**

*Goodwill*

The change in the carrying amount of goodwill was as follows (in millions):

| | Six months ended June 30, 2023 |
|---|---|
| Beginning balance | $ 15,529 |
| Adjustments to goodwill resulting from acquisitions and divestitures, net | (8) |
| Currency translation adjustment | 10 |
| Ending balance | $ 15,531 |

*Other intangible assets*

Other intangible assets consisted of the following (in millions):

| | June 30, 2023 | | | December 31, 2022 | | |
|---|---|---|---|---|---|---|
| | Gross carrying amounts | Accumulated amortization | Other intangible assets, net | Gross carrying amounts | Accumulated amortization | Other intangible assets, net |
| Finite-lived intangible assets: | | | | | | |
| Developed-product-technology rights | $ 29,040 | $ (16,310) | $ 12,730 | $ 29,028 | $ (15,045) | $ 13,983 |
| Licensing rights | 3,864 | (3,197) | 667 | 3,864 | (3,123) | 741 |
| Marketing-related rights | 1,312 | (1,195) | 117 | 1,326 | (1,167) | 159 |
| Research and development technology rights | 1,392 | (1,214) | 178 | 1,378 | (1,190) | 188 |
| Total finite-lived intangible assets | 35,608 | (21,916) | 13,692 | 35,596 | (20,525) | 15,071 |
| Indefinite-lived intangible assets: | | | | | | |
| In-process research and development | 941 | — | 941 | 1,009 | — | 1,009 |
| Total other intangible assets | $ 36,549 | $ (21,916) | $ 14,633 | $ 36,605 | $ (20,525) | $ 16,080 |

Developed-product-technology rights consists of rights related to marketed products. Licensing rights primarily consists of contractual rights to receive future milestone, royalty and profit-sharing payments; capitalized payments to third parties for milestones related to regulatory approvals to commercialize products; and upfront payments associated with royalty obligations for marketed products. Marketing-related rights primarily consists of rights related to the sale and distribution of marketed products. R&D technology rights pertains to technologies used in R&D that have alternative future uses.

IPR&D consists of R&D projects acquired in a business combination that are not complete at the time of acquisition due to remaining technological risks and/or lack of receipt of required regulatory approvals. We review IPR&D projects for impairment annually, whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable and upon the establishment of technological feasibility or regulatory approval.

During the three months ended June 30, 2023 and 2022, we recognized amortization associated with our finite-lived intangible assets of $693 million and $629 million, respectively. During the six months ended June 30, 2023 and 2022, we recognized amortization associated with our finite-lived intangible assets of $1.4 billion and $1.3 billion, respectively. Amortization of intangible assets is primarily included in Cost of sales in the Condensed Consolidated Statements of Income. The total estimated amortization of our finite-lived intangible assets for the remaining six months ending December 31, 2023, and the years ending December 31, 2024, 2025, 2026, 2027 and 2028, are $1.4 billion, $2.7 billion, $2.5 billion, $2.1 billion, $2.1 billion and $1.1 billion, respectively.

### 10. Financing arrangements

Our borrowings consisted of the following (in millions):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| 0.41% CHF700 million bonds due 2023 (0.41% 2023 Swiss franc Bonds) | $ — | $ 757 |
| 2.25% notes due 2023 (2.25% 2023 Notes) | 750 | 750 |
| 3.625% notes due 2024 (3.625% 2024 Notes) | 1,400 | 1,400 |
| 1.90% notes due 2025 (1.90% 2025 Notes) | 500 | 500 |
| 5.25% notes due 2025 (5.25% 2025 Notes) | 2,000 | — |
| 3.125% notes due 2025 (3.125% 2025 Notes) | 1,000 | 1,000 |
| 2.00% €750 million notes due 2026 (2.00% 2026 euro Notes) | 818 | 803 |
| 5.507% notes due 2026 (5.507% 2026 Notes) | 1,500 | — |
| 2.60% notes due 2026 (2.60% 2026 Notes) | 1,250 | 1,250 |
| 5.50% £475 million notes due 2026 (5.50% 2026 pound sterling Notes) | 603 | 574 |
| 2.20% notes due 2027 (2.20% 2027 Notes) | 1,724 | 1,724 |
| 3.20% notes due 2027 (3.20% 2027 Notes) | 1,000 | 1,000 |
| 5.15% notes due 2028 (5.15% 2028 Notes) | 3,750 | — |
| 1.65% notes due 2028 (1.65% 2028 Notes) | 1,234 | 1,234 |
| 3.00% notes due 2029 (3.00% 2029 Notes) | 750 | 750 |
| 4.05% notes due 2029 (4.05% 2029 Notes) | 1,250 | 1,250 |
| 4.00% £700 million notes due 2029 (4.00% 2029 pound sterling Notes) | 889 | 846 |
| 2.45% notes due 2030 (2.45% 2030 Notes) | 1,250 | 1,250 |
| 5.25% notes due 2030 (5.25% 2030 Notes) | 2,750 | — |
| 2.30% notes due 2031 (2.30% 2031 Notes) | 1,250 | 1,250 |
| 2.00% notes due 2032 (2.00% 2032 Notes) | 1,001 | 1,051 |
| 3.35% notes due 2032 (3.35% 2032 Notes) | 1,000 | 1,000 |
| 4.20% notes due 2033 (4.20% 2033 Notes) | 750 | 750 |
| 5.25% notes due 2033 (5.25% 2033 Notes) | 4,250 | — |
| 6.375% notes due 2037 (6.375% 2037 Notes) | 478 | 478 |
| 6.90% notes due 2038 (6.90% 2038 Notes) | 254 | 254 |
| 6.40% notes due 2039 (6.40% 2039 Notes) | 333 | 333 |
| 3.15% notes due 2040 (3.15% 2040 Notes) | 1,803 | 2,000 |
| 5.75% notes due 2040 (5.75% 2040 Notes) | 373 | 373 |
| 2.80% notes due 2041 (2.80% 2041 Notes) | 1,091 | 1,110 |
| 4.95% notes due 2041 (4.95% 2041 Notes) | 600 | 600 |
| 5.15% notes due 2041 (5.15% 2041 Notes) | 729 | 729 |
| 5.65% notes due 2042 (5.65% 2042 Notes) | 415 | 415 |
| 5.60% notes due 2043 (5.60% 2043 Notes) | 2,750 | — |
| 5.375% notes due 2043 (5.375% 2043 Notes) | 185 | 185 |
| 4.40% notes due 2045 (4.40% 2045 Notes) | 2,250 | 2,250 |
| 4.563% notes due 2048 (4.563% 2048 Notes) | 1,415 | 1,415 |
| 3.375% notes due 2050 (3.375% 2050 Notes) | 2,132 | 2,250 |
| 4.663% notes due 2051 (4.663% 2051 Notes) | 3,541 | 3,541 |
| 3.00% notes due 2052 (3.00% 2052 Notes) | 1,199 | 1,254 |
| 4.20% notes due 2052 (4.20% 2052 Notes) | 950 | 1,000 |
| 4.875% notes due 2053 (4.875% 2053 Notes) | 1,000 | 1,000 |
| 5.65% notes due 2053 (5.65% 2053 Notes) | 4,250 | — |
| 2.77% notes due 2053 (2.77% 2053 Notes) | 940 | 940 |
| 4.40% notes due 2062 (4.40% 2062 Notes) | 1,200 | 1,250 |

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| 5.75% notes due 2063 (5.75% 2063 Notes) | 2,750 | — |
| Other notes due 2097 | 100 | 100 |
| Unamortized bond discounts, premiums and issuance costs, net | (1,438) | (1,246) |
| Fair value adjustments | (436) | (437) |
| Other | 11 | 12 |
| Total carrying value of debt | 61,544 | 38,945 |
| Less current portion | (2,167) | (1,591) |
| Total long-term debt | $ 59,377 | $ 37,354 |

There are no material differences between the effective interest rates and coupon rates of any of our borrowings, except for the 4.563% 2048 Notes, the 4.663% 2051 Notes and the 2.77% 2053 Notes, which have effective interest rates of 6.3%, 5.6% and 5.2%, respectively.

*Debt issuances and acquisition-related financing*

During the three months ended March 31, 2023, in connection with the proposed acquisition of Horizon (see Note 3, Acquisitions and divestitures—*Proposed acquisition of Horizon Therapeutics plc*), we issued the following series of notes (in millions):

| | Principal Amount |
|---|---|
| 5.25% 2025 Notes | $ 2,000 |
| 5.507% 2026 Notes | 1,500 |
| 5.15% 2028 Notes | 3,750 |
| 5.25% 2030 Notes | 2,750 |
| 5.25% 2033 Notes | 4,250 |
| 5.60% 2043 Notes | 2,750 |
| 5.65% 2053 Notes | 4,250 |
| 5.75% 2063 Notes | 2,750 |
| Total | $ 24,000 |

If consummation of the proposed acquisition of Horizon does not occur on or before the later of (i) January 31, 2024, or such later date to which the agreement to acquire Horizon (Transaction Agreement) may be extended in accordance with its terms, (ii) the Transaction Agreement is terminated, or (iii) we otherwise notify the trustee of the notes that consummation of the acquisition will not be pursued, we will be required to redeem each series of notes, other than the 5.75% 2063 Notes, at a price equal to 101% of the principal amount of the notes plus accrued and unpaid interest. In the event of a change-in-control triggering event, as defined by the terms of the notes, we may be required to purchase all or a portion of these notes at a price equal to 101% of the principal amount of the notes plus accrued and unpaid interest. In addition, these notes may be redeemed at any time at our option, in whole or in part, at the principal amount of the notes being redeemed plus accrued and unpaid interest and a make-whole amount, which are defined by the terms of the notes. Except with respect to the 5.25% 2025 Notes, the notes may be redeemed without payment of make-whole amounts if redemption occurs during a specified period of time immediately prior to the maturing of the notes. Such time periods range from two months to six months prior to maturity, except for the 5.507% 2026 Notes, which may be redeemed without payment of the make-whole amount if redemption occurs after two years prior to maturity.

In December 2022, in connection with the proposed acquisition of Horizon, we entered into a bridge credit agreement, which provided for borrowings with an aggregate principal amount of $24.5 billion as of December 31, 2022. Subsequent to our March 2023 debt issuance described above, we terminated the bridge credit agreement. Accordingly, during the three months ended March 31, 2023, we recognized $98 million of financing cost associated with the bridge credit agreement, primarily in Other (expense) income, net, in the Condensed Consolidated Statements of Income.

Also in connection with the proposed acquisition of Horizon, we entered into a $4.0 billion term loan credit agreement in December 2022. No amounts under this agreement were outstanding as of June 30, 2023 and December 31, 2022.

*Debt extinguishment*

During the three months ended March 31, 2023, we repurchased portions of the 2.00% 2032 Notes, 3.15% 2040 Notes, 2.80% 2041 Notes, 3.375% 2050 Notes, 3.00% 2052 Notes, 4.20% 2052 Notes and 4.40% 2062 Notes for an aggregate cost of $420 million, which resulted in the recognition of a $113 million gain on extinguishment of debt recorded in Other (expense) income, net, in the Condensed Consolidated Statements of Income.

*Debt repayments*

During the three months ended March 31, 2023, we repaid the CHF700 million aggregate principal amount ($704 million upon settlement of the related cross-currency swap) of the 0.41% 2023 Swiss franc Bonds.

*Shelf registration statement and other facilities*

In February 2023, we filed a shelf registration statement with the SEC that allows us to issue unspecified amounts of debt securities; common stock; preferred stock; warrants to purchase debt securities, common stock, preferred stock or depositary shares; rights to purchase common stock or preferred stock; securities purchase contracts; securities purchase units; and depositary shares. Under this shelf registration statement, all of the securities available for issuance may be offered from time to time, with terms to be determined at the time of issuance. This shelf registration statement expires in February 2026.

During the three months ended March 31, 2023, we amended and restated our syndicated, unsecured, revolving credit agreement, under which we may borrow up to $4.0 billion (increased from $2.5 billion prior to the amendment) for general corporate purposes, including as a liquidity backstop for our commercial paper program. The commitments under the revolving credit agreement may be increased by up to $1.25 billion with the agreement of the banks (increased from $750 million prior to the amendment). Each bank that is a party to the agreement has an initial commitment term of five years. This term may be extended for up to two additional one-year periods with the agreement of the banks. Annual commitment fees for this agreement are 0.09% of the unused portion of the facility based on our current credit rating. Generally, we would be charged interest for any amounts borrowed under this facility, based on our current credit rating, at (i) SOFR plus 1.01% or (ii) the highest of (A) the administrative agent bank base commercial lending rate, (B) the overnight federal funds rate plus 0.50% or (C) one-month SOFR plus 1.1%. As of June 30, 2023 and December 31, 2022, no amounts were outstanding under this facility.

**11. Stockholders' equity**

*Stock repurchase program*

Activity under our stock repurchase program, on a trade date basis, was as follows (in millions):

| | 2023 | | 2022 | |
|---|---|---|---|---|
| | Shares | Dollars | Shares | Dollars |
| First quarter | — | $ — | 24.6 | $ 5,410 |
| Second quarter | — | — | — | — |
| Total stock repurchases | — | $ — | 24.6 | $ 5,410 |

As of June 30, 2023, $7.0 billion of authorization remained available under our stock repurchase program.

*Dividends*

In March 2023 and December 2022, our Board of Directors declared quarterly cash dividends of $2.13 per share, which were paid in June 2023 and March 2023, respectively. In August 2023, our Board of Directors declared a quarterly cash dividend of $2.13 per share that will be paid in September 2023.

*Accumulated other comprehensive income (loss)*

The components of AOCI were as follows (in millions):

| | Foreign currency translation | Cash flow hedges | Other | AOCI |
|---|---|---|---|---|
| Balance as of December 31, 2022 | $ (348) | $ 128 | $ (11) | $ (231) |
| Foreign currency translation adjustments | 28 | — | — | 28 |
| Unrealized losses | — | (71) | — | (71) |
| Reclassification adjustments to income | — | (30) | — | (30) |
| Other | — | — | 21 | 21 |
| Income taxes | — | 15 | — | 15 |
| Balance as of March 31, 2023 | (320) | 42 | 10 | (268) |
| Foreign currency translation adjustments | 11 | — | — | 11 |
| Unrealized gains | — | 50 | — | 50 |
| Reclassification adjustments to income | — | (87) | — | (87) |
| Other | — | — | (1) | (1) |
| Income taxes | — | 15 | — | 15 |
| Balance as of June 30, 2023 | $ (309) | $ 20 | $ 9 | $ (280) |

Reclassifications out of AOCI and into earnings, including related income tax expenses, were as follows (in millions):

| | Three months ended June 30, | | |
|---|---|---|---|
| **Components of AOCI** | **2023** | **2022** | **Condensed Consolidated Statements of Income locations** |
| Cash flow hedges: | | | |
| Foreign currency contract gains | $ 36 | $ 53 | Product sales |
| Cross-currency swap contract gains (losses) | 51 | (185) | Other (expense) income, net |
| | 87 | (132) | Income before income taxes |
| | (19) | 28 | Provision for income taxes |
| | $ 68 | $ (104) | Net income |

| | Six months ended June 30, | | |
|---|---|---|---|
| **Components of AOCI** | **2023** | **2022** | **Condensed Consolidated Statements of Income locations** |
| Cash flow hedges: | | | |
| Foreign currency contract gains | $ 88 | $ 80 | Product sales |
| Cross-currency swap contract gains (losses) | 29 | (263) | Other (expense) income, net |
| | 117 | (183) | Income before income taxes |
| | (25) | 39 | Provision for income taxes |
| | $ 92 | $ (144) | Net income |

**12. Fair value measurement**

To estimate the fair value of our financial assets and liabilities, we use valuation approaches within a hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing an asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing an asset or liability and are developed based on the best information available in the circumstances. The fair value hierarchy is divided into three levels based on the sources of inputs as follows:

| | | |
|---|---|---|
| Level 1 | — | Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access |
| Level 2 | — | Valuations for which all significant inputs are observable either directly or indirectly—other than Level 1 inputs |
| Level 3 | — | Valuations based on inputs that are unobservable and significant to the overall fair value measurement |

The availability of observable inputs can vary among different types of financial assets and liabilities. To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. In certain cases, inputs used for measuring fair value may fall into different levels of the fair value hierarchy. In such cases, for financial statement disclosure purposes, the level in the fair value hierarchy within which the fair value measurement is categorized is based on the lowest level of input used that is significant to the overall fair value measurement.

The fair values of each major class of the Company's financial assets and liabilities measured at fair value on a recurring basis were as follows (in millions):

| **Fair value measurement as of June 30, 2023, using:** | **Quoted prices in active markets for identical assets (Level 1)** | **Significant other observable inputs (Level 2)** | **Significant unobservable inputs (Level 3)** | **Total** |
|---|---|---|---|---|
| **Assets:** | | | | |
| Available-for-sale securities: | | | | |
| U.S. Treasury bills | $ — | $ — | $ — | $ — |
| Money market mutual funds | 33,618 | — | — | 33,618 |
| Other investments | — | 137 | — | 137 |
| Equity securities | | | | |
| Derivatives: | 3,775 | — | 316 | 4,091 |
| Foreign currency forward contracts | — | 251 | — | 251 |
| Cross-currency swap contracts | — | — | — | — |
| Total assets | $ 37,393 | $ 388 | $ 316 | $ 38,097 |
| | | | | |
| **Liabilities:** | | | | |
| Derivatives: | | | | |
| Foreign currency forward contracts | $ — | $ 83 | $ — | $ 83 |
| Cross-currency swap contracts | — | 493 | — | 493 |
| Interest rate swap contracts | — | 735 | — | 735 |
| Forward interest rate contracts | — | — | — | — |
| Contingent consideration obligations | — | — | 248 | 248 |
| Total liabilities | $ — | $ 1,311 | $ 248 | $ 1,559 |

| Fair value measurement as of December 31, 2022, using: | Quoted prices in active markets for identical assets (Level 1) | Significant other observable inputs (Level 2) | Significant unobservable inputs (Level 3) | Total |
|---|---|---|---|---|
| **Assets:** | | | | |
| Available-for-sale securities: | | | | |
| U.S. Treasury bills | $ 1,676 | $ — | $ — | $ 1,676 |
| Money market mutual funds | 2,659 | — | — | 2,659 |
| Other investments | — | 130 | — | 130 |
| Equity securities | 480 | — | 335 | 815 |
| Derivatives: | | | | |
| Foreign currency forward contracts | — | 287 | — | 287 |
| Cross-currency swap contracts | — | 54 | — | 54 |
| Total assets | $ 4,815 | $ 471 | $ 335 | $ 5,621 |
| | | | | |
| **Liabilities:** | | | | |
| Derivatives: | | | | |
| Foreign currency forward contracts | $ — | $ 76 | $ — | $ 76 |
| Cross-currency swap contracts | — | 541 | — | 541 |
| Interest rate swap contracts | — | 776 | — | 776 |
| Forward interest rate contracts | — | 5 | — | 5 |
| Contingent consideration obligations | — | — | 270 | 270 |
| Total liabilities | $ — | $ 1,398 | $ 270 | $ 1,668 |

*Interest-bearing and equity securities*

The fair values of our U.S. Treasury securities, money market mutual funds and equity investments in publicly traded securities, including our equity investment in BeiGene as of June 30, 2023, are based on quoted market prices in active markets, with no valuation adjustment. Other investments consist of interest-bearing deposits that are valued at amortized cost, which approximates fair value given their near-term maturity. The fair values of equity securities without readily determinable fair values are initially valued at the transaction prices and subsequently valued based on a combination of observable price transactions when available, market performance and publicly available market information for similar companies that have actively traded equity securities. See Note 7, Investments—*Neumora Therapeutics, Inc.*

As of the first quarter of 2023, we no longer account for our equity investment in BeiGene under the equity method of accounting. As of December 31, 2022, the fair value and carrying value were $4.2 billion and $2.2 billion, respectively. The fair value of our investment in BeiGene was estimated by using Level 1 inputs. See Note 7, Investments—*BeiGene, Ltd.*

*Derivatives*

All of our foreign currency forward contracts, cross-currency swap contracts and interest rate swap contracts are with counterparties that have minimum credit ratings of A– or equivalent by S&P, Moody's or Fitch. We estimate the fair values of these contracts by taking into consideration valuations obtained from a third-party valuation service that uses an income-based industry-standard valuation model for which all significant inputs are observable either directly or indirectly. These inputs, as applicable, include foreign currency exchange rates, LIBOR, SOFR, swap rates, obligor credit default swap rates and cross-currency basis swap spreads. Certain inputs, when applicable, are at commonly quoted intervals. Starting in the third quarter of 2023, terms under our existing derivative contracts will reference the SOFR benchmark consistent with the ISDA protocol. See Note 13, Derivative instruments.

*Contingent consideration obligations*

As a result of our business acquisitions, we have incurred contingent consideration obligations as discussed below. The contingent consideration obligations are recorded at their fair values by using probability-adjusted discounted cash flows, and we revalue these obligations each reporting period until the related contingencies have been resolved. The fair value measurements of these obligations are based on significant unobservable inputs related to licensing rights and product candidates acquired in business combinations, and they are reviewed quarterly by management in our R&D and commercial sales organizations. The inputs include, as applicable, estimated probabilities and the timing of achieving specified development, regulatory and commercial milestones as well as estimated annual sales. Significant changes that increase or decrease the probabilities of achieving the related development, regulatory and commercial events or that shorten or lengthen the time required to achieve such events or that increase or decrease estimated annual sales would result in corresponding increases or decreases in the fair values of the obligations, as applicable. Changes in the fair values of contingent consideration obligations are recognized in Other operating expenses in the Condensed Consolidated Statements of Income.

Changes in the carrying amounts of contingent consideration obligations were as follows (in millions):

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| Beginning balance | $ 273 | $ 330 | $ 270 | $ 342 |
| Payments | (2) | (1) | (4) | (3) |
| Net changes in valuations | (23) | (19) | (18) | (29) |
| Ending balance | $ 248 | $ 310 | $ 248 | $ 310 |

As of June 30, 2023 and December 31, 2022, our contingent consideration obligations are primarily the result of our acquisition of Teneobio, in October 2021, which obligates us to pay the former shareholders up to $1.6 billion upon achieving separate development and regulatory milestones with regard to various R&D programs.

*Summary of the fair values of other financial instruments*

*Cash equivalents*

The fair values of cash equivalents approximate their carrying values due to the short-term nature of such financial instruments.

*Borrowings*

We estimated the fair values of our borrowings by using Level 2 inputs. As of June 30, 2023 and December 31, 2022, the aggregate fair values of our borrowings were $59.1 billion and $35.0 billion, respectively, and the carrying values were $61.5 billion and $38.9 billion, respectively.

During the six months ended June 30, 2023 and 2022, there were no transfers of assets or liabilities between fair value measurement levels, and there were no material remeasurements to the fair values of assets and liabilities that are not measured at fair value on a recurring basis.

**13. Derivative instruments**

The Company is exposed to foreign currency exchange rate and interest rate risks related to its business operations. To reduce our risks related to such exposures, we use or have used certain derivative instruments, including foreign currency forward, foreign currency option, cross-currency swap, forward interest rate and interest rate swap contracts. We have designated certain of our derivatives as cash flow and fair value hedges; we also have derivatives not designated as hedges. We do not use derivatives for speculative-trading purposes.

*Cash flow hedges*

We are exposed to possible changes in the values of certain anticipated foreign currency cash flows resulting from changes in foreign currency exchange rates primarily associated with our euro-denominated international product sales. The foreign currency exchange rate fluctuation exposure associated with cash inflows from our international product sales is partially offset by corresponding cash outflows from our international operating expenses. To further reduce our exposure, we enter into foreign currency forward contracts to hedge a portion of our projected international product sales up to a maximum of three years into the future; and at any given point in time, a higher percentage of nearer-term projected product sales is being hedged than in successive periods.

As of June 30, 2023 and December 31, 2022, we had outstanding foreign currency forward contracts with aggregate notional amounts of $6.1 billion and $6.0 billion, respectively. We have designated these foreign currency forward contracts, which are primarily euro based, as cash flow hedges. Accordingly, we report the unrealized gains and losses on these contracts in AOCI in the Condensed Consolidated Balance Sheets, and we reclassify them to Product sales in the Condensed Consolidated Statements of Income in the same periods during which the hedged transactions affect earnings.

To hedge our exposure to foreign currency exchange rate risk associated with certain of our long-term debt denominated in foreign currencies, we enter into cross-currency swap contracts. Under the terms of such contracts, we paid euros, pounds sterling and Swiss francs and received U.S. dollars for the notional amounts at the inception of the contracts; and based on these notional amounts, we exchange interest payments at fixed rates over the lives of the contracts by paying U.S. dollars and receiving euros, pounds sterling and Swiss francs. In addition, we will pay U.S. dollars to and receive euros, pounds sterling and Swiss francs from the counterparties at the maturities of the contracts for these same notional amounts. The terms of these contracts correspond to the related hedged debt, thereby effectively converting the interest payments and principal repayment on the debt from euros, pounds sterling and Swiss francs to U.S. dollars. We have designated these cross-currency swap contracts as cash flow hedges. Accordingly, the unrealized gains and losses on these contracts are reported in AOCI in the Condensed Consolidated Balance Sheets and reclassified to Other (expense) income, net, in the Condensed Consolidated Statements of Income in the same periods during which the hedged debt affects earnings.

The notional amounts and interest rates of our cross-currency swaps as of June 30, 2023, were as follows (notional amounts in millions):

| | Foreign currency | | U.S. dollars | |
|---|---|---|---|---|
| **Hedged notes** | **Notional amounts** | **Interest rates** | **Notional amounts** | **Interest rates** |
| 2.00% 2026 euro Notes | € 750 | 2.0 % | $ 833 | 3.9 % |
| 5.50% 2026 pound sterling Notes | £ 475 | 5.5 % | $ 747 | 6.0 % |
| 4.00% 2029 pound sterling Notes | £ 700 | 4.0 % | $ 1,111 | 4.6 % |

In connection with the anticipated issuance of long-term fixed-rate debt, we occasionally enter into forward interest rate contracts in order to hedge the variability in cash flows due to changes in the applicable U.S. Treasury rate between the time we enter into these contracts and the time the related debt is issued. Gains and losses on forward interest rate contracts, which are designated as cash flow hedges, are recognized in AOCI in the Condensed Consolidated Balance Sheets and are amortized into Interest expense, net, in the Condensed Consolidated Statements of Income over the lives of the associated debt issuances. Amounts recognized in connection with forward interest rate contracts during the six months ended June 30, 2023, and amounts expected to be recognized during the subsequent 12 months are not material.

Gains and losses recognized in AOCI for our derivative instruments designated as cash flow hedges were as follows (in millions):

| Derivatives in cash flow hedging relationships | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Six months ended June 30, 2023 | Six months ended June 30, 2022 |
|---|---|---|---|---|
| Foreign currency forward contracts | $ 24 | $ 252 | $ 24 | $ 330 |
| Cross-currency swap contracts | 26 | (185) | (14) | (207) |
| Forward interest rate contracts | — | — | (31) | — |
| Total unrealized gains (losses) | $ 50 | $ 67 | $ (21) | $ 123 |

*Fair value hedges*

To achieve a desired mix of fixed-rate and floating-rate debt, we entered into interest rate swap contracts that qualified for and were designated as fair value hedges. These interest rate swap contracts effectively convert fixed-rate coupons to floating-rate coupons over the terms of the related hedge contracts. As of both June 30, 2023 and December 31, 2022, we had interest rate swap contracts with aggregate notional amounts of $6.7 billion that hedge certain portions of our long-term debt issuances.

For interest rate swap contracts that qualify for and are designated as fair value hedges, we recognize in Interest expense, net, in the Condensed Consolidated Statements of Income the unrealized gain or loss on the derivative resulting from the change in fair value during the period, as well as the offsetting unrealized loss or gain of the hedged item resulting from the change in fair value during the period attributable to the hedged risk. If a hedging relationship involving an interest rate swap contract is terminated, the gain or loss realized on contract termination is recorded as an adjustment to the carrying value of the debt and amortized into Interest expense, net, over the remaining life of the previously hedged debt.

The hedged liabilities and related cumulative-basis adjustments for fair value hedges of those liabilities were recorded in the Condensed Consolidated Balance Sheets as follows (in millions):

| Condensed Consolidated Balance Sheets locations | Carrying amounts of hedged liabilities[1] June 30, 2023 | Carrying amounts of hedged liabilities[1] December 31, 2022 | Cumulative amounts of fair value hedging adjustments related to the carrying amounts of the hedged liabilities[2] June 30, 2023 | Cumulative amounts of fair value hedging adjustments related to the carrying amounts of the hedged liabilities[2] December 31, 2022 |
|---|---|---|---|---|
| Current portion of long-term debt | $ 1,416 | $ 82 | $ 16 | $ 82 |
| Long-term debt | $ 4,688 | $ 6,017 | $ (452) | $ (519) |

(1) Current portion of long-term debt includes $80 million and $82 million of carrying value with discontinued hedging relationships as of June 30, 2023 and December 31, 2022, respectively. Long-term debt includes $318 million and $357 million of carrying value with discontinued hedging relationships as of June 30, 2023 and December 31, 2022, respectively.

(2) Current portion of long-term debt includes $80 million and $82 million of hedging adjustments on discontinued hedging relationships as of June 30, 2023 and December 31, 2022, respectively. Long-term debt includes $218 million and $257 million of hedging adjustments on discontinued hedging relationships as of June 30, 2023 and December 31, 2022, respectively.

*Impact of hedging transactions*

The following tables summarize the amounts recorded in income and expense line items and the effects thereon from fair value and cash flow hedging, including discontinued hedging relationships (in millions):

| | Three months ended June 30, 2023 | | | Six months ended June 30, 2023 | | |
|---|---|---|---|---|---|---|
| | **Product sales** | **Other (expense) income, net** | **Interest expense, net** | **Product sales** | **Other (expense) income, net** | **Interest expense, net** |
| Total amounts recorded in income and (expense) line items presented in the Condensed Consolidated Statements of Income | $ 6,683 | $ (318) | $ (752) | $ 12,529 | $ 1,746 | $ (1,295) |
| The effects of cash flow and fair value hedging: | | | | | | |
| Gains on cash flow hedging relationships reclassified out of AOCI: | | | | | | |
| Foreign currency forward contracts | $ 36 | $ — | $ — | $ 88 | $ — | $ — |
| Cross-currency swap contracts | $ — | $ 51 | $ — | $ — | $ 29 | $ — |
| Gains (losses) on fair value hedging relationships—interest rate swap agreements: | | | | | | |
| Hedged items[(1)] | $ — | $ — | $ 93 | $ — | $ — | $ 5 |
| Derivatives designated as hedging instruments | $ — | $ — | $ (72) | $ — | $ — | $ 42 |

| | Three months ended June 30, 2022 | | | Six months ended June 30, 2022 | | |
|---|---|---|---|---|---|---|
| | **Product sales** | **Other (expense) income, net** | **Interest expense, net** | **Product sales** | **Other (expense) income, net** | **Interest expense, net** |
| Total amounts recorded in income and (expense) line items presented in the Condensed Consolidated Statements of Income | $ 6,281 | $ (317) | $ (328) | $ 12,012 | $ (847) | $ (623) |
| The effects of cash flow and fair value hedging: | | | | | | |
| Gains (losses) on cash flow hedging relationships reclassified out of AOCI: | | | | | | |
| Foreign currency forward contracts | $ 53 | $ — | $ — | $ 80 | $ — | $ — |
| Cross-currency swap contracts | $ — | $ (185) | $ — | $ — | $ (263) | $ — |
| Gains (losses) on fair value hedging relationships—interest rate swap agreements: | | | | | | |
| Hedged items[(1)] | $ — | $ — | $ 157 | $ — | $ — | $ 494 |
| Derivatives designated as hedging instruments | $ — | $ — | $ (135) | $ — | $ — | $ (450) |

[(1)] Gains on hedged items do not exactly offset losses on the related designated hedging instruments due to amortization of the cumulative amounts of fair value hedging adjustments included in the carrying amount of the hedged debt for discontinued hedging relationships and the recognition of gains on terminated hedges when the corresponding hedged item was paid down in the period.

No portions of our cash flow hedge contracts were excluded from the assessment of hedge effectiveness. As of June 30, 2023, we expected to reclassify $108 million of net gains on our foreign currency and cross-currency swap contracts out of AOCI and into earnings during the next 12 months.

*Derivatives not designated as hedges*

To reduce our exposure to foreign currency fluctuations in certain assets and liabilities denominated in foreign currencies, we enter into foreign currency forward contracts that are not designated as hedging transactions. Most of these exposures are hedged on a month-to-month basis. As of June 30, 2023 and December 31, 2022, the total notional amounts of these foreign currency forward contracts were $557 million and $517 million, respectively. Gains and losses recognized in earnings for our derivative instruments not designated as hedging instruments were not material for the three and six months ended June 30, 2023 and 2022.

*Fair values of derivatives*

The fair values of derivatives included in the Condensed Consolidated Balance Sheets were as follows (in millions):

| | Derivative assets | | Derivative liabilities | |
|---|---|---|---|---|
| **June 30, 2023** | **Condensed Consolidated Balance Sheets locations** | **Fair values** | **Condensed Consolidated Balance Sheets locations** | **Fair values** |
| **Derivatives designated as hedging instruments:** | | | | |
| Foreign currency forward contracts | Other current assets/ Other noncurrent assets | $ 251 | Accrued liabilities/ Other noncurrent liabilities | $ 83 |
| Cross-currency swap contracts | Other current assets/ Other noncurrent assets | — | Accrued liabilities/ Other noncurrent liabilities | 493 |
| Interest rate swap contracts | Other current assets/ Other noncurrent assets | — | Accrued liabilities/ Other noncurrent liabilities | 735 |
| Forward interest rate contracts | Other current assets/ Other noncurrent assets | — | Accrued liabilities/ Other noncurrent liabilities | — |
| Total derivatives designated as hedging instruments | | 251 | | 1,311 |
| Total derivatives | | $ 251 | | $ 1,311 |

| | Derivative assets | | Derivative liabilities | |
|---|---|---|---|---|
| **December 31, 2022** | **Condensed Consolidated Balance Sheets locations** | **Fair values** | **Condensed Consolidated Balance Sheets locations** | **Fair values** |
| **Derivatives designated as hedging instruments:** | | | | |
| Foreign currency forward contracts | Other current assets/ Other noncurrent assets | $ 287 | Accrued liabilities/ Other noncurrent liabilities | $ 76 |
| Cross-currency swap contracts | Other current assets/ Other noncurrent assets | 54 | Accrued liabilities/ Other noncurrent liabilities | 541 |
| Interest rate swap contracts | Other current assets/ Other noncurrent assets | — | Accrued liabilities/ Other noncurrent liabilities | 776 |
| Forward interest rate contracts | Other current assets/ Other noncurrent assets | — | Accrued liabilities/ Other noncurrent liabilities | 5 |
| Total derivatives designated as hedging instruments | | 341 | | 1,398 |
| Total derivatives | | $ 341 | | $ 1,398 |

For additional information, see Note 12, Fair value measurement.

Our derivative contracts that were in liability positions as of June 30, 2023, contain certain credit-risk-related contingent provisions that would be triggered if (i) we were to undergo a change-in-control and (ii) our or the surviving entity's creditworthiness deteriorates, which is generally defined as having either a credit rating that is below investment grade or a materially weaker creditworthiness after the change-in-control. If these events were to occur, the counterparties would have the right, but not the obligation, to close the contracts under early-termination provisions. In such circumstances, the counterparties could request immediate settlement of these contracts for amounts that approximate the then current fair values of the contracts. In addition, our derivative contracts are not subject to any type of master netting arrangement, and amounts due either to or from a counterparty under the contracts may be offset against other amounts due either to or from the same counterparty only if an event of default or termination, as defined, were to occur.

The cash flow effects of our derivative contracts in the Condensed Consolidated Statements of Cash Flows are included in Net cash provided by operating activities, except for the settlement of notional amounts of cross-currency swaps, which are included in Net cash provided by (used in) financing activities.

**14. Contingencies and commitments**

*Contingencies*

In the ordinary course of business, we are involved in various legal proceedings, government investigations and other matters that are complex in nature and have outcomes that are difficult to predict. See our Annual Report on Form 10-K for the year ended December 31, 2022, Part I, Item 1A. Risk Factors—*Our business may be affected by litigation and government investigations.* We describe our legal proceedings and other matters that are significant or that we believe could become significant in this footnote; and in Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022; and in Note 14, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2023.

We record accruals for loss contingencies to the extent that we conclude it is probable that a liability has been incurred and the amount of the related loss can be reasonably estimated. We evaluate, on a quarterly basis, developments in legal proceedings and other matters that could cause an increase or decrease in the amount of the liability that has been accrued previously.

Our legal proceedings involve various aspects of our business and a variety of claims, some of which present novel factual allegations and/or unique legal theories. In each of the matters described in this filing; and in Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022; and in Note 14, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2023, in which we could incur a liability, our opponents seek an award of a not-yet-quantified amount of damages or an amount that is not material. In addition, a number of the matters pending against us are at very early stages of the legal process, which in complex proceedings of the sort we face often extend for several years. As a result, none of the matters described in this filing; and in Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022; and in Note 14, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2023, in which we could incur a liability, have progressed sufficiently through discovery and/or the development of important factual information and legal issues to enable us to estimate a range of possible loss, if any, or such amounts are not material. While it is not possible to accurately predict or determine the eventual outcomes of these matters, an adverse determination in one or more of these matters currently pending could have a material adverse effect on our consolidated results of operations, financial position or cash flows.

Certain recent developments concerning our legal proceedings and other matters are discussed below:

*Repatha Patent Litigation*

*Amgen Inc., et al. v. Sanofi, et al.*

On May 18, 2023, the U.S. Supreme Court entered final judgment affirming the lower court's decision invalidating claims 19 and 29 of U.S. Patent No. 8,829,165 and claim 7 of the U.S. Patent No. 8,859,741 as lacking an enabling disclosure of the invention claimed.

*Patent Disputes in the International Region*

On June 1, 2023, Amgen filed an action before the Unitary Patent Court against Sanofi-Aventis Deutschland GmbH, Sanofi-Aventis Groupe S.A., Sanofi Winthrop Industrie S.A. (collectively, Sanofi) and Regeneron Pharmaceuticals, Inc. alleging that the importation, marketing, sale and use of PRALUENT® infringes European Patent 3,666,797 (the EP'797 Patent) seeking an injunction and damages for past infringement. On June 29, 2023, the Unitary Patent Court served us with an action filed by Sanofi before the Unitary Patent Court seeking revocation of Amgen's EP'797 Patent. On July 20, 2023, Amgen filed objections to the admissibility of Sanofi's revocation action before the Unitary Patent Court's Central Division and Local Divisions on the grounds that Amgen's infringement action was filed prior to Sanofi's revocation action.

On November 14, 2023, the Regional Court of Dusseldorf is scheduled to hear argument on Sanofi Biotechnology SAS' lawsuit alleging that our marketing of Repatha infringes European Patent 2,756,004.

The Munich Regional Court scheduled a hearing for February 28, 2024 on Sanofi's action against Amgen in which Sanofi seeks damages arising from the provisional enforcement of an injunction against PRALUENT® that was lifted after an October 29, 2020 ruling by the Technical Board of Appeal that broader claims in Amgen's European Patent 2,215,125 encompassing PRALUENT® were invalid.

*Prolia/XGEVA Biologics Price Competition and Innovation Act (BPCIA) Litigation*

*Amgen Inc. et al. v. Sandoz Inc., et al.*

On May 1, 2023, Amgen Inc. and Amgen Manufacturing Limited filed a lawsuit in the U.S. District Court for the District of New Jersey (New Jersey District Court) against Sandoz Inc., Sandoz GmbH, Lek Pharmaceuticals d.d., Novartis Pharmaceutical Productions d.o.o., and Novartis AG (collectively, Defendants) based on the submission to the FDA of a Biologics License Application seeking approval to market and sell a biosimilar version of Amgen's Prolia and XGEVA products. The complaint asserts infringement of the following 21 patents, which are listed in the FDA's Purple Book for Amgen's Prolia and XGEVA products: U.S. Patent Nos. 7,364,736; 7,928,205; 8,058,418; 9,012,178; 9,133,493; 9,228,168; 9,320,816; 9,328,134; 9,359,435; 9,481,901; 10,167,492; 10,513,723; 10,583,397; 10,822,630; 10,894,972; 11,077,404; 11,098,079; 11,130,980; 11,254,963; 11,299,760; and 11,434,514 (collectively, the Asserted Patents). Amgen seeks a judgment from the New Jersey District Court that Defendants have infringed or will infringe one or more claims of each of the Asserted Patents and based on that judgment, a permanent injunction prohibiting the commercial manufacture, use, offer to sell, or sale within the United States or importation into the United States of Defendants' proposed denosumab biosimilar before expiration of each of the Asserted Patents found to infringe. Amgen also seeks monetary remedies for any past acts of infringement.

On June 16, 2023, Amgen filed an amended and supplemental complaint to include additional information regarding the completion of the BPCIA information exchange after the filing of the original complaint. Sandoz Inc. responded to the amended and supplemental complaint on July 7, 2023, denying infringement and asserting counterclaims seeking a declaratory judgment that asserted patents are invalid and/or unenforceable. On July 21, 2023, the New Jersey District Court granted Amgen's request for a briefing schedule to present and hear a motion to be filed by Amgen on or before September 1, 2023 seeking a preliminary injunction to prohibit patent infringement by Sandoz's denosumab product until the court is able to reach judgment on the merits of Amgen's lawsuit. On August 2, 2023, the New Jersey District Court scheduled a preliminary injunction hearing that will commence on October 30, 2023.

*ABP 654 (ustekinumab) Patent Litigation*

*Janssen Biotech, Inc. v. Amgen Inc.*

On May 22, 2023, pursuant to a confidential settlement agreement, the parties filed a joint stipulation of dismissal with prejudice of the U.S. litigation. On May 23, 2023, the U.S. District Court for the District of Delaware (Delaware District Court) issued an order dismissing the U.S. litigation with prejudice.

*Janssen Biotech Inc. v. Amgen Technology (Ireland) Unlimited Company*

On May 22, 2023, pursuant to a confidential settlement agreement, the parties requested that the Irish proceedings be struck out and on the same day the Irish High Court issued an order striking out the proceedings and vacating all previous orders in those proceedings.

*Antitrust Class Action*

*Sensipar Antitrust Class Actions*

On June 26, 2023, the U.S. Court of Appeals for the Third Circuit entered an order granting defendants' (including Amgen's) petition for interlocutory appeal and denying plaintiffs' cross-petition. The questions certified are whether (1) the statute for interlocutory decisions authorizes a district court judge to certify for interlocutory appeal an order issued in the same case by a predecessor district court judge; and (2) the settlement of a patent infringement claim that involves the forgiveness of damages associated with that patent's alleged infringement, on its own or combined with an acceleration clause, constitutes a reverse payment. On July 3, 2023, Amgen and Teva Pharmaceuticals USA, Inc. filed a notice of appeal.

*Regeneron Pharmaceuticals, Inc. Antitrust Action*

The Delaware District Court scheduled the trial to begin on November 12, 2024.

*U.S. Tax Litigation*

*Amgen Inc. & Subsidiaries v. Commissioner of Internal Revenue*

See Note 5, Income taxes, for discussion of the IRS tax dispute and the Company's petitions in the U.S. Tax Court.

*Shareholder Derivative Litigation*

On August 2, 2023, Leon Martin filed a derivative action, purportedly on behalf of Amgen, against Amgen, Robert Bradway, Peter Griffith and Amgen's independent board members. The action was filed in the U.S. District Court for the Southern District of New York as related to the pending federal securities class action filed by Roofers Local No. 149 Pension Fund on March 13, 2023 (the Roofers securities class action). The complaint in this matter alleges claims for violations of the Securities Exchange Act of 1934, breach of fiduciary duty, aiding and abetting breach of fiduciary duty, unjust enrichment and waste of corporate assets. The factual allegations that form the basis for these claims are essentially the same as the allegations asserted in the Roofers securities class action regarding purportedly false and misleading statements and omissions made from July 29, 2020 through April 27, 2022 relating to Amgen's tax liabilities, business and finances, and the adequacy and maintenance of its internal controls.

*FTC Litigation re the Proposed Horizon Therapeutics plc Acquisition*

On May 16, 2023, the FTC filed a complaint and motion for preliminary injunction in the U.S. District Court for the Northern District of Illinois (Northern Illinois District Court) seeking to enjoin Amgen's proposed acquisition of Horizon. The FTC alleges that the deal would allow Amgen to leverage its portfolio of blockbuster drugs someday to entrench the monopoly positions of Horizon medications used to treat two serious conditions, thyroid eye disease and chronic refractory gout, if competitors eventually come to market.The preliminary injunction hearing in the case is set to begin on September 11, 2023.On June 1, 2023, Amgen, Horizon and the FTC submitted a stipulated proposed temporary restraining order (TRO) to the Northern Illinois District Court providing that Horizon and Amgen would not close the acquisition until the earlier of October 31, 2023 or the second business day after the Northern Illinois District Court rules on the FTC's request for a preliminary injunction.On June 2, 2023, the Northern Illinois District Court issued an order granting the stipulated TRO. Amgen and Horizon filed their answer to the complaint on June 9, 2023. On June 22, 2023, an amended complaint was filed adding six states to the lawsuit, and on June 29, 2023, Amgen filed an answer and counterclaims to the amended complaint.

On June 22, 2023, the FTC filed an administrative complaint before the FTC's administrative judge, and on July 7, 2023 Amgen and Horizon filed an answer to the administrative complaint.

The Transaction Agreement provides that Amgen will be required to pay Horizon a termination fee of $974.4 million if the Transaction Agreement is terminated under certain circumstances in which there was a failure to obtain regulatory approvals by December 12, 2023, as described in Amgen's Form 8-K filed December 12, 2022, and in the Transaction Agreement filed therewith. One of those circumstances would likely arise if the above-described preliminary injunction hearing is not decided favorably to Amgen and Horizon.

**Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

The following MD&A is intended to assist the reader in understanding Amgen's business. MD&A is provided as a supplement to and should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2022, and our Quarterly Report on Form 10-Q for the period ended March 31, 2023. Our results of operations discussed in MD&A are presented in conformity with GAAP. Amgen operates in one business segment: human therapeutics. Therefore, our results of operations are discussed on a consolidated basis.

*Forward-looking statements*

This report and other documents we file with the SEC contain forward-looking statements that are based on current expectations, estimates, forecasts and projections about us, our future performance, our business, our beliefs and our management's assumptions. In addition, we, or others on our behalf, may make forward-looking statements in press releases, written statements or our communications and discussions with investors and analysts in the normal course of business through meetings, webcasts, phone calls and conference calls. Such words as "expect," "anticipate," "outlook," "could," "target," "project," "intend," "plan," "believe," "seek," "estimate," "should," "may," "assume" and "continue" as well as variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance, and they involve certain risks, uncertainties and assumptions that are difficult to predict. We describe our respective risks, uncertainties and assumptions that could affect the outcome or results of operations in Item 1A. Risk Factors in Part II herein and in Part I, Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2022, and in Part II, Item 1A. Risk Factors of our Quarterly Report on Form 10-Q for the period ended March 31, 2023. We have based our forward-looking statements on our management's beliefs and assumptions based on information available to our management at the time the statements are made. We caution you that actual outcomes and results may differ materially from what is expressed, implied or forecasted by our forward-looking statements. Reference is made in particular to forward-looking statements regarding product sales, regulatory activities, clinical trial results, reimbursement, expenses, EPS, liquidity and capital resources, trends, planned dividends, stock repurchases, collaborations and effects of pandemics. Except as required under the federal securities laws and the rules and regulations of the SEC, we do not have any intention or obligation to update publicly any forward-looking statements after the distribution of this report, whether as a result of new information, future events, changes in assumptions or otherwise.

**Overview**

Amgen is a biotechnology company committed to unlocking the potential of biology for patients suffering from serious illnesses. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Our principal products are Prolia, ENBREL, XGEVA, Otezla, Repatha, Aranesp, KYPROLIS, Nplate and EVENITY. We also market a number of other products, including Neulasta, Vectibix, BLINCYTO, MVASI, AMJEVITA/AMGEVITA, TEZSPIRE, Parsabiv, Aimovig, LUMAKRAS/LUMYKRAS, EPOGEN, KANJINTI and TAVNEOS.

*Macroeconomic challenges*

Uncertain macroeconomic conditions, including higher inflation, rising interest rates and instability in the financial system, geopolitical conflicts and rising healthcare costs continue to pose challenges to our business. As a result of public and private healthcare-provider focus, the industry continues to be subject to cost containment measures and significant pricing pressures, including net price declines. Moreover, legislation enacted to reduce healthcare expenditures, including provisions of the IRA, have affected, and are likely to continue to affect, our business. See our Quarterly Report on Form 10-Q for the period ended March 31, 2023, Part II, Item 1A. Risk Factors—*Global economic conditions may negatively affect us and may magnify certain risks that affect our business.*

**Significant developments**

Following is a summary of selected significant developments affecting our business that occurred since the filing of our Quarterly Report on Form 10-Q for the period ended March 31, 2023. For additional developments or for a more comprehensive discussion of certain developments discussed below, see our Annual Report on Form 10-K for the year ended December 31, 2022, and our Quarterly Report on Form 10-Q for the period ended March 31, 2023.

*FTC challenges to our proposed acquisition of Horizon Therapeutics plc*

In May 2023, the FTC filed a complaint in the U.S. District Court for the Northern District of Illinois (Northern Illinois District Court) seeking a temporary restraining order and preliminary injunction enjoining our proposed acquisition of Horizon, and the parties have since agreed to, and the Northern Illinois District Court has granted, a stipulated temporary restraining order providing that Horizon and Amgen would not close the proposed acquisition until the earlier of October 31, 2023, or the second business day after the Northern Illinois District Court rules on the FTC's request for a preliminary injunction. The Northern Illinois District Court scheduled an evidentiary hearing on the FTC's request for a preliminary injunction beginning on September 11, 2023. Attorneys general for California, Minnesota, New York, Illinois, Washington and Wisconsin joined the Northern Illinois District Court lawsuit as co-complainants. On June 22, 2023, the FTC filed an administrative complaint alleging that our proposed acquisition of Horizon would violate federal antitrust laws. See Note 14, Contingencies and commitments, to the condensed consolidated financial statements in this Quarterly Report.

*Products/Pipeline*

On August 3, 2023, the Company announced positive top-line results from two late stage clinical studies in oncology.

*Tarlatamab*

The DeLLphi-301 study, evaluating tarlatamab, a first-in-class DLL3 targeting bi-specific T-cell engager (BiTE®) molecule, in patients with relapsed or refractory small cell lung cancer (SCLC) who had failed two or more prior lines of treatment, demonstrated a durable objective response rate (primary endpoint) that substantially exceeds what was previously reported in the Phase 1 study. Safety and tolerability were also more favorable compared to the Phase 1 study, with no new safety signals identified. The Company will discuss these potentially registrational data with regulatory agencies to evaluate tarlatamab as a potential treatment for patients with relapsed or refractory SCLC. Detailed results will be presented at an upcoming medical congress.

*LUMAKRAS/LUMYKRAS*

The CodeBreaK 300 study, a global Phase 3 study evaluating LUMAKRAS/LUMYKRAS combined with Vectibix in patients with chemorefractory metastatic KRAS G12C mutated colorectal cancer (CRC), met its primary endpoint of progression-free survival (PFS) for both the 240 mg and 960 mg doses of LUMAKRAS/LUMYKRAS. At comparable doses, efficacy results were consistent with what was observed in CodeBreaK 101 with no new safety signals. The Company will discuss these data with regulatory agencies to evaluate LUMAKRAS/LUMYKRAS in combination with Vectibix as a potential treatment for patients with metastatic KRAS G12C mutated CRC. Detailed results will be presented at an upcoming medical congress.

The FDA recently granted Breakthrough Therapy Designation to LUMAKRAS in combination with Vectibix for the treatment of patients with metastatic KRAS G12C mutated CRC, as determined by an FDA approved test, who have received prior chemotherapy, based on data from the previous CodeBreaK 101 study.

**Selected financial information**

The following is an overview of our results of operations (in millions, except percentages and per-share data):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Product sales | | | | | | |
| U.S. | $ 4,736 | $ 4,446 | 7 % | $ 8,711 | $ 8,483 | 3 % |
| ROW | 1,947 | 1,835 | 6 % | 3,818 | 3,529 | 8 % |
| Total product sales | 6,683 | 6,281 | 6 % | 12,529 | 12,012 | 4 % |
| Other revenues | 303 | 313 | (3) % | 562 | 820 | (31) % |
| Total revenues | $ 6,986 | $ 6,594 | 6 % | $ 13,091 | $ 12,832 | 2 % |
| Operating expenses | $ 4,302 | $ 4,418 | (3) % | $ 8,486 | $ 8,156 | 4 % |
| Operating income | $ 2,684 | $ 2,176 | 23 % | $ 4,605 | $ 4,676 | (2) % |
| Net income | $ 1,379 | $ 1,317 | 5 % | $ 4,220 | $ 2,793 | 51 % |
| Diluted EPS | $ 2.57 | $ 2.45 | 5 % | $ 7.86 | $ 5.13 | 53 % |
| Diluted shares | 537 | 537 | — % | 537 | 544 | (1) % |

In the following discussion of changes in product sales, any reference to unit demand growth or decline refers to changes in purchases of our products by healthcare providers (such as physicians or their clinics), dialysis centers, hospitals and pharmacies. In addition, any reference to increases or decreases in inventory refers to changes in inventory held by wholesaler customers and end users (such as pharmacies).

Total product sales increased for the three months ended June 30, 2023, driven by volume growth for certain brands, including Repatha, Prolia, TEZSPIRE, EVENITY, AMJEVITA/AMGEVITA and BLINCYTO, partially offset by declines in net selling prices of certain products, including Neulasta, MVASI and KANJINTI, higher inventory drawdowns compared to the prior year and unfavorable changes to foreign currency exchange rates.

Total product sales increased for the six months ended June 30, 2023, driven by volume growth for certain brands, including Repatha, EVENITY, TEZSPIRE, Prolia, Nplate, BLINCYTO and AMJEVITA/AMGEVITA, partially offset by declines in net selling prices of certain products, including Neulasta, MVASI and KANJINTI, higher inventory drawdowns compared to the prior year, unfavorable changes to estimated sales deductions and unfavorable changes to foreign currency exchange rates. For the remainder of 2023, we expect that net selling price will continue to decline year-over-year at a portfolio level, driven by increased competition.

As a result of uncertain macroeconomic conditions, we expect volatility around foreign currency exchange rates to continue. The impact of unfavorable changes to foreign currency exchange rates will be partially offset by corresponding decreases in our international operating expenses. While not designed to completely address foreign currency changes, our hedging activities also seek to offset, in part, such effects on our net income by hedging our net foreign currency exposure, primarily with respect to product sales denominated in euros.

Our product sales have been affected by reduced demand as a result of the COVID-19 pandemic. In general, the dynamics of the pandemic were most significant on our product sales in the early months of the pandemic. Further, the cumulative decrease in diagnoses over the course of the pandemic suppressed the volume of new patients starting treatment, which continues to impact the business. Given the unpredictable nature of the pandemic, there could be future intermittent disruptions in physician–patient interactions, and as a result, we may again experience quarter-to-quarter variability. In addition, other disruptions, including changes in the healthcare ecosystem, uncertain macroeconomic conditions and geopolitical conflicts, have the potential to introduce variability into product sales. For example, growth in numbers of Medicaid enrollees and uninsured individuals, provisions of the IRA and actions by governments and other entities to curb high inflation may have a negative impact on product sales. See Part II, Item 1A. Risk Factors, of this Quarterly Report.

Other revenues decreased for the three and six months ended June 30, 2023, due to lower revenue from our COVID-19 manufacturing collaboration.

Operating expenses decreased for the three months ended June 30, 2023, driven by a loss on a nonstrategic divestiture in the prior period, partially offset by higher Cost of sales, higher R&D spend and an impairment charge associated with an IPR&D asset. Operating expenses increased for the six months ended June 30, 2023, driven by higher Cost of sales, expenses related to our restructuring plan, higher R&D spend and an impairment charge associated with an IPR&D asset, partially offset by a loss on a nonstrategic divestiture in the prior period. See Note 2, Restructuring, and Note 3, Acquisitions and divestitures, to the condensed consolidated financial statements.

**Results of operations**

*Product sales*

Worldwide product sales were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Prolia | $ 1,028 | $ 922 | 11 % | $ 1,955 | 1,774 | 10 % |
| ENBREL | 1,068 | 1,051 | 2 % | 1,647 | 1,913 | (14) % |
| XGEVA | 530 | 533 | (1) % | 1,066 | 1,035 | 3 % |
| Otezla | 600 | 594 | 1 % | 992 | 1,045 | (5) % |
| Repatha | 424 | 325 | 30 % | 812 | 654 | 24 % |
| Aranesp | 365 | 357 | 2 % | 720 | 715 | 1 % |
| KYPROLIS | 346 | 317 | 9 % | 704 | 604 | 17 % |
| Nplate | 310 | 284 | 9 % | 672 | 550 | 22 % |
| EVENITY | 281 | 191 | 47 % | 535 | 361 | 48 % |
| Other products[1] | 1,731 | 1,707 | 1 % | 3,426 | 3,361 | 2 % |
| Total product sales | $ 6,683 | $ 6,281 | 6 % | $ 12,529 | $ 12,012 | 4 % |

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(1) Consists of product sales of our non-principal products, as well as our Bergamo and Gensenta subsidiaries.

Future sales of our products will depend in part on the factors discussed below and in the following sections of this report: (i) Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Overview, and Selected financial information; and (ii) Part II, Item 1A. Risk Factors, and in the following sections of our Annual Report on Form 10-K for the year ended December 31, 2022: (i) Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products; (ii) Part I, Item 1A. Risk Factors; and (iii) Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Overview, and Results of operations—Product sales, as well as in our Quarterly Report on Form 10-Q for the period ended March 31, 2023: (i) Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of operations—Product sales; and (ii) Part II, Item 1A. Risk Factors.

*Prolia*

Total Prolia sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Prolia — U.S. | $ 691 | $ 611 | 13 % | $ 1,314 | $ 1,193 | 10 % |
| Prolia — ROW | 337 | 311 | 8 % | 641 | 581 | 10 % |
| Total Prolia | $ 1,028 | $ 922 | 11 % | $ 1,955 | $ 1,774 | 10 % |

The increase in global Prolia sales for the three and six months ended June 30, 2023, was driven by volume growth. For a discussion of litigation related to Prolia, see Note 14, Contingencies and commitments, to the condensed consolidated financial statements in this Quarterly Report.

*ENBREL*

Total ENBREL sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| ENBREL — U.S. | $ 1,055 | $ 1,036 | 2 % | $ 1,619 | $ 1,879 | (14) % |
| ENBREL — Canada | 13 | 15 | (13) % | 28 | 34 | (18) % |
| Total ENBREL | $ 1,068 | $ 1,051 | 2 % | $ 1,647 | $ 1,913 | (14) % |

The increase in ENBREL sales for the three months ended June 30, 2023, was driven by favorable changes to estimated sales deductions and higher net selling price, partially offset by lower inventory.

The decrease in ENBREL sales for the six months ended June 30, 2023, was driven by lower inventory, unfavorable changes to estimated sales deductions and lower net selling price.

For the remainder of 2023, we expect improved payer coverage will lead to continued growth in new patients that supports volume, and declining net selling price.

*XGEVA*

Total XGEVA sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| XGEVA — U.S. | $ 387 | $ 391 | (1) % | $ 771 | $ 759 | 2 % |
| XGEVA — ROW | 143 | 142 | 1 % | 295 | 276 | 7 % |
| Total XGEVA | $ 530 | $ 533 | (1) % | $ 1,066 | $ 1,035 | 3 % |

The decrease in global XGEVA sales for the three months ended June 30, 2023, was primarily driven by unfavorable changes to estimated sales deductions, lower inventory and unfavorable changes to foreign currency exchange rates, partially offset by higher net selling price.

The increase in global XGEVA sales for the six months ended June 30, 2023, was driven by higher net selling price and volume growth, partially offset by unfavorable changes to estimated sales deductions and foreign currency exchange rates.

For a discussion of litigation related to XGEVA, see Note 14, Contingencies and commitments, to the condensed consolidated financial statements in this Quarterly Report.

*Otezla*

Total Otezla sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| Otezla — U.S. | $ 495 | $ 487 | 2 % | $ 789 | $ 837 | (6) % |
| Otezla — ROW | 105 | 107 | (2) % | 203 | 208 | (2) % |
| Total Otezla | $ 600 | $ 594 | 1 % | $ 992 | $ 1,045 | (5) % |

The increase in global Otezla sales for the three months ended June 30, 2023, was driven by volume growth.

The decrease in global Otezla sales for the six months ended June 30, 2023, was driven by lower inventory and net selling price and unfavorable changes to foreign currency exchange rates, partially offset by volume growth.

For the remainder of 2023, we expect new patient demand to continue to be impacted by free drug programs from newly launched competition.

For a discussion of litigation related to Otezla, see Part IV—Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022; and Part I—Note 14, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2023.

*Repatha*

Total Repatha sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Repatha — U.S. | $ 212 | $ 154 | 38 % | $ 409 | $ 319 | 28 % |
| Repatha — ROW | 212 | 171 | 24 % | 403 | 335 | 20 % |
| Total Repatha | $ 424 | $ 325 | 30 % | $ 812 | $ 654 | 24 % |

The increase in global Repatha sales for the three and six months ended June 30, 2023, was primarily driven by volume growth, partially offset by lower net selling price.

For a discussion of ongoing litigation related to Repatha, see Part IV—Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022; Part I—Note 14, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2023; and Note 14, Contingencies and commitments, to the condensed consolidated financial statements in this Quarterly Report.

*Aranesp*

Total Aranesp sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Aranesp — U.S. | $ 123 | $ 132 | (7) % | $ 238 | $ 269 | (12) % |
| Aranesp — ROW | 242 | 225 | 8 % | 482 | 446 | 8 % |
| Total Aranesp | $ 365 | $ 357 | 2 % | $ 720 | $ 715 | 1 % |

The increase in global Aranesp sales for the three months ended June 30, 2023, was driven by volume growth and favorable changes to estimated sales deductions, partially offset by unfavorable changes to foreign currency exchange rates and lower net selling price.

The increase in global Aranesp sales for the six months ended June 30, 2023, was driven by volume growth, partially offset by unfavorable changes to foreign currency exchange rates and lower net selling price.

ROW Aranesp sales for the three and six months ended June 30, 2023, were favorably impacted by the timing of orders in certain markets outside the United States. U.S. Aranesp sales for the three and six months ended June 30, 2023, decreased due to lower unit demand as a result of independent and medium-sized dialysis organizations transitioning from Aranesp to EPOGEN. We expect Aranesp to continue to face competition from EPOGEN and its biosimilars, which will impact volume and net selling price in the future.

*KYPROLIS*

Total KYPROLIS sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| KYPROLIS — U.S. | $ 234 | $ 213 | 10 % | $ 468 | $ 409 | 14 % |
| KYPROLIS — ROW | 112 | 104 | 8 % | 236 | 195 | 21 % |
| Total KYPROLIS | $ 346 | $ 317 | 9 % | $ 704 | $ 604 | 17 % |

The increase in global KYPROLIS sales for the three months ended June 30, 2023, was driven by volume growth, partially offset by lower net selling price.

The increase in global KYPROLIS sales for the six months ended June 30, 2023, was driven by volume growth.

*Nplate*

Total Nplate sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| Nplate — U.S. | $ 176 | $ 156 | 13 % | $ 422 | $ 312 | 35 % |
| Nplate — ROW | 134 | 128 | 5 % | 250 | 238 | 5 % |
| Total Nplate | $ 310 | $ 284 | 9 % | $ 672 | $ 550 | 22 % |

The increase in global Nplate sales for the three months ended June 30, 2023, was driven by volume growth, partially offset by unfavorable changes to foreign currency exchange rates.

The increase in global Nplate sales for the six months ended June 30, 2023, was driven by volume growth, partially offset by unfavorable changes to estimated sales deductions and foreign currency exchange rates. Nplate sales for the six months ended June 30, 2023, included an $82 million order from the U.S. government.

*EVENITY*

Total EVENITY sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, 2023 | Three months ended June 30, 2022 | Change | Six months ended June 30, 2023 | Six months ended June 30, 2022 | Change |
|---|---|---|---|---|---|---|
| EVENITY — U.S. | $ 192 | $ 130 | 48 % | $ 356 | $ 240 | 48 % |
| EVENITY — ROW | 89 | 61 | 46 % | 179 | 121 | 48 % |
| Total EVENITY | $ 281 | $ 191 | 47 % | $ 535 | $ 361 | 48 % |

The increase in global EVENITY sales for the three and six months ended June 30, 2023, was primarily driven by volume growth across our markets.

*Other products*

Other product sales by geographic region were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Neulasta — U.S. | $ 199 | $ 263 | (24) % | $ 410 | $ 567 | (28) % |
| Neulasta — ROW | 37 | 47 | (21) % | 75 | 91 | (18) % |
| Vectibix — U.S. | 118 | 96 | 23 % | 229 | 181 | 27 % |
| Vectibix — ROW | 130 | 111 | 17 % | 252 | 227 | 11 % |
| BLINCYTO — U.S. | 145 | 77 | 88 % | 271 | 156 | 74 % |
| BLINCYTO — ROW | 61 | 62 | (2) % | 129 | 121 | 7 % |
| MVASI — U.S. | 123 | 161 | (24) % | 244 | 329 | (26) % |
| MVASI — ROW | 74 | 82 | (10) % | 155 | 158 | (2) % |
| AMJEVITA — U.S. | 19 | — | NM | 70 | — | NM |
| AMGEVITA — ROW | 131 | 116 | 13 % | 244 | 224 | 9 % |
| TEZSPIRE — U.S. | 133 | 29 | * | 229 | 36 | * |
| Parsabiv — U.S. | 54 | 71 | (24) % | 112 | 128 | (13) % |
| Parsabiv — ROW | 33 | 32 | 3 % | 66 | 61 | 8 % |
| Aimovig — U.S. | 78 | 88 | (11) % | 142 | 186 | (24) % |
| Aimovig — ROW | 4 | 4 | — % | 9 | 7 | 29 % |
| LUMAKRAS — U.S. | 50 | 51 | (2) % | 98 | 99 | (1) % |
| LUMYKRAS — ROW | 27 | 26 | 4 % | 53 | 40 | 33 % |
| EPOGEN — U.S. | 61 | 136 | (55) % | 121 | 256 | (53) % |
| KANJINTI — U.S. | 38 | 69 | (45) % | 71 | 149 | (52) % |
| KANJINTI — ROW | 12 | 16 | (25) % | 26 | 32 | (19) % |
| TAVNEOS — U.S. | 29 | — | NM | 52 | — | NM |
| TAVNEOS — ROW | 1 | — | NM | 1 | — | NM |
| Other — U.S.[(1)] | 124 | 95 | 31 % | 276 | 179 | 54 % |
| Other — ROW[(1)] | 50 | 75 | (33) % | 91 | 134 | (32) % |
| Total other products | $ 1,731 | $ 1,707 | 1 % | $ 3,426 | $ 3,361 | 2 % |
| Total U.S. — other products | $ 1,171 | $ 1,136 | 3 % | $ 2,325 | $ 2,266 | 3 % |
| Total ROW — other products | 560 | 571 | (2) % | 1,101 | 1,095 | 1 % |
| Total other products | $ 1,731 | $ 1,707 | 1 % | $ 3,426 | $ 3,361 | 2 % |

NM = not meaningful

* Change in excess of 100%

(1) Consists of AVSOLA, Corlanor, RIABNI, NEUPOGEN, IMLYGIC, Sensipar/Mimpara and BEKEMV as well as sales by our Bergamo and Gensenta subsidiaries.

*Operating expenses*

Operating expenses were as follows (dollar amounts in millions):

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| | 2023 | 2022 | Change | 2023 | 2022 | Change |
| Operating expenses: | | | | | | |
| Cost of sales | $ 1,813 | $ 1,510 | 20 % | $ 3,533 | $ 3,071 | 15 % |
| % of product sales | 27.1 % | 24.0 % | | 28.2 % | 25.6 % | |
| % of total revenues | 26.0 % | 22.9 % | | 27.0 % | 23.9 % | |
| Research and development | $ 1,113 | $ 1,039 | 7 % | $ 2,171 | $ 1,998 | 9 % |
| % of product sales | 16.7 % | 16.5 % | | 17.3 % | 16.6 % | |
| % of total revenues | 15.9 % | 15.8 % | | 16.6 % | 15.6 % | |
| Selling, general and administrative | $ 1,294 | $ 1,327 | (2) % | $ 2,552 | $ 2,555 | — % |
| % of product sales | 19.4 % | 21.1 % | | 20.4 % | 21.3 % | |
| % of total revenues | 18.5 % | 20.1 % | | 19.5 % | 19.9 % | |
| Other | $ 82 | $ 542 | (85) % | $ 230 | $ 532 | (57) % |
| Total operating expenses | $ 4,302 | $ 4,418 | (3) % | $ 8,486 | $ 8,156 | 4 % |

*Cost of sales*

Cost of sales increased to 26.0% and 27.0% of total revenues for the three and six months ended June 30, 2023, respectively, primarily driven by higher profit share expenses, higher amortization expense from acquisition-related assets and changes in our product mix.

*Research and development*

The increase in R&D expense for the three months ended June 30, 2023, was driven by higher spend in late-stage development and marketed product support.

The increase in R&D expense for the six months ended June 30, 2023, was driven by higher spend in late-stage development, marketed product support, and research and early pipeline.

*Selling, general and administrative*

The decrease in SG&A expense for the three months ended June 30, 2023, was primarily driven by lower marketed product support, partially offset by higher acquisition-related expenses.

SG&A expense for the six months ended June 30, 2023, remained relatively unchanged, as lower marketed product support was offset by higher general and administrative expenses, including acquisition-related expenses.

*Other*

Other operating expenses for the three and six months ended June 30, 2023, consisted primarily of expenses related to our restructuring plan and an impairment charge associated with an IPR&D asset. See Note 2, Restructuring, to the condensed consolidated financial statements.

Other operating expenses for the three and six months ended June 30, 2022, consisted primarily of a loss on a nonstrategic divestiture. See Note 3, Acquisitions and divestitures, to the condensed consolidated financial statements.

*Nonoperating expense/income and income taxes*

Nonoperating expense/income and income taxes were as follows (dollar amounts in millions):

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| | 2023 | 2022 | 2023 | 2022 |
| Interest expense, net | $ (752) | $ (328) | $ (1,295) | $ (623) |
| Other (expense) income, net | $ (318) | $ (317) | $ 1,746 | $ (847) |
| Provision for income taxes | $ 235 | $ 214 | $ 836 | $ 413 |
| Effective tax rate | 14.6 % | 14.0 % | 16.5 % | 12.9 % |

*Interest expense, net*

The increase in Interest expense, net, for the three and six months ended June 30, 2023, was primarily due to higher overall debt outstanding and higher interest rates on debt for which we effectively pay a variable rate of interest through the use of interest rate swaps.

*Other (expense) income, net*

During the first quarter of 2023, we changed the method of accounting for our investment in BeiGene from the equity method to recording the investment at fair value, with changes in fair value recognized in earnings. See Note 7, Investments, to the condensed consolidated financial statements.

Other (expense) income, net, for the three months ended June 30, 2023, was relatively unchanged compared with the prior period. The losses recorded in the current period exceeded the losses recorded in the prior period for BeiGene and other strategic equity investments and were substantially offset by increased interest income due to the higher cash balance and higher interest rates.

The change in Other (expense) income, net, for the six months ended June 30, 2023, was primarily due to the net gain recognized in the current year period on our investment in BeiGene, the increase in interest income due to the higher cash balance and higher interest rates and the impact of higher losses on our other strategic equity investments recognized in the prior year.

*Income taxes*

The increase in our effective tax rate for the three months ended June 30, 2023, was primarily due to the new Puerto Rico income tax beginning in 2023, partially offset by the current period change in the fair value of our equity investments and net favorable items. The increase in our effective tax rate for the six months ended June 30, 2023, was primarily due to the new Puerto Rico income tax beginning in 2023, current year change in the fair value of our equity investments and an increase in interest expense on tax reserves, partially offset by net favorable items.

The Administration and Congress continue to discuss changes to existing tax law that could substantially increase the taxes we pay to the U.S. government. Further, the OECD recently reached an agreement to align countries on a minimum corporate tax rate and an expansion of the taxing rights of market countries. Some individual countries, including those in the EU, have begun to implement the global minimum tax agreement with effective dates as early as 2024. If enacted, either by all OECD participants or unilaterally by individual countries, this agreement could result in a tax increase that could affect our U.S. and foreign tax liabilities.

The U.S. Treasury released final foreign tax credit regulations in December 2021 that eliminated U.S. creditability of the Puerto Rico excise tax beginning in 2023. In response, on June 30, 2022, the U.S. territory of Puerto Rico enacted Act 52-2022, which provides for an alternative income tax rate on industrial development income that the U.S. Treasury confirmed will be creditable under federal law. As part of this new law, eligible businesses will be subject to incremental income and withholding taxes in lieu of payment of the Puerto Rico excise tax. In order to qualify for the alternative income tax, our current tax grant with the Puerto Rico government was amended in December 2022. We qualified for this alternative income tax beginning on January 1, 2023, and our tax expense increased. See Note 5, Income taxes, to the condensed consolidated financial statements.

In 2017, we received an RAR and a modified RAR from the IRS for the years 2010–2012, proposing significant adjustments that primarily relate to the allocation of profits between certain of our entities in the United States and the U.S. territory of Puerto Rico. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office but were unable to reach resolution. In July 2021, we filed a petition in the U.S. Tax Court to contest two duplicate Statutory Notices of Deficiency (Notices) for the years 2010–2012 that we received in May and July 2021, which seek to increase our U.S. taxable income for the years 2010–2012 by an amount that would result in additional federal tax of approximately $3.6 billion plus interest. Any additional tax that could be imposed for the years 2010–2012 would be reduced by up to approximately $900 million of repatriation tax previously accrued on our foreign earnings.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013–2015, also proposing significant adjustments that primarily relate to the allocation of profits between certain of our entities in the United States and the U.S. territory of Puerto Rico similar to those proposed for the years 2010–2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office but were unable to reach resolution. In July 2022, we filed a petition in the U.S. Tax Court to contest a Notice for the years 2013–2015 that we previously reported receiving in April 2022 that seeks to increase our U.S. taxable income for the years 2013–2015 by an amount that would result in additional federal tax of approximately $5.1 billion, plus interest. In addition, the Notice asserts penalties of approximately $2.0 billion. Any additional tax that could be imposed for the years 2013–2015 would be reduced by up to approximately $2.2 billion of repatriation tax previously accrued on our foreign earnings.

We firmly believe that the IRS positions set forth in the 2010–2012 and 2013–2015 Notices are without merit. We are contesting the 2010–2012 and 2013–2015 Notices through the judicial process. The two cases were consolidated in the U.S. Tax Court on December 19, 2022. On February 10, 2023, the U.S. Tax Court entered an order setting a trial date of November 4, 2024.

We are currently under examination by the IRS for the years 2016–2018 with respect to issues similar to those for the 2010 through 2015 period. In addition, we are under examination by a number of state and foreign tax jurisdictions.

Final resolution of these complex matters is not likely within the next 12 months. We continue to believe our accrual for income tax liabilities is appropriate based on past experience, interpretations of tax law, application of the tax law to our facts and judgments about potential actions by tax authorities; however, due to the complexity of the provision for income taxes and uncertain resolution of these matters, the ultimate outcome of any tax matters may result in payments substantially greater than amounts accrued and could have a material adverse impact on our condensed consolidated financial statements.

We are no longer subject to U.S. federal income tax examinations for years ended on or before December 31, 2009.

See our Annual Report on Form 10-K for the year ended December 31, 2022, Part I, Item 1A, Risk Factors—*The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability,* and Note 5, Income taxes, to the condensed consolidated financial statements in this filing for further discussion.

**Financial condition, liquidity and capital resources**

Selected financial data were as follows (in millions):

| | June 30, 2023 | December 31, 2022 |
|---|---|---|
| Cash, cash equivalents and marketable securities | $ 34,248 | $ 9,305 |
| Total assets | $ 90,269 | $ 65,121 |
| Current portion of long-term debt | $ 2,167 | $ 1,591 |
| Long-term debt | $ 59,377 | $ 37,354 |
| Stockholders' equity | $ 6,781 | $ 3,661 |

*Cash, cash equivalents and marketable securities*

Our balance of cash, cash equivalents and marketable securities was $34.2 billion as of June 30, 2023, of which $27.8 billion is anticipated to be used for the proposed acquisition of Horizon. See Note 3, Acquisitions and divestitures, to the condensed consolidated financial statements. The primary objective of our investment portfolio is to maintain safety of principal, prudent levels of liquidity and acceptable levels of risk. Our investment policy limits interest-bearing security investments to certain types of debt and money market instruments issued by institutions with primarily investment-grade credit ratings, and it places restrictions on maturities and concentration by asset class and issuer.

*Capital allocation*

Consistent with the objective to optimize our capital structure, we deploy our accumulated cash balances in a strategic manner and consider a number of alternatives, including investments in innovation both internally and externally (including investments that expand our portfolio of products in areas of therapeutic interest), capital expenditures, repayment of debt, payment of dividends and stock repurchases.

We intend to continue to invest in our business while returning capital to stockholders through the payment of cash dividends and stock repurchases, thereby reflecting our confidence in the future cash flows of our business and our desire to optimize our cost of capital. The timing and amount of future dividends and stock repurchases will vary based on a number of factors, including future capital requirements for strategic transactions, availability of financing on acceptable terms, debt service requirements, our credit rating, changes in applicable tax laws or corporate laws, changes in our business model and periodic determination by our Board of Directors that cash dividends and/or stock repurchases are in the best interests of stockholders and are in compliance with applicable laws and the Company's agreements. In addition, the timing and amount of stock repurchases may also be affected by our overall level of cash, stock price and blackout periods, during which we are restricted from repurchasing stock. The manner of stock repurchases may include block purchases, tender offers, ASRs and market transactions.

In March 2023 and December 2022, our Board of Directors declared quarterly cash dividends of $2.13 per share of common stock, which were paid in June 2023 and March 2023, respectively, and was an increase of 10% over the quarterly cash dividends paid each quarter in 2022. In August 2023, our Board of Directors declared a quarterly cash dividend of $2.13 per share of common stock that will be paid in September 2023.

During the six months ended June 30, 2023, we did not repurchase any of our common stock. As of June 30, 2023, $7.0 billion of authorization remained available under our stock repurchase program.

As a result of stock repurchases and quarterly dividend payments, we have an accumulated deficit as of June 30, 2023 and December 31, 2022. Our accumulated deficit is not anticipated to affect our future ability to operate, repurchase stock, pay dividends or repay our debt given our continuing profitability and strong financial position.

We believe that existing funds, cash generated from operations and existing sources of and access to financing are adequate to satisfy our needs for working capital, capital expenditure and debt service requirements, our plans to pay dividends and repurchase stock, and other business initiatives we plan to strategically pursue, including acquisitions and licensing activities. We anticipate that our liquidity needs can be met through a variety of sources, including cash provided by operating activities, sales of marketable securities, borrowings through commercial paper and/or syndicated credit facilities and access to other domestic and foreign debt markets and equity markets. See our Quarterly Report on 10-Q for the period ended March 31, 2023, Part II, Item 1A. Risk Factors—*Global economic conditions may negatively affect us and may magnify certain risks that affect our business.*

*Financing arrangements*

In February 2023, we filed a shelf registration statement with the SEC that allows us to issue unspecified amounts of debt securities; common stock; preferred stock; warrants to purchase debt securities, common stock, preferred stock or depositary shares; rights to purchase common stock or preferred stock; securities purchase contracts; securities purchase units; and depositary shares. Under this shelf registration statement, all of the securities available for issuance may be offered from time to time, with terms to be determined at the time of issuance. This shelf registration statement expires in February 2026.

During the three months ended March 31, 2023, in connection with the proposed acquisition of Horizon, we issued $24.0 billion of debt composed of eight series of notes. If the proposed acquisition of Horizon does not occur by a specified date or at all, we will be required to redeem all but one of the series of notes at a price equal to 101% of the principal amount of the notes plus accrued and unpaid interest. In connection with the issue of these notes, we elected to terminate all remaining commitments under the bridge credit agreement we entered into in December 2022. See Note 10, Financing arrangements, to the condensed consolidated financial statements.

During the three months ended March 31, 2023, we amended and restated our syndicated, unsecured, revolving credit agreement, under which we may borrow up to $4.0 billion (increased from $2.5 billion prior to the amendment) for general corporate purposes, including as a liquidity backstop for our commercial paper program. The commitments under the revolving credit agreement may be increased by up to $1.25 billion with the agreement of the banks (increased from $750 million prior to the amendment). Each bank that is a party to the agreement has an initial commitment term of five years. This term may be extended for up to two additional one-year periods with the agreement of the banks. Annual commitment fees for this agreement are 0.09% of the unused portion of the facility based on our current credit rating. Generally, we would be charged interest for any amounts borrowed under this facility, based on our current credit rating, at (i) SOFR plus 1.01% or (ii) the highest of (A) the administrative agent bank base commercial lending rate, (B) the overnight federal funds rate plus 0.50% or (C) one-month SOFR plus 1.1%. As of June 30, 2023 and December 31, 2022, no amounts were outstanding under this facility.

Certain of our financing arrangements contain nonfinancial covenants. In addition, our revolving credit agreement includes a financial covenant that requires us to maintain a specified minimum interest coverage ratio of (i) the sum of consolidated net income, interest expense, provision for income taxes, depreciation expense, amortization expense, unusual or nonrecurring charges and other noncash items (consolidated earnings before interest, taxes, depreciation and amortization) to (ii) consolidated interest expense, each as defined and described in the credit agreement. We were in compliance with all applicable covenants under these arrangements as of June 30, 2023.

*Cash flows*

Our summarized cash flow activity was as follows (in millions):

| | Six months ended June 30, | |
|---|---|---|
| | **2023** | **2022** |
| Net cash provided by operating activities | $ 5,173 | $ 4,094 |
| Net cash provided by (used in) investing activities | $ 1,147 | $ (2,304) |
| Net cash provided by (used in) financing activities | $ 20,299 | $ (4,576) |

*Operating*

Cash provided by operating activities has been and is expected to continue to be our primary recurring source of funds. Cash provided by operating activities during the six months ended June 30, 2023, increased due to timing of payments to tax authorities and other working capital items, partially offset by lower net income after adjustments for noncash items.

*Investing*

Cash provided by investing activities during the six months ended June 30, 2023, was primarily due to net cash inflows from sales and maturities of marketable securities of $1.7 billion, partially offset by capital expenditures of $615 million, including construction costs of new plants in North Carolina and Ohio. Cash used in investing activities during the six months ended June 30, 2022, was primarily due to net cash outflows from purchases of marketable securities, net of maturities, of $1.9 billion and capital expenditures of $436 million. We currently estimate 2023 spending on capital projects to be approximately $925 million.

*Financing*

Cash provided by financing activities during the six months ended June 30, 2023, was primarily due to proceeds from the issuance of debt of $23.8 billion, partially offset by the payment of dividends of $2.3 billion as well as the repayment and extinguishment of debt of $1.1 billion. Cash used in financing activities during the six months ended June 30, 2022, was primarily due to payments to repurchase our common stock of $6.4 billion, including amounts paid under our ASR agreements, and the payment of dividends of $2.1 billion, partially offset by proceeds from the issuance of debt of $4.0 billion. See Note 10, Financing arrangements, and Note 11, Stockholders’ equity, to the condensed consolidated financial statements for further discussion.

**Critical Accounting Policies and Estimates**

The preparation of our condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the notes to the financial statements. Some of those judgments can be subjective and complex, and therefore, actual results could differ materially from those estimates under different assumptions or conditions. A summary of our critical accounting policies and estimates is presented in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, of our Annual Report on Form 10-K for the year ended December 31, 2022.

## Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Information about our market risk is disclosed in Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk, of our Annual Report on Form 10-K for the year ended December 31, 2022, and is incorporated herein by reference. There were no material changes during the six months ended June 30, 2023, to the information provided in Part II, Item 7A. Quantitative and Qualitative Disclosures About Market Risk, of our Annual Report on Form 10-K for the year ended December 31, 2022.

During the six months ended June 30, 2023, our outstanding debt increased by $22.6 billion, due to the issuance of $24.0 billion of debt in connection with the proposed acquisition of Horizon. As of June 30, 2023, we had outstanding debt with a carrying value of $61.5 billion and a fair value of $59.1 billion. As of December 31, 2022, we had outstanding debt with a carrying value of $38.9 billion and a fair value of $35.0 billion. Our debt pays interest at fixed rates, and therefore changes in interest rates do not affect interest expense on our outstanding debt. Changes in interest rates would, however, affect the fair values of fixed-rate debt. A hypothetical 100 basis point decrease in interest rates relative to interest rates as of June 30, 2023 and December 31, 2022, would have resulted in an increase of $5.5 billion and $3.5 billion, respectively, in the aggregate fair value of our outstanding debt on these dates. The analysis does not consider the impact that hypothetical changes in interest rates would have on related interest rate swap contracts and cross-currency swap contracts.

## Item 4. CONTROLS AND PROCEDURES

We maintain "disclosure controls and procedures," as such term is defined under the Securities Exchange Act Rule 13a-15(e) that are designed to ensure that information required to be disclosed in Amgen's Exchange Act reports gets recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information gets accumulated and communicated to Amgen's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to facilitate timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, Amgen's management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and in reaching a reasonable level of assurance, Amgen's management necessarily was required to apply its judgment in evaluating the cost–benefit relationship of possible controls and procedures. We carried out an evaluation under the supervision and with the participation of our management, including Amgen's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of Amgen's disclosure controls and procedures. Based on their evaluation and subject to the foregoing, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of June 30, 2023.

Management determined that as of June 30, 2023, no changes in our internal control over financial reporting had occurred during the fiscal quarter then ended that materially affected or are reasonably likely to materially affect our internal control over financial reporting.

## PART II — OTHER INFORMATION

### Item 1. LEGAL PROCEEDINGS

See Part I—Note 14, Contingencies and commitments, to the condensed consolidated financial statements included in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2023 and June 30, 2023, for discussions that are limited to certain recent developments concerning our legal proceedings. Those discussions should be read in conjunction with Part IV—Note 19, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2022.

### Item 1A. RISK FACTORS

This report and other documents we file with the SEC contain forward-looking statements that are based on current expectations, estimates, forecasts and projections about us, our future performance, our business, our beliefs and our management's assumptions. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. You should carefully consider the risks and uncertainties our business faces. The risks described below are not the only ones we face. Our business is also subject to the risks that affect many other companies, such as employment relations, general economic conditions, geopolitical events and international operations. Further, additional risks not currently known to us or that we currently believe are immaterial may in the future materially and adversely affect our business, operations, liquidity and stock price.

Below we provide in supplemental form the material changes to our risk factors that occurred during the past quarter. Our risk factors disclosed in Part I, Item 1A, of our Annual Report on Form 10-K for the year ended December 31, 2022, provide additional disclosure for these supplemental risks and are incorporated herein by reference.

*Our sales depend on coverage and reimbursement from government and commercial third-party payers, and pricing and reimbursement pressures have affected, and are likely to continue to affect, our profitability.*

Sales of our products depend on the availability and extent of coverage and reimbursement from third-party payers, including government healthcare programs and private insurance plans. Governments and private payers continue to pursue initiatives to manage drug utilization and contain costs. Further, pressures on healthcare budgets from the pandemic, the economic downturn and inflation continue and are likely to increase across the markets we serve. Payers are increasingly focused on costs, which have resulted, and are expected to continue to result, in lower reimbursement rates for our products or narrower populations for which payers will reimburse. Continued intense public scrutiny of the price of drugs and other healthcare costs, together with payer dynamics, have limited, and are likely to continue to limit, our ability to set or adjust the price of our products based on their value, which can have a material adverse effect on our business. In the United States, particularly over the past few years, a number of legislative and regulatory proposals have been introduced and/or signed into law that attempt to lower drug prices. These include legislation promulgated by the IRA that enables the U.S. government to set prices for certain drugs in Medicare, redesigns Medicare Part D benefits to shift a greater portion of the costs to manufacturers and enables the U.S. government to impose penalties if drug prices are increased at a rate faster than inflation. Additional proposals focused on drug pricing continue to be debated, and additional executive orders focused on drug pricing and competition are likely to be adopted and implemented in some form. Government actions or ballot initiatives at the state level also represent a highly active area of policymaking and experimentation, including pursuit of proposals that limit drug reimbursement under state run Medicaid programs based on reference prices or permitting importation of drugs from Canada. Such state policies may also eventually be adopted at the federal level.

We are unable to predict which or how many policy, regulatory, administrative or legislative changes may ultimately be, or effectively estimate the consequences to our business if, enacted and implemented. However, to the extent that payer actions further decrease or modify the coverage or reimbursement available for our products, require that we pay increased rebates or shift other costs to us, limit or affect our decisions regarding the pricing of or otherwise reduce the use of our products, such actions could have a material adverse effect on our business and results of operations.

*—Changing U.S. federal coverage and reimbursement policies and practices have affected and are likely to continue to affect access to, pricing of and sales of our products*

A substantial portion of our U.S. business relies on reimbursement from federal government healthcare programs and commercial insurance plans regulated by federal and state governments. See Part I, Item 1. Business—Reimbursement, of our Annual Report on Form 10-K for the year ended December 31, 2022. Our business has been and will continue to be affected by legislative actions changing U.S. federal reimbursement policy. For example, in 2022, the IRA was enacted and includes provisions requiring that beginning in 2026, mandatory price setting be introduced in Medicare for certain drugs paid for under

Parts B and D, whereby manufacturers must accept a price established by the government or face penalties on all U.S. sales (starting with 10 drugs in 2026, adding 15 in 2027 and 2028, and adding 20 in 2029 and subsequent years such that by 2031 approximately 100 drugs could be subject to such set prices), and starting in 2024, Medicare Part D will be redesigned to cap beneficiary out-of-pocket costs and, beginning January 1, 2025, Federal reinsurance be reduced in the catastrophic phase (resulting in a shift and increase of such costs to Part D plans and manufacturers, including by requiring manufacturer discounts on certain drugs). Further, the IRA created a mechanism for CMS to collect rebates from manufacturers if price increases outpace inflation. Rebate obligations began to accrue October 1, 2022 for Medicare Part B and January 1, 2023 for Medicare Part D, but CMS has not yet issued invoices and has some discretion as to when it must bill manufacturers. We expect that our products will be subject to these inflation rebates, and several of our products have been on lists that are issued and updated on a quarterly basis by CMS under a related program under which Medicare beneficiaries are charged reduced coinsurance if price increases exceed inflation. The IRA's drug pricing controls and Medicare redesign are likely to have a material adverse effect on our sales, our business and our results of operations, and such impact is expected to increase through the end of the decade and will depend on factors including the extent of our portfolio's exposure to Medicare reimbursement, the rate of inflation over time, the number of our products selected for mandatory price setting and the timing of market entry of generic or biosimilar competition. Further, following the passage of the IRA, the environment remains dynamic and U.S. policymakers continue to demonstrate interest in health care and drug pricing reform. In February 2023, the HHS selected new healthcare payment and delivery models for testing, in response to an October 2022 Executive Order on Lowering Prescription Drug Costs for Americans, including the Accelerating Clinical Evidence Model, which could introduce new payment methods that reduce reimbursement for drugs approved under accelerated approval. That Executive Order followed a 2021 Executive Order designed to increase competition in the healthcare sector, including by calling for the FDA to develop prescription drug importation programs and the FTC to apply greater scrutiny of anticompetitive activity and responses to which include actions from the HHS (which released a report with drug pricing proposals that seek to promote competition) and from the U.S. Patent and Trademark Office (which has taken steps to strengthen coordination with the FDA to address impediments to generic drug and biosimilar competition). Other CMS policy changes and demonstration projects to test new care, delivery and payment models can also significantly affect how drugs, including our products, are covered and reimbursed. In September 2021, HHS released a plan to address drug pricing that included potential future mandatory models that link payment for prescription drugs and biologics to certain factors, including the overall cost of care. In March 2023, the Administration released its budget plan for fiscal year 2024 that included proposals to expand the number of drugs subject to mandatory Medicare price setting under the IRA, imposing such price setting activity earlier, and extending to commercial health insurance the requirement that drug manufacturers pay rebates if price increases outpace inflation. While those proposed expansions of the IRA's drug pricing controls and Medicare redesigns have not been enacted, the proposals demonstrate that this area continues to be a focus of the Administration.

We also face risks related to the reporting of pricing data that affects reimbursement of and discounts provided for our products. U.S. government price reporting regulations are complex and may require biopharmaceutical manufacturers to update certain previously submitted data. If our submitted pricing data are incorrect, we may become subject to substantial fines and penalties or other government enforcement actions, which could have a material adverse effect on our business and results of operations. In addition, as a result of restating previously reported price data, we may be required to pay additional rebates and provide additional discounts.

*—Changing reimbursement and pricing actions in various states have negatively affected and may continue to negatively affect access to and have affected and may continue to affect sales of our products*

At the state level, government actions or ballot initiatives can also affect how our products are covered and reimbursed and/or create additional pressure on our pricing decisions. Existing and proposed state pricing laws have added complexity to the pricing of drugs and may already be affecting industry pricing decisions. A number of states have adopted, and many other states are considering, drug importation programs and other pricing actions, including proposals designed to require biopharmaceutical manufacturers to report to the state proprietary pricing information or provide advance notice of certain price increases. States are also enacting laws modeled on federal policies, such as the IRA and the 340B Drug Discount Program. For example, bills were introduced in fifteen states in 2023 with provisions directed at manufacturers participating in 340B, including restricting a manufacturer's ability to direct drugs in 340B channels, recognizing 340B contract pharmacies and a prohibition on requiring the inclusion of 340B claims modifiers. Further, following the passage of the IRA, laws have been proposed in Connecticut, Maine, Nevada, New York, Rhode Island and Virginia that would apply the drug price caps set by HHS for Medicare to all state drug prices. For Medicaid patients, states have established a Medicaid drug spending cap (New York) and implemented a new review and supplemental rebate negotiation process (Massachusetts). Seven states (Colorado, Maine, New Hampshire, Maryland, Minnesota, Oregon and Washington) have enacted laws that establish Prescription Drug Affordability Boards (PDABs) to study drug prices and identify drugs that pose affordability challenges, and in four states (Colorado, Maryland, Minnesota and Washington) include authority for the state PDAB to set upper payment limits on certain drugs in state regulated plans and, in Minnesota, upper billing limits by in-state payers and providers. Additionally, Colorado, Florida, Maine, New Hampshire, New Mexico, Texas and Vermont have enacted laws, and several other states have proposed bills, to implement importation of drugs from Canada. The FDA has met with representatives from Colorado, Florida, Maine and New Mexico to discuss those states' proposed importation programs, and the FDA may be working towards approving such plans. Other states could adopt similar approaches or could pursue different policy changes in a continuing effort to reduce their costs. Ultimately, as with U.S. federal government actions, existing or future state government actions or ballot initiatives may also have a material adverse effect on our product sales, business and results of operations.

*—U.S. commercial payer actions have affected and may continue to affect access to and sales of our products*

Payers, including healthcare insurers, PBMs, integrated healthcare delivery systems (vertically-integrated organizations built from consolidations of healthcare insurers and PBMs) and group purchasing organizations, increasingly seek ways to reduce their costs. With increasing frequency, payers are adopting benefit plan changes that shift a greater proportion of drug costs to patients. Such measures include more limited benefit plan designs, high deductible plans, higher patient co-pay or coinsurance obligations and more significant limitations on patients' use of manufacturer commercial co-pay assistance programs. Further, government regulation of payers may affect these trends. For example, CMS finalized a policy for plan years starting on or after January 1, 2021 that has caused commercial payers to more widely adopt co-pay accumulator adjustment programs. Payers, including PBMs, have sought, and continue to seek, price discounts or rebates in connection with the placement of our products on their formularies or those they manage, and to also impose restrictions on access to or usage of our products (such as Step Therapy), require that patients receive the payer's prior authorization before covering the product, and/or chosen to exclude certain indications for which our products are approved. For example, some payers require physicians to demonstrate or document that the patients for whom Repatha has been prescribed meet their utilization criteria, and these requirements have served to limit and may continue to limit patient access to Repatha treatment. In an effort to reduce barriers to access, we reduced the net price of Repatha by providing greater discounts and rebates to payers (including PBMs that administer Medicare Part D prescription drug plans), and in response to a very high percentage of Medicare patients abandoning their Repatha prescriptions rather than paying their co-pay, we introduced a set of new National Drug Codes to make Repatha available at a lower list price. However, affordability of patient out-of-pocket co-pay cost has limited and may continue to limit patient use. Further, despite these net and list price reductions, some payers have restricted, and may continue to restrict, patient access and may seek further discounts or rebates or take other actions, such as changing formulary coverage for Repatha, that could reduce our sales of Repatha. These factors have limited, and may continue to limit, patient affordability and use, negatively affecting Repatha sales.

Further, significant consolidation in the health insurance industry has resulted in a few large insurers and PBMs, which places greater pressure on pricing and usage negotiations with biopharmaceutical manufacturers, significantly increasing discount and rebate requirements and limiting patient access and usage. For example, in the United States, as of the beginning of 2023, the top five integrated health plans and PBMs controlled about 92% of all pharmacy prescriptions. This high degree of consolidation among insurers, PBMs and other payers, including integrated healthcare delivery systems and/or with specialty or mail-order pharmacies and pharmacy retailers, has increased the negotiating leverage such entities have over us and other biopharmaceutical manufacturers and has resulted in greater price discounts, rebates and service fees realized by those payers from our business. Each of CVS, Express Scripts and United Health Group (among the top five integrated health plans and PBMs), have Rebate Management Organizations that further increase their leverage to negotiate deeper discounts. Ultimately, additional discounts, rebates, fees, coverage changes, plan changes, restrictions or exclusions imposed by these commercial payers could have a material adverse effect on our product sales, business and results of operations. Policy reforms advanced by Congress or the Administration that refine the role of PBMs in the U.S. marketplace could have downstream implications or consequences for our business and how we interact with these entities. For example, in June 2022, the FTC launched an inquiry into the business practices of PBMs and subsequently expanded the investigation to the three rebate management organizations owned by the three largest PBMs. In addition, multiple Congressional Committees are investigating PBM practices and have also proposed legislation that could increase transparency and reporting of these practices and/or impact rebates and service fees. The results of such inquiry could have an effect on manufacturer interactions with PBMs, resulting in changes to access for certain medicines. See our Annual Report on Form 10-K for the year ended December 31, 2022, Part I, Item 1A. Risk Factors—*Concentration of sales at certain of our wholesaler distributors and consolidation of private payers may negatively affect our business.*

Our business is also affected by policies implemented by private healthcare entities that process Medicare claims, including Medicare Administrative Contractors. For example, in the second quarter of 2022, several Medicare Administrative Contractors issued notice that TEZSPIRE would be added to their "self-administered drug" exclusion lists. Although the Medicare Administrative Contractors subsequently removed TEZSPIRE from their exclusion lists, these exclusions, if reintroduced and/or implemented, would result in Medicare beneficiaries with severe asthma losing access to TEZSPIRE coverage under Medicare Part B and potentially also under Medicare Advantage.

*—Government and commercial payer actions outside the United States have affected and will continue to affect access to and sales of our products*

Outside the United States, we expect countries will also continue to take actions to reduce their drug expenditures and to reduce intellectual property protections. See Part I, Item 1. Business—Reimbursement, of our Annual Report on Form 10-K for the year ended December 31, 2022. Pressures to decrease drug expenditures may further intensify as the COVID-19 pandemic has strained government budgets and as economic conditions continue to worsen in certain regions, including in Europe where high inflation and the energy crisis relating to the Russia–Ukraine conflict are challenging the economies in that region. International reference pricing has been widely used by many countries outside the United States to control costs based on an external benchmark of a product's price in other countries. International reference pricing policies can change quickly and frequently and may not reflect differences in the burden of disease, indications, market structures or affordability differences across countries or regions. Other expenditure control practices, including but not limited to the use of revenue clawbacks, rebates and percentage caps on price increases, are used in various foreign jurisdictions as well. In addition, countries may refuse to reimburse or may restrict the reimbursed population for a product when their national health technology assessments do not consider a medicine to demonstrate sufficient clinical benefit beyond existing therapies or to meet certain cost effectiveness thresholds. For example, despite the European Medicines Agency's approval of Repatha for the treatment of patients with established atherosclerotic disease, prior to 2020, the reimbursement of Repatha in France was limited to a narrower patient population (such as those with homozygous familial hypercholesterolemia (HoFH)) following a national health technology assessment. Many countries decide on reimbursement between potentially competing products through national or regional tenders that often result in one product receiving most or all of the sales in that country or region. Failure to obtain coverage and reimbursement for our products, a deterioration in their existing coverage and reimbursement or a decline in the timeliness or certainty of payment by payers to physicians and other providers has negatively affected, and may further negatively affect, the ability or willingness of healthcare providers to prescribe our products for their patients and otherwise negatively affect the use of our products or the prices we realize for them. Such changes have had, and could in the future have, a material adverse effect on our product sales, business and results of operations.

*Our efforts to collaborate with or acquire other companies, products, or technology, and to integrate the operations of companies or to support the products or technology we have acquired, may not be successful, and may result in unanticipated costs, delays or failures to realize the benefits of the transactions.*

We seek innovation through significant investment in both internal R&D and external transactions, including collaborations, partnerships, alliances, licenses, joint ventures, mergers and acquisitions (collectively, acquisition activity). Acquisition activities may be subject to regulatory approvals or other requirements that are not within our control. Antitrust scrutiny by regulatory agencies and changes to regulatory approval process in the U.S. and foreign jurisdictions may cause approvals to take longer than anticipated to obtain, not be obtained at all, or contain burdensome conditions, which may jeopardize, delay or reduce the anticipated benefits of acquisitions to us and could impede the execution of our business strategy. On May 16, 2023, the FTC filed a complaint in the Northern Illinois District Court seeking to enjoin our proposed acquisition of Horizon. Attorneys general for California, New York, Illinois, Minnesota, Washington and Wisconsin joined the Northern Illinois District Court lawsuit as co-complainants. On June 22, 2023, the FTC filed an administrative complaint alleging that the proposed acquisition would violate federal antitrust laws. See Part I—Note 14, Contingencies and commitments, to the condensed consolidated financial statements. There can be no assurance that such regulatory or other approvals will be obtained or that all closing conditions required in connection with our acquisition activities will be satisfied or waived, which could result in us being unable to complete the planned acquisition activities.

Acquisition activities are complex, time consuming and expensive and may result in unanticipated costs, delays or other operational or financial problems related to integrating the acquired company and business with our company, which may divert our management's attention from other business issues and opportunities and restrict the full realization of the anticipated benefits of such transactions within the expected timeframe or at all. We may pay substantial amounts of cash, incur debt or issue equity securities to pay for acquisition activities, which could adversely affect our liquidity or result in dilution to our stockholders, respectively. For example, the funds received from our $24 billion of senior notes issued on March 2, 2023, together with our $4 billion term loan facility, are expected to be among our primary sources of payment for the proposed acquisition of Horizon. Further, failures or difficulties in integrating or retaining new personnel or in integrating the operations of the businesses, products or assets we acquire (including related technology, commercial operations, compliance programs, manufacturing, distribution and general business operations and procedures and ESG activities) may affect our ability to realize the benefits of the transaction and grow our business and may result in us incurring asset impairment or restructuring charges. These and other challenges may arise in connection with our acquisitions of Otezla, Five Prime Therapeutics, Inc., Teneobio, ChemoCentryx, Horizon and/or our collaborations with BeiGene and Kyowa Kirin Co., Ltd., or with other acquisition activities, which could have a material adverse effect on our business, results of operations and stock price.

**Item 2.** **UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

During the three months ended June 30, 2023, we had one outstanding stock repurchase program, under which the repurchase activity was as follows:

| Period | Total number of shares purchased | Average price paid per share | Total number of shares purchased as part of publicly announced program | Maximum dollar value that may yet be purchased under the program[(1)] |
|---|---|---|---|---|
| April 1–30 | — | — | — | $ 6,979,263,848 |
| May 1–31 | — | — | — | $ 6,979,263,848 |
| June 1–30 | — | — | — | $ 6,979,263,848 |
| Total | — | | — | |

(1) In October 2022, our Board of Directors increased the amount authorized under the repurchase program by an additional $2.4 billion.

**Item 5.** **OTHER INFORMATION**

*Trading Arrangements*

During the three months ended June 30, 2023, no director or officer of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K. The Company has established controls with respect to securities trading by its directors and officers and has permitted the use of Rule 10b5-1 trading arrangements from time to time.

**Item 6.** **EXHIBITS**

Reference is made to the Index to Exhibits included herein.

## INDEX TO EXHIBITS

| Exhibit No. | Description |
|---|---|
| 2.1 | Asset Purchase Agreement, dated August 25, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 8-K on August 26, 2019 and incorporated herein by reference.) |
| 2.1.1 | Amendment No. 1 to the Asset Purchase Agreement, dated October 17, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 8-K on October 17, 2019 and incorporated herein by reference.) |
| 2.1.2 | Amendment No. 2 to the Asset Purchase Agreement, dated October 17, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 2.2 | Letter Agreement, dated November 21, 2019, by and between Amgen Inc. and the parties named therein re: Treatment of Certain Product Inventory in connection with Amgen's acquisition of Otezla. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 2.3 | Irrevocable Guarantee, dated August 25, 2019, by and between Amgen Inc. and Bristol-Myers Squibb Company. (Filed as an exhibit to Form 8-K on August 26, 2019 and incorporated herein by reference.) |
| 2.4 | Agreement and Plan of Merger, dated July 27, 2021, by and among Amgen Inc., Teneobio, Inc., Tuxedo Merger Sub, Inc., and Fortis Advisors LLC. (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential)(Filed as an exhibit to Form 10-Q for the quarter ended September 30, 2021 on November 3, 2021 and incorporated herein by reference.) |
| 2.5 | Agreement and Plan of Merger, dated as of August 3, 2022, among ChemoCentryx, Inc., Amgen Inc. and Carnation Merger Sub, Inc. (Filed as an exhibit to Form 8-K on August 4, 2022 and incorporated herein by reference.) |
| 2.6 | Transaction Agreement, dated as of December 11, 2022, by and among Amgen Inc., Pillartree Limited and Horizon Therapeutics plc. (Filed as an exhibit to Form 8-K on December 12, 2022 and incorporated herein by reference.) |
| 2.7 | Appendix 3 to the Rule 2.7 Announcement, dated as of December 12, 2022 (Conditions Appendix). (Filed as an exhibit to Form 8-K on December 12, 2022 and incorporated herein by reference.) |
| 3.1 | Restated Certificate of Incorporation of Amgen Inc. (As Restated March 6, 2013.) (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2013 on May 3, 2013 and incorporated herein by reference.) |
| 3.2 | Amended and Restated Bylaws of Amgen Inc. (As Amended and Restated February 15, 2016.) (Filed as an exhibit to Form 8-K on February 17, 2016 and incorporated herein by reference.) |
| 4.1 | Form of stock certificate for the common stock, par value $.0001 of the Company. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 1997 on May 14, 1997 and incorporated herein by reference.) |
| 4.2 | Form of Indenture, dated January 1, 1992. (Filed as an exhibit to Form S-3 Registration Statement filed on December 19, 1991 and incorporated herein by reference.) |
| 4.3 | Agreement of Resignation, Appointment and Acceptance dated February 15, 2008. (Filed as an exhibit to Form 10-K for the year ended December 31, 2007 on February 28, 2008 and incorporated herein by reference.) |
| 4.4 | First Supplemental Indenture, dated February 26, 1997. (Filed as an exhibit to Form 8-K on March 14, 1997 and incorporated herein by reference.) |
| 4.5 | 8-1/8% Debentures due April 1, 2097. (Filed as an exhibit to Form 8-K on April 8, 1997 and incorporated herein by reference.) |
| 4.6 | Officer's Certificate of Amgen Inc., dated April 8, 1997, establishing a series of securities entitled "8 1/8% Debentures due April 1, 2097." (Filed as an exhibit to Form 8-K on April 8, 1997 and incorporated herein by reference.) |
| 4.7 | Indenture, dated August 4, 2003. (Filed as an exhibit to Form S-3 Registration Statement on August 4, 2003 and incorporated herein by reference.) |

| Exhibit No. | Description |
|---|---|
| 4.8 | Corporate Commercial Paper - Master Note between and among Amgen Inc., as Issuer, Cede & Co., as Nominee of The Depository Trust Company, and Citibank, N.A., as Paying Agent. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 1998 on May 13, 1998 and incorporated herein by reference.) |
| 4.9 | Officers' Certificate of Amgen Inc., dated May 30, 2007, including form of the Company's 6.375% Senior Notes due 2037. (Filed as an exhibit to Form 8-K on May 30, 2007 and incorporated herein by reference.) |
| 4.10 | Officers' Certificate of Amgen Inc., dated May 23, 2008, including form of the Company's 6.90% Senior Notes due 2038. (Filed as exhibit to Form 8-K on May 23, 2008 and incorporated herein by reference.) |
| 4.11 | Officers' Certificate of Amgen Inc., dated January 16, 2009, including form of the Company's 6.40% Senior Notes due 2039. (Filed as exhibit to Form 8-K on January 16, 2009 and incorporated herein by reference.) |
| 4.12 | Officers' Certificate of Amgen Inc., dated March 12, 2010, including form of the Company's 5.75% Senior Notes due 2040. (Filed as exhibit to Form 8-K on March 12, 2010 and incorporated herein by reference.) |
| 4.13 | Officers' Certificate of Amgen Inc., dated September 16, 2010, including form of the Company's 4.95% Senior Notes due 2041. (Filed as an exhibit to Form 8-K on September 17, 2010 and incorporated herein by reference.) |
| 4.14 | Officers' Certificate of Amgen Inc., dated June 30, 2011, including form of the Company's 5.65% Senior Notes due 2042. (Filed as an exhibit to Form 8-K on June 30, 2011 and incorporated herein by reference.) |
| 4.15 | Officers' Certificate of Amgen Inc., dated November 10, 2011, including form of the Company's 5.15% Senior Notes due 2041. (Filed as an exhibit to Form 8-K on November 10, 2011 and incorporated herein by reference.) |
| 4.16 | Officers' Certificate of Amgen Inc., dated December 5, 2011, including form of the Company's 5.50% Senior Notes due 2026. (Filed as an exhibit to Form 8-K on December 5, 2011 and incorporated herein by reference.) |
| 4.17 | Officers' Certificate of Amgen Inc., dated May 15, 2012, including form of the Company's 5.375% Senior Notes due 2043. (Filed as an exhibit to Form 8-K on May 15, 2012 and incorporated herein by reference.) |
| 4.18 | Officers' Certificate of Amgen Inc., dated September 13, 2012, including form of the Company's 4.000% Senior Notes due 2029. (Filed as an exhibit to Form 8-K on September 13, 2012 and incorporated herein by reference.) |
| 4.19 | Indenture, dated May 22, 2014, between Amgen Inc. and The Bank of New York Mellon Trust Company, N.A., as Trustee. (Filed as an exhibit to Form 8-K on May 22, 2014 and incorporated herein by reference.) |
| 4.20 | Officers' Certificate of Amgen Inc., dated May 22, 2014, including form of the Company's 3.625% Senior Notes due 2024. (Filed as an exhibit to Form 8-K on May 22, 2014 and incorporated herein by reference.) |
| 4.21 | Officer's Certificate of Amgen Inc., dated May 1, 2015, including forms of the Company's 3.125% Senior Notes due 2025 and 4.400% Senior Notes due 2045. (Filed as an exhibit on Form 8-K on May 1, 2015 and incorporated herein by reference.) |
| 4.22 | Officer's Certificate of Amgen Inc., dated as of February 25, 2016, including form of the Company's 2.000% Senior Notes due 2026. (Filed as an exhibit on Form 8-K on February 26, 2016 and incorporated herein by reference.) |
| 4.23 | Officer's Certificate of Amgen Inc., dated as of June 14, 2016, including forms of the Company's 4.563% Senior Notes due 2048 and 4.663% Senior Notes due 2051. (Filed as an exhibit to Form 8-K on June 14, 2016 and incorporated herein by reference.) |
| 4.24 | Officer's Certificate of Amgen Inc., dated as of August 19, 2016, including forms of the Company's 2.250% Senior Notes due 2023 and 2.600% Senior Notes due 2026. (Filed as an exhibit to Form 8-K on August 19, 2016 and incorporated herein by reference.) |
| 4.25 | Officer's Certificate of Amgen Inc., dated as of November 2, 2017, including in the form of the Company's 3.200% Senior Notes due 2027. (Filed as an exhibit to Form 8-K on November 2, 2017 and incorporated herein by reference.) |
| 4.26 | Officer's Certificate of Amgen Inc., dated as of February 21, 2020, including forms of the Company's 1.900% Senior Notes due 2025, 2.200% Senior Notes due 2027, 2.450% Senior Notes due 2030, 3.150% Senior Notes due 2040 and 3.375% Senior Notes due 2050. (Filed as an exhibit to Form 8-K on February 21, 2020 and incorporated herein by reference.) |

| Exhibit No. | Description |
|---|---|
| 4.27 | Officer's Certificate of Amgen Inc., dated as of May 6, 2020, including form of the Company's 2.300% Senior Notes due 2031. (Filed as an exhibit to Form 8-K on May 6, 2020 and incorporated herein by reference.) |
| 4.28 | Officer's Certificate of Amgen Inc., dated as of August 17, 2020, including forms of the Company's 2.770% Senior Notes due 2053. (Filed as an exhibit to Form 8-K on August 18, 2020 and incorporated herein by reference.) |
| 4.29 | Officer's Certificate of Amgen Inc., dated as of August 9, 2021, including forms of the Company's 1.650% Senior Notes due 2028, 2.000% Senior Notes due 2032, 2.800% Senior Notes due 2041 and 3.000% Senior Notes due 2052. (Filed as an exhibit to Form 8-K on August 9, 2021 and incorporated herein by reference.) |
| 4.30 | Officer's Certificate of Amgen Inc., dated as of February 22, 2022, including forms of the Company's 3.000% Senior Notes due 2029, 3.350% Senior Notes due 2032, 4.200% Senior Notes due 2052 and 4.400% Senior Notes due 2062. (Filed as an exhibit to Form 8-K on February 22, 2022 and incorporated herein by reference.) |
| 4.31 | Officer's Certificate of Amgen Inc., dated as of August 18, 2022, including forms of the Company's 4.050% Senior Notes due 2029, 4.200% Senior Notes due 2033 and 4.875% Senior Notes due 2053. (Filed as an exhibit to Form 8-K on August 18, 2022 and incorporated herein by reference.) |
| 4.32 | Description of Amgen Inc.'s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934. (Filed as an exhibit to Form 10-K for the year ended December 31, 2022 on February 9, 2023 and incorporated herein by reference.) |
| 4.33 | Officer's Certificate of the Company, dated as of March 2, 2023, including forms of the Company's 5.250% Senior Notes due 2025, 5.507% Senior Notes due 2026, 5.150% Senior Notes due 2028, 5.250% Senior Notes due 2030, 5.250% Senior Notes due 2033, 5.600% Senior Notes due 2043, 5.650% Senior Notes due 2053 and 5.750% Senior Notes due 2063. (Filed as an exhibit to Form 8-K on March 2, 2023 and incorporated herein by reference.) |
| 10.1+ | Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (Filed as Appendix C to the Definitive Proxy Statement on Schedule 14A on April 8, 2013 and incorporated herein by reference.) |
| 10.2+ | First Amendment to Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, effective March 4, 2015. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2015 on April 27, 2015 and incorporated herein by reference.) |
| 10.3+ | Second Amendment to Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, effective March 2, 2016. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2016 on May 2, 2016 and incorporated herein by reference.) |
| 10.4+ | Form of Grant of Stock Option Agreement for the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on December 12, 2022.)(Filed as an exhibit to Form 10-K for the year ended December 31, 2022 on February 9, 2023 and incorporated herein by reference.) |
| 10.5+ | Form of Restricted Stock Unit Agreement for the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on December 12, 2022.)(Filed as an exhibit to Form 10-K for the year ended December 31, 2022 on February 9, 2023 and incorporated herein by reference.) |
| 10.6+ | Amgen Inc. 2009 Performance Award Program. (As Amended on December 12, 2017.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2017 on February 13, 2018 and incorporated herein by reference.) |
| 10.7+ | Form of Performance Unit Agreement for the Amgen Inc. 2009 Performance Award Program. (As Amended and Reinstated on December 12, 2022.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2022 on February 9, 2023 and incorporated herein by reference.) |
| 10.8+ | Amgen Inc. 2009 Director Equity Incentive Program. (As Amended and Restated on October 21, 2020.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2020 on February 9, 2021 and incorporated herein by reference.) |
| 10.9+ | Form of Restricted Stock Unit Agreement for the Amgen Inc. 2009 Director Equity Incentive Program. (As Amended on December 11, 2019.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |

| Exhibit No. | Description |
|---|---|
| 10.10+ | Form of Cash-Settled Restricted Stock Unit Agreement for the Amgen 2009 Director Equity Incentive Program. (As Amended on December 11, 2019.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 10.11+ | Amgen Inc. Supplemental Retirement Plan. (As Amended and Restated effective October 16, 2013.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2013 on February 24, 2014 and incorporated herein by reference.) |
| 10.11.1+ | First Amendment to the Amgen Inc. Supplemental Retirement Plan, effective October 14, 2016. (Filed as an exhibit to Form 10-Q for the quarter ended September 30, 2016 on October 28, 2016 and incorporated herein by reference.) |
| 10.11.2+ | Second Amendment to the Amgen Inc. Supplemental Retirement Plan, effective October 23, 2019. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 10.11.3+ | Third Amendment to the Amgen Inc. Supplemental Retirement Plan, effective October 20, 2021. (Filed as an exhibit to Form 10-K for the year ended December 31, 2021 on February 16, 2022 and incorporated herein by reference.) |
| 10.11.4+ | Fourth Amendment to the Amgen Inc. Supplemental Retirement Plan, effective October 20, 2022. (Filed as an exhibit to Form 10-K for the year ended December 31, 2022 on February 9, 2023 and incorporated herein by reference.) |
| 10.12+ | Amended and Restated Amgen Change of Control Severance Plan. (As Amended and Restated effective December 9, 2010 and subsequently amended effective March 2, 2011.) (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2011 on May 10, 2011 and incorporated herein by reference.) |
| 10.13+ | Amgen Inc. Executive Incentive Plan. (As Amended and Restated effective January 1, 2022.) (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2022 on April 28, 2022 and incorporated herein by reference.) |
| 10.14+ | Amgen Nonqualified Deferred Compensation Plan. (As Amended and Restated effective October 16, 2013.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2013 on February 24, 2014 and incorporated herein by reference.) |
| 10.14.1+ | First Amendment to the Amgen Nonqualified Deferred Compensation Plan, effective October 14, 2016. (Filed as an exhibit to Form 10-Q for the quarter ended September 30, 2016 on October 28, 2016 and incorporated herein by reference.) |
| 10.14.2+ | Second Amendment to the Amgen Nonqualified Deferred Compensation Plan, effective January 1, 2020. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 10.14.3+ | Third Amendment to the Amgen Nonqualified Deferred Compensation Plan, effective January 1, 2022. (Filed as an exhibit to Form 10-K for the year ended December 31, 2021 on February 16, 2022 and incorporated herein by reference.) |
| 10.15+ | Aircraft Time Sharing Agreement, dated December 3, 2021, by and between Amgen Inc. and Robert A. Bradway. (Filed as an exhibit to Form 10-K for the year ended December 31, 2021 on February 16, 2022 and incorporated herein by reference.) |
| 10.16 | Term Loan Credit Agreement, dated as of December 22, 2022, by and among Amgen Inc., Citibank, N.A., as administrative agent, Bank of America, N.A., as syndication agent, Citibank, N.A., Bank of America, N.A., Goldman Sachs Bank USA and Mizuho Bank, Ltd., as lead arrangers and book runners, Goldman Sachs Bank USA and Mizuho Bank, Ltd. as documentation agents, and the other banks party thereto. (Filed as an exhibit to Form 8-K on December 22, 2022 and incorporated herein by reference.) |
| 10.17 | Third Amended and Restated Credit Agreement, dated as of March 9, 2023, among Amgen Inc., the Banks therein named, Citibank, N.A., as Administrative Agent, and JPMorgan Chase Bank, N.A., as Syndication Agent. (Filed as an exhibit to Form 8-K on March 9, 2023 and incorporated herein by reference.) |
| 10.18 | Collaboration and License Agreement between Amgen Inc. and Celltech R&D Limited dated May 10, 2002 (portions of the exhibit have been omitted pursuant to a request for confidential treatment) and Amendment No. 1, effective June 9, 2003, to Collaboration and License Agreement between Amgen Inc. and Celltech R&D Limited (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-K/A for the year ended December 31, 2012 on July 31, 2013 and incorporated herein by reference.) |

| Exhibit No. | Description |
|---|---|
| 10.18.1 | Amendment No. 2 to Collaboration and License Agreement, effective November 14, 2016, between Amgen Inc. and Celltech R&D Limited (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-K for the year ended December 31, 2016 on February 14, 2017 and incorporated herein by reference.) |
| 10.19 | Letter Agreement, dated June 25, 2019, by and between Amgen Inc. and UCB Celltech (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2019 on July 31, 2019 and incorporated herein by reference.) |
| 10.20 | Collaboration Agreement, dated October 31, 2019, by and between Amgen Inc. and BeiGene Switzerland GmbH, a wholly-owned subsidiary of BeiGene, Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed). (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 10.20.1 | First Amendment to Collaboration Agreement, dated April 20, 2022, by and between Amgen Inc. and BeiGene Switzerland GmbH, and BeiGene, Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential.) (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2022 on August 5, 2022 and incorporated herein by reference.) |
| 10.20.2 | Second Amendment to Collaboration Agreement, entered into as of February 26, 2023, by and between Amgen Inc. and BeiGene Switzerland GmbH, and BeiGene, Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential.) (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2023 on April 28, 2023 and incorporated herein by reference.) |
| 10.21 | Guarantee, dated as of October 31, 2019, made by and among BeiGene, Ltd. and Amgen Inc. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.) |
| 10.22 | Share Purchase Agreement, dated October 31, 2019, by and between Amgen Inc. and BeiGene, Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed). (Filed as an exhibit to Schedule 13D on January 8, 2020 and incorporated herein by reference.) |
| 10.22.1 | Amendment No. 1 to Share Purchase Agreement, dated December 6, 2019, by and among BeiGene, Ltd. and Amgen Inc. (Filed as an exhibit to Schedule 13D on January 8, 2020 and incorporated herein by reference.) |
| 10.22.2 | Restated Amendment No. 2 to Share Purchase Agreement, dated September 24, 2020, by and among BeiGene, Ltd. and Amgen Inc. (Filed as an exhibit to Form 10-Q for the quarter ended September 30, 2020 on October 29, 2020 and incorporated herein by reference.) |
| 10.22.3 | Amendment No. 3 to Share Purchase Agreement, dated January 30, 2023, by and among BeiGene, Ltd. and Amgen Inc. (Filed as an exhibit to Form 8-K on January 31, 2023 and incorporated herein by reference.) |
| 10.23 | Collaboration Agreement dated March 30, 2012 by and between Amgen Inc. and AstraZeneca Collaboration Ventures, LLC, a wholly owned subsidiary of AstraZeneca Pharmaceuticals LP (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential.) (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2022 on August 5, 2022 and incorporated herein by reference.) |
| 10.23.1 | Amendment No. 1 to the Collaboration Agreement, dated October 1, 2014, by and among Amgen Inc., AstraZeneca Collaboration Ventures, LLC and AstraZeneca Pharmaceuticals LP (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential.) (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2022 on August 5, 2022 and incorporated herein by reference.) |
| 10.23.2 | Amendment Nos. 2 through 6 to the March 30, 2012 Collaboration Agreement between Amgen Inc. and AstraZeneca Collaboration Ventures, LLC, dated May 2 and 27 and October 2, 2016, January 31, 2018, and May 15, 2020, respectively (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed.) (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2020 on July 29, 2020 and incorporated herein by reference.) |

| Exhibit No. | Description |
|---|---|
| 10.23.3 | Amendment No. 7 to the Collaboration Agreement, dated December 17, 2020, by and between Amgen Inc. and AstraZeneca Collaboration Ventures, LLC (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2020 on February 9, 2021 and incorporated herein by reference.) |
| 10.23.4 | Amendment No. 8 to the Collaboration Agreement, dated November 19, 2021, by and between Amgen Inc. and AstraZeneca Collaboration Ventures, LLC (portions of the exhibit have been omitted because they are both (i) not material and (ii) is the type of information that the Company treats as private or confidential.)(Filed as an exhibit to Form 10-K for the year ended December 31, 2021 on February 16, 2022 and incorporated herein by reference.) |
| 10.24 | License and Collaboration Agreement, dated June 1, 2021, by and between Amgen Inc. and Kyowa Kirin Co., Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2021 on August 4, 2021 and incorporated herein by reference.) |
| 31* | Rule 13a-14(a) Certifications. |
| 32** | Section 1350 Certifications. |
| 101.INS | Inline XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document. |
| 101.SCH* | Inline XBRL Taxonomy Extension Schema Document. |
| 101.CAL* | Inline XBRL Taxonomy Extension Calculation Linkbase Document. |
| 101.DEF* | Inline XBRL Taxonomy Extension Definition Linkbase Document. |
| 101.LAB* | Inline XBRL Taxonomy Extension Label Linkbase Document. |
| 101.PRE* | Inline XBRL Taxonomy Extension Presentation Linkbase Document. |
| 104 | Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101). |

(* = filed herewith)

(** = furnished herewith and not “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended)

(+ = management contract or compensatory plan or arrangement)

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Amgen Inc.
(Registrant)

| | | | |
|---|---|---|---|
| Date: | August 3, 2023 | By: | /S/ PETER H. GRIFFITH |
| | | | **Peter H. Griffith** |
| | | | **Executive Vice President and Chief Financial Officer** |
| | | | **(Principal Financial Officer)** |