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 ACT OF 1934**

For the quarterly period ended June 30, 2024

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 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 August 1, 2024, the registrant had 537,329,220 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)
AstraZeneca	AstraZeneca plc
B-ALL	B-cell precursor acute lymphoblastic leukemia
BeiGene	BeiGene, Ltd.
ChemoCentryx	ChemoCentryx, Inc.
CMS	Centers for Medicare & Medicaid Services
COVID-19	coronavirus disease 2019
EMA	European Medicines Agency
EPS	earnings per share
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
HHS	U.S. Department of Health and Human Services
Horizon	Horizon Therapeutics plc
IPR&D	in-process research and development
IRA	Inflation Reduction Act of 2022
IRS	Internal Revenue Service
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
PDAB	Prescription Drug Affordability Board
R&D	research and development
RANKL	receptor activator of nuclear factor kappa-B ligand
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
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
ACTIMMUNE	ACTIMMUNE® (interferon gamma-1b)[1]
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)
BUPHENYL	BUPHENYL® (sodium phenylbutyrate)[1]
Corlanor	Corlanor® (ivabradine)
DUEXIS	DUEXIS® (ibuprofen and famotidine)[1]
ENBREL	Enbrel® (etanercept)
EPOGEN	EPOGEN® (epoetin alfa)
EVENITY	EVENITY® (romosozumab-aqqg)
IMDELLTRA	IMDELLTRA™ (tarlatamab-dlle)
IMLYGIC	IMLYGIC® (talimogene laherparepvec)
KANJINTI	KANJINTI® (trastuzumab-anns)
KRYSTEXXA	KRYSTEXXA® (pegloticase)[1]
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)
PENNSAID	PENNSAID® (diclofenac sodium topical solution) 2%[1]
PROCYSBI	PROCYSBI® (cysteamine bitartrate)[1]
Prolia	Prolia® (denosumab)
QUINSAIR	QUINSAIR® (levofloxacin)[1]
RAVICTI	RAVICTI® (glycerol phenylbutyrate)[1]
RAYOS	RAYOS® (prednisone)[1]
Repatha	Repatha® (evolocumab)
RIABNI	RIABNI® (rituximab-arrx)
Sensipar/Mimpara	Sensipar®/Mimpara™ (cinacalcet)
TAVNEOS	TAVNEOS® (avacopan)
TEPEZZA	TEPEZZA® (teprotumumab-trbw)[1]
TEZSPIRE	TEZSPIRE® (tezepelumab-ekko)
UPLIZNA	UPLIZNA® (inebilizumab-cdon)[1]
Vectibix	Vectibix® (panitumumab)
WEZLANA/WEZENLA	WEZLANA™/WEZENLA™ (ustekinumab-auub)
XGEVA	XGEVA® (denosumab)

[1] Products were acquired from our Horizon acquisition on October 6, 2023.

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,	
	2024	2023	2024	2023
Revenues:				
Product sales	$ 8,041	$ 6,683	$ 15,159	$ 12,529
Other revenues	347	303	676	562
Total revenues	8,388	6,986	15,835	13,091
Operating expenses:				
Cost of sales	3,236	1,813	6,436	3,533
Research and development	1,447	1,113	2,790	2,171
Selling, general and administrative	1,785	1,294	3,593	2,552
Other	11	82	116	230
Total operating expenses	6,479	4,302	12,935	8,486
Operating income	1,909	2,684	2,900	4,605
Other income (expense):				
Interest expense, net	(808)	(752)	(1,632)	(1,295)
Other (expense) income, net	(307)	(318)	(542)	1,746
Income before income taxes	794	1,614	726	5,056
Provision for income taxes	48	235	93	836
Net income	$ 746	$ 1,379	$ 633	$ 4,220
Earnings per share:				
Basic	$ 1.39	$ 2.58	$ 1.18	$ 7.90
Diluted	$ 1.38	$ 2.57	$ 1.17	$ 7.86
Shares used in calculation of earnings per share:				
Basic	537	535	537	534
Diluted	541	537	541	537

See accompanying notes.

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

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	2024	2023
Net income	$ 746	$ 1,379	$ 633	$ 4,220
Other comprehensive income (loss), net of reclassification adjustments and taxes:				
Foreign currency translation	(15)	11	(39)	39
Cash flow hedges	51	(22)	177	(108)
Other	(1)	(1)	(4)	20
Other comprehensive income (loss), net of reclassification adjustments and taxes	35	(12)	134	(49)
Comprehensive income	$ 781	$ 1,367	$ 767	$ 4,171

See accompanying notes.

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

	June 30, 2024 (Unaudited)	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 9,301	$ 10,944
Trade receivables, net	6,934	7,268
Inventories	7,995	9,518
Other current assets	2,976	2,602
Total current assets	27,206	30,332
Property, plant and equipment, net	6,097	5,941
Intangible assets, net	30,172	32,641
Goodwill	18,616	18,629
Other noncurrent assets	8,816	9,611
Total assets	$ 90,907	$ 97,154
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,267	$ 1,590
Accrued liabilities	13,722	15,359
Current portion of long-term debt	5,528	1,443
Total current liabilities	21,517	18,392
Long-term debt	57,117	63,170
Long-term deferred tax liabilities	1,780	2,354
Long-term tax liabilities	2,205	4,680
Other noncurrent liabilities	2,363	2,326
Contingencies and commitments		
Stockholders' equity:		
Common stock and additional paid-in capital; $0.0001 par value; 2,750.0 shares authorized; outstanding—537.2 shares in 2024 and 535.4 shares in 2023	33,204	33,070
Accumulated deficit	(27,124)	(26,549)
Accumulated other comprehensive loss	(155)	(289)
Total stockholders' equity	5,925	6,232
Total liabilities and stockholders' equity	$ 90,907	$ 97,154

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, 2023	535.4	$ 33,070	$ (26,549)	$ (289)	$ 6,232
Net loss	—	—	(113)	—	(113)
Other comprehensive income, net of taxes	—	—	—	99	99
Dividends declared on common stock ($2.25 per share)	—	—	(1,208)	—	(1,208)
Issuance of common stock in connection with the Company's equity award programs	1.0	34	—	—	34
Stock-based compensation expense	—	103	—	—	103
Tax impact related to employee stock-based compensation expense	—	(125)	—	—	(125)
Balance as of March 31, 2024	536.4	33,082	(27,870)	(190)	5,022
Net income	—	—	746	—	746
Other comprehensive income, net of taxes	—	—	—	35	35
Issuance of common stock in connection with the Company's equity award programs	0.8	65	—	—	65
Stock-based compensation expense	—	157	—	—	157
Tax impact related to employee stock-based compensation expense	—	(100)	—	—	(100)
Balance as of June 30, 2024	537.2	$ 33,204	$ (27,124)	$ (155)	$ 5,925

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, 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

See accompanying notes.

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

	Six months ended June 30,	
	2024	**2023**
Cash flows from operating activities:		
Net income	$ 633	$ 4,220
Depreciation, amortization and other	2,799	1,796
Stock-based compensation expense	260	166
Deferred income taxes	(784)	(203)
Adjustments for equity method investments	(39)	(3)
Losses (gains) on equity securities	916	(1,169)
Other items, net	(67)	5
Changes in operating assets and liabilities, net of acquisitions:		
Trade receivables, net	310	(240)
Inventories	1,528	(28)
Other assets	(339)	(69)
Accounts payable	666	(371)
Accrued income taxes, net	(1,311)	471
Long-term tax liabilities	(637)	196
Accrued liabilities	(361)	351
Accrued sales incentives and allowance	(393)	173
Other liabilities	(33)	(122)
Net cash provided by operating activities	3,148	5,173
Cash flows from investing activities:		
Proceeds from sales of marketable securities	—	1,125
Proceeds from maturities of marketable securities	—	550
Purchases of property, plant and equipment	(468)	(615)
Other	34	87
Net cash (used in) provided by investing activities	(434)	1,147
Cash flows from financing activities:		
Net proceeds from issuance of debt	—	23,780
Extinguishment of debt	(410)	(420)
Repayment of debt	(1,400)	(704)
Dividends paid	(2,417)	(2,276)
Other	(130)	(81)
Net cash (used in) provided by financing activities	(4,357)	20,299
(Decrease) increase in cash and cash equivalents	(1,643)	26,619
Cash and cash equivalents at beginning of period	10,944	7,629
Cash and cash equivalents at end of period	$ 9,301	$ 34,248

See accompanying notes.

AMGEN INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2024
(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, 2024 and 2023, 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, 2023, 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, 2024.

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. Certain reclassifications have been made to prior periods in the condensed consolidated financial statements and accompanying notes to conform with the current presentation.

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 $10.1 billion and $9.8 billion as of June 30, 2024 and December 31, 2023, respectively.

Recent accounting pronouncements

In November 2023, the Financial Accounting Standards Board (FASB) issued a new accounting standard that improves reportable segment disclosure requirements. The new standard requires enhanced disclosures about a public company's significant segment expenses and more timely and detailed segment information reporting throughout the fiscal period, including for companies with a single reportable segment. The standard is effective for public business entities for annual periods beginning after December 15, 2023 and interim periods beginning after December 15, 2024, and early adoption is permitted. We are currently evaluating the impact of this new standard on our related disclosures.

In December 2023, the FASB issued a new accounting standard that improves income tax disclosure requirements. The new standard requires more detailed information on several income tax disclosures, such as income taxes paid and the income tax rate reconciliation table. The standard is effective for public business entities for annual periods beginning after December 15, 2024, and early adoption is permitted. We are currently evaluating the impact of this new standard on our related disclosures.

2. **Acquisitions**

Acquisition of Horizon Therapeutics plc

On October 6, 2023, Amgen completed its acquisition of Horizon for $116.50 per share in cash, representing a total consideration of approximately $27.8 billion. Horizon is a global biotechnology company focused on the discovery, development and commercialization of medicines that address critical needs of patients impacted by rare, autoimmune and severe inflammatory diseases. The acquisition, which was accounted for as a business combination, aligns with Amgen's core strategy of delivering innovative medicines that make a significant difference for patients suffering from serious diseases and strengthens Amgen's leading rare disease portfolio by adding first-in-class, early-in-lifecycle medicines, including TEPEZZA for thyroid eye disease, KRYSTEXXA for chronic refractory gout and UPLIZNA for neuromyelitis optica spectrum disorder. Upon its acquisition, Horizon became a wholly owned subsidiary of Amgen, and its operations have been included in our consolidated financial statements commencing on the acquisition date.

Measurement period adjustments during the six months ended June 30, 2024, included changes to the purchase price allocation, resulting in a net decrease of approximately $1 million to goodwill. The measurement period adjustments resulted primarily from adjustments to acquired assets and liabilities, including sales reserve and allowances as well as right-of-use assets and liabilities 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, 2024, 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	$ 681
Inventories	5,014
Property, plant and equipment, net	318
Finite-lived intangible assets – developed-product-technology rights	19,590
IPR&D	1,060
Goodwill	3,110
Deferred tax asset	834
Deferred tax liability	(2,492)
Other assets and liabilities, net	(282)
Total assets acquired, net	$ 27,833

The $27.8 billion total consideration for this transaction consisted of (i) cash consideration transferred to common shareholders of $26.7 billion; (ii) cash consideration transferred to vested and outstanding options, outstanding restricted stock unit (RSU) awards, and outstanding performance share unit (PSU) awards of $523 million; (iii) fair value of Amgen replacement awards (based on conversion of outstanding employee RSU awards) of $180 million representing non-cash consideration; and (iv) a portion of Horizon's debt, settled by Amgen on the closing date, of $382 million. Amgen issued 1.7 million replacement equity awards with the original vesting conditions, and fair value was determined based on acquisition date fair value based on the conversion calculation.

The estimated fair values of $20.7 billion for the developed-product-technology rights and IPR&D intangible assets were determined 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 projected cash flows were based on certain assumptions attributable to the respective intangible asset, including estimates of future revenues and expenses, the time and resources needed to complete development and the probabilities of obtaining marketing approval from the FDA and other regulatory agencies. The developed-product-technology rights are being amortized on a straight-line basis over a weighted-average period of approximately 10 years from the acquisition date using the straight-line methodology.

The estimated fair value of the acquired inventory of $5.0 billion 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 using a weighted-average inventory turnover, which we estimate to approximate 27 months from the acquisition date.

A deferred tax liability of $2.5 billion 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, as well as associated deferred tax asset for anticipatory foreign tax credits of $834 million.

The excess of the acquisition date consideration over the fair values assigned to the assets acquired and the liabilities assumed of $3.1 billion was recorded as goodwill, which is not deductible for tax purposes. The goodwill value represents expected synergies from the marketed products acquired and other benefits.

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 tax-related items as we obtain additional information during the measurement period of up to one year from the acquisition date.

Supplemental Pro Forma Financial Information

The following table presents the unaudited supplemental pro forma results of a hypothetical combined Amgen and Horizon entity for the three and six months ended June 30, 2023, as if the acquisition of Horizon had occurred on January 1, 2022 (in millions):

	Three months ended June 30, 2023	Six months ended June 30, 2023
Total revenue	$ 7,933	$ 14,874
Net income	$ 434	$ 2,616

The unaudited supplemental pro forma combined financial information was prepared using the acquisition method of accounting and was based on the historical financial information of Amgen and Horizon. In order to reflect the occurrence of the acquisition on January 1, 2022, the unaudited supplemental pro forma financial information includes adjustments to reflect the following: (i) incremental amortization expense based on the current preliminary fair values of the identifiable intangible assets and inventory step-up; (ii) the additional interest expense associated with the issuance of debt to finance the acquisition; and (iii) the income tax impact using an estimated effective tax rate applied to the combined entity. The unaudited supplemental pro forma financial information is not necessarily indicative of what the condensed consolidated results of operations would have been had the acquisition been completed on January 1, 2022. In addition, the unaudited supplemental pro forma financial information is not a projection of future results of operations of the combined company, nor does it reflect the expected realization of any synergies or cost savings associated with the acquisition.

3. 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,					
	2024			2023		
	U.S.	ROW	Total	U.S.	ROW	Total
Prolia	$ 770	$ 395	$ 1,165	$ 691	$ 337	$ 1,028
ENBREL	902	7	909	1,055	13	1,068
XGEVA	399	163	562	387	143	530
Repatha	270	262	532	212	212	424
Otezla	432	112	544	495	105	600
TEPEZZA[1]	478	1	479	—	—	—
KYPROLIS	240	137	377	234	112	346
EVENITY	281	110	391	192	89	281
Aranesp	91	257	348	123	242	365
Nplate	214	132	346	176	134	310
KRYSTEXXA[1]	294	—	294	—	—	—
Vectibix	133	137	270	118	130	248
BLINCYTO	165	99	264	145	61	206
TEZSPIRE[2]	234	—	234	133	—	133
Other products[3]	937	389	1,326	775	369	1,144
Total product sales[4]	$ 5,840	$ 2,201	8,041	$ 4,736	$ 1,947	6,683
Other revenues			347			303
Total revenues			$ 8,388			$ 6,986

	Six months ended June 30,					
	2024			2023		
	U.S.	ROW	Total	U.S.	ROW	Total
Prolia	$ 1,427	$ 737	$ 2,164	$ 1,314	$ 641	$ 1,955
ENBREL	1,463	13	1,476	1,619	28	1,647
XGEVA	765	358	1,123	771	295	1,066
Repatha	543	506	1,049	409	403	812
Otezla	725	213	938	789	203	992
TEPEZZA[1]	897	6	903	—	—	—
KYPROLIS	474	279	753	468	236	704
EVENITY	517	216	733	356	179	535
Aranesp	191	506	697	238	482	720
Nplate	404	259	663	422	250	672
KRYSTEXXA[1]	529	—	529	—	—	—
Vectibix	253	264	517	229	252	481
BLINCYTO	318	190	508	271	129	400
TEZSPIRE[2]	407	—	407	229	—	229
Other products[3]	1,900	799	2,699	1,596	720	2,316
Total product sales[4]	$ 10,813	$ 4,346	15,159	$ 8,711	$ 3,818	12,529
Other revenues			676			562
Total revenues			$ 15,835			$ 13,091

[1] TEPEZZA and KRYSTEXXA were acquired from the acquisition of Horizon on October 6, 2023, and include product sales in the periods after the acquisition date.

[2] TEZSPIRE is marketed by our collaborator AstraZeneca outside the United States.

[3] Consists of product sales of our non-principal products.

[4] Hedging gains and losses, which are included in product sales, were not material for the three and six months ended June 30, 2024 and 2023.

4. Income taxes

The effective tax rates for the three and six months ended June 30, 2024, were 6.0% and 12.8%, respectively, compared with 14.6% and 16.5%, respectively, for the corresponding periods in the prior year.

The decrease in our effective tax rate for the three months ended June 30, 2024, was primarily due to the earnings mix as a result of the inclusion of the Horizon business (including the amortization of Horizon acquired assets). The decrease in our effective tax rate for the six months ended June 30, 2024, was primarily due to the earnings mix as a result of the inclusion of the Horizon business (including the amortization of Horizon acquired assets) and the year-to-date 2024 unrealized losses on our equity investments. See Note 6, Investments—*BeiGene, Ltd*. and *Neumora Therapeutics, Inc.* The effective tax rates differ from the federal statutory rate primarily due to impacts of the jurisdictional mix of income and expenses. Substantially all of the benefit to our effective tax rate from foreign earnings results from locations where the Company has significant manufacturing operations, including Singapore, Ireland and Puerto Rico, a territory of the United States that is treated as a foreign jurisdiction for U.S. tax purposes. Our operations in Puerto Rico are subject to a tax incentive grant through 2050. Additionally, the Company's operations conducted in Singapore are subject to a tax incentive grant through 2036. Our foreign earnings are also subject to U.S. tax at a reduced rate of 10.5%. Additionally, effective January 1, 2024, selected individual countries, including the United Kingdom and EU member countries, have enacted the global minimum tax agreement. Our legal entities in such countries, along with their direct and indirect subsidiaries, are now subject to a 15% minimum tax rate on adjusted financial statement income.

Beginning on January 1, 2023, we were 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. We qualify for and are subject to 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 accounted for the 2022 excise tax that was capitalized in Inventories as an expense in Cost of sales when the related products were sold in the first half of 2023, and a foreign tax credit was not recognized with respect to the excise tax expense in 2023. We do not have this excise tax exposure in 2024.

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. The trial is currently scheduled to begin on 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.

During the three and six months ended June 30, 2024, the gross amounts of our UTBs increased by $40 million and $80 million, respectively, as a result of tax positions taken during the current year. Substantially all of the UTBs as of June 30, 2024, if recognized, would affect our effective tax rate.

5. 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,	
	2024	2023	2024	2023
Income (Numerator):				
Net income for basic and diluted EPS	$ 746	$ 1,379	$ 633	$ 4,220
Shares (Denominator):				
Weighted-average shares for basic EPS	537	535	537	534
Effect of dilutive securities	4	2	4	3
Weighted-average shares for diluted EPS	541	537	541	537
Basic EPS	$ 1.39	$ 2.58	$ 1.18	$ 7.90
Diluted EPS	$ 1.38	$ 2.57	$ 1.17	$ 7.86

For the three and six months ended June 30, 2024 and 2023, the number of antidilutive employee stock-based awards excluded from the computation of diluted EPS was not significant.

6. 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, 2024	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair values
U.S. Treasury bills	$ 995	$ —	$ —	$ 995
Money market mutual funds	7,678	—	—	7,678
Other short-term interest-bearing securities	139	—	—	139
Total interest-bearing securities	$ 8,812	$ —	$ —	$ 8,812

Types of securities as of December 31, 2023	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair values
U.S. Treasury bills	$ —	$ —	$ —	$ —
Money market mutual funds	10,266	—	—	10,266
Other short-term interest-bearing securities	138	—	—	138
Total interest-bearing securities	$ 10,404	$ —	$ —	$ 10,404

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, 2024	December 31, 2023
Cash and cash equivalents	$ 8,812	$ 10,404
Total interest-bearing securities	$ 8,812	$ 10,404

Cash and cash equivalents in the above table excludes bank account cash of $489 million and $540 million as of June 30, 2024 and December 31, 2023, respectively.

All interest-bearing securities as of June 30, 2024 and December 31, 2023, mature in one year or less.

For the three and six months ended June 30, 2024 and 2023, 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.

Our ownership interest in BeiGene was approximately 18% as of both June 30, 2024 and December 31, 2023, and the fair values of our investment were $2.7 billion and $3.4 billion, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. 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 11, Fair value measurement. During the three months ended June 30, 2024 and 2023, we recognized unrealized losses of $260 million and $705 million, respectively, recorded in Other (expense) income, net, in our Condensed Consolidated Statements of Income. During the six months ended June 30, 2024 and 2023, we recognized unrealized losses of $714 million and unrealized gains of $1.2 billion, respectively, recorded in Other (expense) income, net, in our Condensed Consolidated Statements of Income.

Subject to certain exceptions or otherwise agreed to by BeiGene, while Amgen holds at least 5.0% of BeiGene's outstanding common stock, (A) we may only sell our BeiGene equity investment via: (i) a registered public offering, (ii) a sale under Rule 144 of the Securities Act of 1933 (the "Securities Act") or (iii) a private sale exempt from registration requirements under the Securities Act, and (B) we may not sell more than 5.0% of BeiGene's outstanding common stock in any rolling 12-month period.

Other equity securities

Excluding our equity investments in BeiGene (discussed above) and Neumora (discussed below), we held investments in other equity securities with readily determinable fair values (publicly traded securities) of $419 million and $494 million as of June 30, 2024 and December 31, 2023, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. During the three months ended June 30, 2024 and 2023, net unrealized losses and gains on these publicly traded securities were a net loss of $50 million and net gain of $3 million, respectively. During the six months ended June 30, 2024 and 2023, net unrealized gains and losses on these publicly traded securities were not material. Net realized gains and losses on sales of publicly traded securities for the three and six months ended June 30, 2024 and 2023 were not material.

We held investments of $330 million and $309 million in equity securities without readily determinable fair values as of June 30, 2024 and December 31, 2023, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. During the three and six months ended June 30, 2024 and 2023, upward and downward adjustments on these securities were not material. Adjustments were based on observable price transactions. Net realized gains and losses on sales of securities without readily determinable fair values for the three and six months ended June 30, 2024 and 2023, were not material.

Equity method investments

Neumora Therapeutics, Inc.

As of June 30, 2024 and December 31, 2023, our ownership interests in Neumora were approximately 22.2% and 23.2%, respectively, and the fair values of our investment were $348 million and $603 million, respectively, which are included in Other noncurrent assets in the Condensed Consolidated Balance Sheets. During the three months ended June 30, 2024 and 2023, we recognized unrealized losses and gains of $138 million loss and $28 million gain, respectively, and during the six months ended June 30, 2024 and 2023, we recognized unrealized losses of $255 million and $19 million, respectively. Although our equity investment qualifies us for the equity method of accounting, we have elected the fair value option to account for our 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. See Note 11, Fair value measurement. We believe the fair value option best reflects the economics of the underlying transaction.

We are contractually restricted from selling more than 5.0% of Neumora's outstanding common stock in any rolling 12-month period for as long as we hold at least 10.0% of their outstanding common stock, subject to certain exceptions or otherwise agreed to by Neumora.

Limited partnerships

We held limited partnership investments of $290 million and $251 million as of June 30, 2024 and December 31, 2023, 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, 2024, unfunded additional commitments to be made for these investments during the next several years amounted to $153 million. For the three and six months ended June 30, 2024 and 2023, net unrealized gains and losses from our limited partnership investments were not material.

7. Inventories

Inventories consisted of the following (in millions):

	June 30, 2024	December 31, 2023
Raw materials	$ 884	$ 993
Work in process	4,476	5,747
Finished goods	2,635	2,778
Total inventories	$ 7,995	$ 9,518

8. Goodwill and other intangible assets

Goodwill

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

	Six months ended June 30, 2024
Beginning balance	$ 18,629
Adjustments to goodwill resulting from acquisitions [(1)]	(1)
Currency translation adjustment	(12)
Ending balance	$ 18,616

[(1)] For the six months ended June 30, 2024, adjustments to goodwill consisted of measurement period adjustments related to our Horizon acquisition. See Note 2, Acquisitions.

Other intangible assets

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

	June 30, 2024			December 31, 2023		
	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	$ 48,621	$ (20,320)	$ 28,301	$ 48,631	$ (18,049)	$ 30,582
Licensing rights	3,864	(3,329)	535	3,865	(3,265)	600
Marketing-related rights	1,203	(1,169)	34	1,339	(1,264)	75
Research and development technology rights	1,383	(1,231)	152	1,394	(1,228)	166
Total finite-lived intangible assets	55,071	(26,049)	29,022	55,229	(23,806)	31,423
Indefinite-lived intangible assets:						
In-process research and development	1,150	—	1,150	1,218	—	1,218
Total other intangible assets	$ 56,221	$ (26,049)	$ 30,172	$ 56,447	$ (23,806)	$ 32,641

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, 2024 and 2023, we recognized amortization associated with our finite-lived intangible assets of $1.2 billion and $693 million, respectively. During the six months ended June 30, 2024 and 2023, we recognized amortization associated with our finite-lived intangible assets of $2.4 billion and $1.4 billion, respectively. Amortization of intangible assets is primarily included in Cost of sales in the Condensed Consolidated Statements of Income. As of June 30, 2024, the total estimated amortization of our finite-lived intangible assets for the remaining six months ending December 31, 2024, and the years ending December 31, 2025, 2026, 2027, 2028 and 2029, are $2.4 billion, $4.5 billion, $3.9 billion, $3.9 billion, $2.9 billion and $2.2 billion, respectively.

9. Financing arrangements

Our borrowings consisted of the following (in millions):

	June 30, 2024	December 31, 2023
3.625% notes due 2024 (3.625% 2024 Notes)	$ —	$ 1,400
1.90% notes due 2025 (1.90% 2025 Notes)	500	500
5.25% notes due 2025 (5.25% 2025 Notes)	2,000	2,000
Term loan due April 2025	2,000	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)	803	828
5.507% notes due 2026 (5.507% 2026 Notes)	1,500	1,500
2.60% notes due 2026 (2.60% 2026 Notes)	1,250	1,250
Term loan due October 2026	2,000	2,000
5.50% £475 million notes due 2026 (5.50% 2026 pound sterling Notes)	601	605
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	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)	885	892
2.45% notes due 2030 (2.45% 2030 Notes)	1,250	1,250
5.25% notes due 2030 (5.25% 2030 Notes)	2,750	2,750
2.30% notes due 2031 (2.30% 2031 Notes)	1,250	1,250
2.00% notes due 2032 (2.00% 2032 Notes)	1,001	1,001
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	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)	1,768	1,803
5.75% notes due 2040 (5.75% 2040 Notes)	373	373
2.80% notes due 2041 (2.80% 2041 Notes)	828	949
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	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)	1,914	2,132
4.663% notes due 2051 (4.663% 2051 Notes)	3,541	3,541
3.00% notes due 2052 (3.00% 2052 Notes)	919	999
4.20% notes due 2052 (4.20% 2052 Notes)	895	950
4.875% notes due 2053 (4.875% 2053 Notes)	1,000	1,000
5.65% notes due 2053 (5.65% 2053 Notes)	4,250	4,250
2.77% notes due 2053 (2.77% 2053 Notes)	940	940
4.40% notes due 2062 (4.40% 2062 Notes)	1,165	1,200

	June 30, 2024	December 31, 2023
5.75% notes due 2063 (5.75% 2063 Notes)	2,750	2,750
Other notes due 2097	100	100
Unamortized bond discounts, premiums and issuance costs, net	(1,389)	(1,420)
Fair value adjustments	(345)	(314)
Other	29	17
Total carrying value of debt	62,645	64,613
Less current portion	(5,528)	(1,443)
Total long-term debt	$ 57,117	$ 63,170

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.

The Term loans have an interest rate of three-month SOFR plus 1.225%.

Debt repayments

During the three months ended June 30, 2024, we repaid the $1.4 billion aggregate principal amount of the 3.625% 2024 Notes.

Debt extinguishment

During the three months ended March 31, 2024, we repurchased portions of the 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 $410 million, which resulted in the recognition of a $133 million gain on extinguishment of debt recorded in Other (expense) income, net, in the Condensed Consolidated Statements of Income.

10. Stockholders' equity

Stock repurchase program

During the six months ended June 30, 2024 and 2023, we did not repurchase shares under our stock repurchase program. As of June 30, 2024, $7.0 billion of authorization remained available under our stock repurchase program.

Dividends

In March 2024 and December 2023, our Board of Directors declared quarterly cash dividends of $2.25 per share, which were paid in June 2024 and March 2024, respectively. In August 2024, our Board of Directors declared a quarterly cash dividend of $ 2.25 per share that will be paid in September 2024.

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, 2023	$ (298)	$ (22)	$ 31	$ (289)
Foreign currency translation adjustments	(24)	—	—	(24)
Unrealized gains	—	178	—	178
Reclassification adjustments to income	—	(20)	—	(20)
Other	—	—	(3)	(3)
Income taxes	—	(32)	—	(32)
Balance as of March 31, 2024	(322)	104	28	(190)
Foreign currency translation adjustments	(15)	—	—	(15)
Unrealized gains	—	117	—	117
Reclassification adjustments to income	—	(52)	—	(52)
Other	—	—	(1)	(1)
Income taxes	—	(14)	—	(14)
Balance as of June 30, 2024	$ (337)	$ 155	$ 27	$ (155)

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	2024	2023	Condensed Consolidated Statements of Income locations
Cash flow hedges:			
Foreign currency contract gains	$ 55	$ 36	Product sales
Cross-currency swap contract (losses) gains	(3)	51	Other (expense) income, net
	52	87	Income before income taxes
	(11)	(19)	Provision for income taxes
	$ 41	$ 68	Net income

	Six months ended June 30,		
Components of AOCI	2024	2023	Condensed Consolidated Statements of Income locations
Cash flow hedges:			
Foreign currency contract gains	$ 106	$ 88	Product sales
Cross-currency swap contract (losses) gains	(34)	29	Other (expense) income, net
	72	117	Income before income taxes
	(15)	(25)	Provision for income taxes
	$ 57	$ 92	Net income

11. Fair value measurement

To estimate the fair value of our financial assets and liabilities, we use valuation approaches within a hierarchy that maximize 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, 2024, 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	$ —	$ 995	$ —	$ 995
Money market mutual funds	7,678	—	—	7,678
Other short-term interest-bearing securities	—	139	—	139
Equity securities	3,470	—	—	3,470
Derivatives:				
Foreign currency forward contracts	—	270	—	270
Total assets	$ 11,148	$ 1,404	$ —	$ 12,552
Liabilities:				
Derivatives:				
Foreign currency forward contracts	$ —	$ 28	$ —	$ 28
Cross-currency swap contracts	—	435	—	435
Interest rate swap contracts	—	564	—	564
Contingent consideration obligations	—	—	107	107
Total liabilities	$ —	$ 1,027	$ 107	$ 1,134

Fair value measurement as of December 31, 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	10,266	—	—	10,266
Other short-term interest-bearing securities	—	138	—	138
Equity securities	4,514	—	—	4,514
Derivatives:				
Foreign currency forward contracts	—	145	—	145
Total assets	$ 14,780	$ 283	$ —	$ 15,063
Liabilities:				
Derivatives:				
Foreign currency forward contracts	$ —	$ 116	$ —	$ 116
Cross-currency swap contracts	—	405	—	405
Interest rate swap contracts	—	571	—	571
Contingent consideration obligations	—	—	96	96
Total liabilities	$ —	$ 1,092	$ 96	$ 1,188

Interest-bearing and equity securities

The fair values of our money market mutual funds and equity investments in publicly traded securities, including our equity investments in BeiGene and Neumora, as of June 30, 2024 and December 31, 2023, are based on quoted market prices in active markets, with no valuation adjustment.

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, SOFR, swap rates, obligor credit default swap rates and cross-currency basis swap spreads. Certain inputs, when applicable, are at commonly quoted intervals. See Note 12, 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,	
	2024	2023	2024	2023
Beginning balance	$ 96	$ 273	$ 96	$ 270
Payments	(2)	(2)	(4)	(4)
Net changes in valuations	13	(23)	15	(18)
Ending balance	$ 107	$ 248	$ 107	$ 248

As of June 30, 2024 and December 31, 2023, our contingent consideration obligations are primarily the result of our acquisition of Teneobio, Inc. in October 2021, which obligates us to pay the former shareholders payments 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 are approximated at 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, 2024 and December 31, 2023, the aggregate fair values of our borrowings were $59.3 billion and $59.2 billion, respectively, and the carrying values were $62.6 billion and $64.6 billion, respectively.

During the six months ended June 30, 2024 and 2023, 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.

12. 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 both June 30, 2024 and December 31, 2023, we had outstanding foreign currency forward contracts with aggregate notional amounts of $6.6 billion. 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 and pounds sterling 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 and pounds sterling. In addition, we will pay U.S. dollars to and receive euros and pounds sterling 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 and pounds sterling 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, 2024, 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, 2024, 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):

	Three months ended June 30,		Six months ended June 30,	
Derivatives in cash flow hedging relationships	**2024**	**2023**	**2024**	**2023**
Foreign currency forward contracts	$ 123	$ 24	$ 325	$ 24
Cross-currency swap contracts	(6)	26	(30)	(14)
Forward interest rate contracts	—	—	—	(31)
Total unrealized gains (losses)	$ 117	$ 50	$ 295	$ (21)

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 June 30, 2024 and December 31, 2023, we had interest rate swap contracts with aggregate notional amounts of $5.3 billion and $6.7 billion, respectively, that hedge certain portions of our long-term debt issuances. The reduction in aggregate notional amount of these contracts during the six months ended June 30, 2024, was due to the termination of swaps that occurred in connection with the repayment of the 3.625% 2024 Notes (see Note 9, Financing arrangements).

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):

	Carrying amounts of hedged liabilities[1]		Cumulative amounts of fair value hedging adjustments related to the carrying amounts of the hedged liabilities[2]	
Condensed Consolidated Balance Sheets locations	**June 30, 2024**	**December 31, 2023**	**June 30, 2024**	**December 31, 2023**
Current portion of long-term debt	$ 1,026	$ 1,441	$ 26	$ 41
Long-term debt	$ 3,776	$ 4,788	$ (371)	$ (355)

(1) Current portion of long-term debt includes $60 million and $69 million of carrying value with discontinued hedging relationships as of June 30, 2024 and December 31, 2023, respectively. Long-term debt includes $259 million and $288 million of carrying value with discontinued hedging relationships as of June 30, 2024 and December 31, 2023, respectively.

(2) Current portion of long-term debt includes $60 million and $69 million of hedging adjustments on discontinued hedging relationships as of June 30, 2024 and December 31, 2023, respectively. Long-term debt includes $159 million and $188 million of hedging adjustments on discontinued hedging relationships as of June 30, 2024 and December 31, 2023, 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, 2024			Six months ended June 30, 2024		
	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	$ 8,041	$ (307)	$ (808)	$ 15,159	$ (542)	$ (1,632)
The effects of cash flow and fair value hedging:						
Gains (losses) on cash flow hedging relationships reclassified out of AOCI:						
Foreign currency forward contracts	$ 55	$ —	$ —	$ 106	$ —	$ —
Cross-currency swap contracts	$ —	$ (3)	$ —	$ —	$ (34)	$ —
(Losses) gains on fair value hedging relationships—interest rate swap agreements:						
Hedged items[1]	$ —	$ —	$ (18)	$ —	$ —	$ 31
Derivatives designated as hedging instruments	$ —	$ —	$ 36	$ —	$ —	$ 8

	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

[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, 2024, we expected to reclassify $119 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, 2024 and December 31, 2023, the total notional amounts of these foreign currency forward contracts were $145 million and $457 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, 2024 and 2023.

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, 2024	**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	$ 270	Accrued liabilities/ Other noncurrent liabilities	$ 28
Cross-currency swap contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	435
Interest rate swap contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	564
Forward interest rate contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	—
Total derivatives designated as hedging instruments		270		1,027
Total derivatives		$ 270		$ 1,027

	Derivative assets		Derivative liabilities	
December 31, 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	$ 145	Accrued liabilities/ Other noncurrent liabilities	$ 116
Cross-currency swap contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	405
Interest rate swap contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	571
Forward interest rate contracts	Other current assets/ Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	—
Total derivatives designated as hedging instruments		145		1,092
Total derivatives		$ 145		$ 1,092

For additional information, see Note 11, Fair value measurement.

Our derivative contracts that were in liability positions as of June 30, 2024, 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 (used in) provided by financing activities.

13. 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, 2023, 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; in Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023; and in Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2024.

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; in Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023; and in Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2024, 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; in Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023; and in Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2024, 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

Patent Disputes in the International Region

Germany

On May 13, 2024, the Regional Court of Dusseldorf stayed the hearing on Sanofi Biotechnology SAS' infringement action pending the outcome of Amgen's Nullity Action against the European Patent No. 2,756,004 before the German Federal Patent Court.

Unified Patent Court of the European Union

On July 16, 2024, the Central Division of the Unified Patent Court in Munich (UPC) rendered its decision on Sanofi-Aventis Deutschland GmbH's action seeking revocation of Amgen's European Patent 3,666,797 (the EP'797 Patent). In its decision, the Court concluded that the patent claims are invalid and revoked the patent. Subsequently, on July 29, 2024, the Local Division of the UPC stayed Amgen's action against Sanofi-Aventis Deutschland GmbH, et al. alleging that the importation, marketing, sale and use of PRALUENT ® infringes the EP'797 Patent.

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

Amgen Inc. et al. v. Celltrion Inc., et al.

On May 28, 2024, Amgen Inc. and Amgen Manufacturing Limited LLC filed a lawsuit in the U.S. District Court for the District of New Jersey (New Jersey District Court) against Celltrion Inc. and Celltrion USA, Inc. (collectively, Celltrion) based on the submission to the FDA of a Biologics License Application (BLA) seeking approval to market and sell a biosimilar version of Amgen's Prolia and XGEVA products. The complaint asserts infringement of the following 29 patents: U.S. Patent Nos. 7,364,736; 7,427,659; 7,928,205; 8,053,236; 8,460,896; 8,680,248; 9,012,178; 9,228,168; 9,320,816; 9,328,134; 9,359,435; 10,106,829; 10,167,492; 10,227,627; 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; 11,319,568; 11,434,514; 11,459,595; 11,486,883; 11,946,085; and 11,952,605 (collectively, the Asserted Patents). Amgen seeks a judgment from the New Jersey District Court that Celltrion has 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 Celltrion's proposed denosumab biosimilar before expiration of each of the Asserted Patents found infringed. Amgen also seeks monetary remedies for any past acts of infringement.

ABP 938 (aflibercept) Patent Litigation

On June 7, 2024, Regeneron Pharmaceuticals, Inc. (Regeneron) filed a motion for a preliminary injunction to prohibit Amgen from engaging in the manufacture, use, offer for sell or sale within the United States, or importation into the United States, of ABP 938 until resolution of this lawsuit or the entry of a permanent injunction, whichever comes first. Regeneron's motion focuses on U.S. Patent No. 11,084,865, a formulation patent. On July 3, 2024, Amgen filed its opposition to Regeneron's motion. On July 24, 2024, Regeneron filed its reply brief. Oral argument on Regeneron's motion has been scheduled by the U.S. District Court for the Northern District of West Virginia for August 13, 2024.

Antitrust Class Action

Sensipar Antitrust Class Actions

On May 14, 2024, the putative class of direct purchasers of Sensipar (Sensipar Plaintiffs) appealed the claims that were dismissed with prejudice by the U.S. District Court for the District of Delaware. The U.S. Court of Appeals for the Third Circuit has set a schedule for the Sensipar Plaintiffs to file their opening brief by September 9, 2024. Amgen has until October 9, 2024 to file its response and the Sensipar Plaintiffs must file their reply by November 7, 2024.

Regeneron Pharmaceuticals, Inc. Antitrust Action

On May 22, 2024, Amgen filed a motion for summary judgment.

U.S. Tax Litigation and Related Matters

Amgen Inc. & Subsidiaries v. Commissioner of Internal Revenue

See Note 4, Income taxes, for discussion of the IRS tax dispute and the Company's petitions in the U.S. Tax Court.

Securities Class Action Litigation

On July 18, 2024, the U.S. District Court for the Southern District of New York held a hearing on Amgen's motion to dismiss.

ChemoCentryx, Inc. Securities Matters

On May 24, 2024, the United States Court of Appeals for the Ninth Circuit denied ChemoCentryx's petition to appeal the class certification order. Trial is scheduled to begin on September 22, 2025.

While the U.S. District Court for the Northern District of California (Northern District Court of California) has not yet set a deadline by which members of the class must opt out, on May 2, 2024, RA Capital Healthcare Fund, LP filed two similar securities cases, in the California Superior Court in Ventura County and in the Northern District Court of California, against ChemoCentryx and its former Chief Executive Officer, Dr. Thomas Schall. On July 2, 2024, the state court stayed the case pending an order on summary judgment in the federal class action.

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, 2023, and our Quarterly Report on Form 10-Q for the period ended March 31, 2024. 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, 2023, and in Part II, Item 1A. Risk Factors of our Quarterly Report on Form 10-Q for the period ended March 31, 2024. 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, and collaborations. 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 Inc. (including its subsidiaries, referred to as "Amgen," "the Company," "we," "our" or "us") discovers, develops, manufactures and delivers innovative medicines to fight some of the world's toughest diseases. Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that dramatically improve people's lives, while also reducing the social and economic burden of disease. We helped launch the biotechnology industry more than 40 years ago and have grown to be one of the world's leading independent biotechnology companies. Our robust pipeline includes potential first-in-class medicines at all stages of development.

Our principal products are Prolia, ENBREL, XGEVA, Repatha, Otezla, TEPEZZA, KYPROLIS, EVENITY, Aranesp, Nplate, KRYSTEXXA, Vectibix, BLINCYTO and TEZSPIRE. We also market a number of other products, including but not limited to MVASI, AMJEVITA/AMGEVITA, Neulasta, Parsabiv, RAVICTI, UPLIZNA, LUMAKRAS/LUMYKRAS, Aimovig, TAVNEOS, PROCYSBI, EPOGEN and IMDELLTRA.

Macroeconomic and other challenges

Uncertain macroeconomic conditions, including the risk of inflation, higher interest rates and instability in the financial system, as well as rising healthcare costs continue to pose challenges to our business. Further, ongoing geopolitical conflicts continue to create additional uncertainty in global macroeconomic conditions. Additionally, with public and private healthcare-provider focus, the industry continues to be subject to cost containment measures and significant pricing pressures, resulting in 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. Finally, wholesale and end-user buying patterns can affect our product sales. These buying patterns can cause fluctuations in quarterly product sales but have generally not been significant to date when comparing full-year product performance to the prior year. See Part II, Item 1A. Risk Factors, of this Quarterly Report on Form 10-Q.

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, 2024. For additional developments, see our Annual Report on Form 10-K for the year ended December 31, 2023, and our Quarterly Report on Form 10-Q for the period ended March 31, 2024.

Products/pipeline

IMDELLTRA

In May 2024, we announced IMDELLTRA received accelerated approval from the FDA for the treatment of adult patients with extensive-stage small cell lung cancer (ES-SCLC) with disease progression on or after platinum-based chemotherapy.

BLINCYTO

In June 2024, we announced BLINCYTO received approval from the FDA in frontline consolidation for patients with CD19-positive Philadelphia chromosome-negative B-cell precursor acute lymphoblastic leukemia (B-ALL).

UPLIZNA

In June 2024, we announced positive topline results from our Phase 3 registrational trial evaluating UPLIZNA for the treatment of Immunoglobulin G4-related disease (IgG4-RD). The trial met its primary endpoint, showing a statistically significant 87% reduction in the risk of IgG4-RD flare compared to placebo during the 52-week placebo-controlled period. All key secondary endpoints were also met, which were annualized flare rate; flare-free, treatment-free complete remission; and flare-free, corticosteroid-free complete remission. No new safety signals were identified.

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,		
	2024	2023	Change	2024	2023	Change
Product sales						
U.S.	$ 5,840	$ 4,736	23 %	$ 10,813	$ 8,711	24 %
ROW	2,201	1,947	13 %	4,346	3,818	14 %
Total product sales	8,041	6,683	20 %	15,159	12,529	21 %
Other revenues	347	303	15 %	676	562	20 %
Total revenues	$ 8,388	$ 6,986	20 %	$ 15,835	$ 13,091	21 %
Operating expenses	$ 6,479	$ 4,302	51 %	$ 12,935	$ 8,486	52 %
Operating income	$ 1,909	$ 2,684	(29) %	$ 2,900	$ 4,605	(37) %
Net income	$ 746	$ 1,379	(46) %	$ 633	$ 4,220	(85) %
Diluted EPS	$ 1.38	$ 2.57	(46) %	$ 1.17	$ 7.86	(85) %
Diluted shares	541	537	1 %	541	537	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) as may be noted.

Total product sales increased 20% and 21% for the three and six months ended June 30, 2024, respectively, driven by volume growth of 26% for both periods, partially offset by declines in net selling price of 3% and 2%, respectively.

For the three months ended June 30, 2024, U.S. volume grew 30% and ROW volume grew 15%. Product sales from acquired Horizon products contributed $1.1 billion, with volume growth of 10% from our other brands, including Repatha, TEZSPIRE, Prolia and EVENITY.

For the six months ended June 30, 2024, U.S. volume grew 30% and ROW volume grew 16%. Product sales from

acquired Horizon products contributed $2.0 billion, with volume growth of 9% from our other brands, including Repatha, TEZSPIRE, EVENITY and Prolia.

For the remainder of 2024, we expect product sales growth from acquired Horizon products and volume growth from our other brands to be partially offset by net selling price declines on a year-over-year basis at a portfolio level.

Uncertain macroeconomic conditions, changes in the healthcare ecosystem and geopolitical conflicts have the potential to introduce variability into product sales. Furthermore, product sales continue to be impacted by actions from governments and other entities to curb high inflation, provisions of the IRA and growth in numbers of Medicaid enrollees and uninsured individuals. See Part I, Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2023, and Part II, Item 1A. Risk Factors, of our Quarterly Reports on Form 10-Q for the periods ended March 31, 2024 and June 30, 2024.

Other revenues increased for the three months ended June 30, 2024, driven by higher royalty income from licensed products. Other revenues increased for the six months ended June 30, 2024, driven by higher royalty income and corporate partner revenue from licensed products.

Operating expenses increased for the three and six months ended June 30, 2024, primarily driven by higher amortization expense from Horizon acquisition-related assets and expenses from the acquired Horizon business.

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,		
	2024	2023	Change	2024	2023	Change
Prolia	$ 1,165	$ 1,028	13 %	$ 2,164	$ 1,955	11 %
ENBREL	909	1,068	(15) %	1,476	1,647	(10) %
XGEVA	562	530	6 %	1,123	1,066	5 %
Repatha	532	424	25 %	1,049	812	29 %
Otezla	544	600	(9) %	938	992	(5) %
TEPEZZA[1]	479	—	N/A	903	—	N/A
KYPROLIS	377	346	9 %	753	704	7 %
EVENITY	391	281	39 %	733	535	37 %
Aranesp	348	365	(5) %	697	720	(3) %
Nplate	346	310	12 %	663	672	(1) %
KRYSTEXXA[1]	294	—	N/A	529	—	N/A
Vectibix	270	248	9 %	517	481	7 %
BLINCYTO	264	206	28 %	508	400	27 %
TEZSPIRE[2]	234	133	76 %	407	229	78 %
Other products[3]	1,326	1,144	16 %	2,699	2,316	17 %
Total product sales	$ 8,041	$ 6,683	20 %	$ 15,159	$ 12,529	21 %

N/A = not applicable

(1) TEPEZZA and KRYSTEXXA were acquired from the acquisition of Horizon on October 6, 2023, and include product sales in the periods after the acquisition date.

(2) TEZSPIRE is marketed by our collaborator AstraZeneca outside the United States.

(3) Consists of product sales of our non-principal products.

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, 2023: (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, 2024: (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,		
	2024	2023	Change	2024	2023	Change
Prolia — U.S.	$ 770	$ 691	11 %	$ 1,427	$ 1,314	9 %
Prolia — ROW	395	337	17 %	737	641	15 %
Total Prolia	$ 1,165	$ 1,028	13 %	$ 2,164	$ 1,955	11 %

The increase in global Prolia sales for the three and six months ended June 30, 2024 was primarily driven by volume growth. As disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Patents, our U.S. patent for RANKL antibodies (including sequences) for Prolia and XGEVA expires in February 2025. For information about our settlement with Sandoz Inc., see Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2024.

For a discussion of litigation related to Prolia, see Part IV—Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023; and Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2024 and June 30, 2024.

ENBREL

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
ENBREL — U.S.	$ 902	$ 1,055	(15) %	$ 1,463	$ 1,619	(10) %
ENBREL — Canada	7	13	(46) %	13	28	(54) %
Total ENBREL	$ 909	$ 1,068	(15) %	$ 1,476	$ 1,647	(10) %

The decrease in ENBREL sales for the three and six months ended June 30, 2024 was primarily driven by lower net selling price. Going forward, we expect relatively flat volumes with continued declines in net selling price, including the impact from the IRA Medicare Part D price set by CMS beginning in 2026.

XGEVA

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
XGEVA — U.S.	$ 399	$ 387	3 %	$ 765	$ 771	(1) %
XGEVA — ROW	163	143	14 %	358	295	21 %
Total XGEVA	$ 562	$ 530	6 %	$ 1,123	$ 1,066	5 %

The increase in global XGEVA sales for the three and six months ended June 30, 2024 was driven by higher net selling price. As disclosed in our Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Patents, our U.S. patent for RANKL antibodies (including sequences) for Prolia and XGEVA expires in February 2025. For information about our settlement with Sandoz Inc., see Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Report on Form 10-Q for the period ended March 31, 2024.

For a discussion of litigation related to XGEVA, see Part IV—Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023; and Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2024 and June 30, 2024.

Repatha

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Repatha — U.S.	$ 270	$ 212	27 %	$ 543	$ 409	33 %
Repatha — ROW	262	212	24 %	506	403	26 %
Total Repatha	$ 532	$ 424	25 %	$ 1,049	$ 812	29 %

The increase in global Repatha sales for the three and six months ended June 30, 2024 was driven by volume growth of 46% and 45%, respectively, partially offset by lower net selling price of 20% and 16%, respectively.

For a discussion of ongoing litigation related to Repatha, see Part IV—Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023, and Note 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2024 and June 30, 2024.

Otezla

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Otezla — U.S.	$ 432	$ 495	(13) %	$ 725	$ 789	(8) %
Otezla — ROW	112	105	7 %	213	203	5 %
Total Otezla	$ 544	$ 600	(9) %	$ 938	$ 992	(5) %

The decrease in global Otezla sales for the three months ended June 30, 2024 was driven by lower net selling price of 7% and unfavorable changes to estimated sales deductions of 6%, partially offset by volume growth of 2%.

The decrease in global Otezla sales for the six months ended June 30, 2024 was driven by lower net selling price of 7% and unfavorable changes to estimated sales deductions of 4%, partially offset by higher inventory of 4%.

TEPEZZA

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
TEPEZZA — U.S.	$ 478	$ —	N/A	$ 897	$ —	N/A
TEPEZZA — ROW	1	—	N/A	6	—	N/A
Total TEPEZZA	$ 479	$ —	N/A	$ 903	$ —	N/A

N/A = not applicable

TEPEZZA was acquired on October 6, 2023 from our Horizon acquisition and generated $479 million and $903 million in product sales for the three and six months ended June 30, 2024, respectively. As TEPEZZA was acquired on October 6, 2023, there were no recorded product sales for the comparative prior periods.

KYPROLIS

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
KYPROLIS — U.S.	$ 240	$ 234	3 %	$ 474	$ 468	1 %
KYPROLIS — ROW	137	112	22 %	279	236	18 %
Total KYPROLIS	$ 377	$ 346	9 %	$ 753	$ 704	7 %

The increase in global KYPROLIS sales for the three and six months ended June 30, 2024 was primarily driven by volume growth outside the United States.

EVENITY

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
EVENITY — U.S.	$ 281	$ 192	46 %	$ 517	$ 356	45 %
EVENITY — ROW	110	89	24 %	216	179	21 %
Total EVENITY	$ 391	$ 281	39 %	$ 733	$ 535	37 %

The increase in global EVENITY sales for the three and six months ended June 30, 2024 was primarily driven by volume growth.

Aranesp

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Aranesp — U.S.	$ 91	$ 123	(26) %	$ 191	$ 238	(20) %
Aranesp — ROW	257	242	6 %	506	482	5 %
Total Aranesp	$ 348	$ 365	(5) %	$ 697	$ 720	(3) %

The decrease in global Aranesp sales for the three and six months ended June 30, 2024 was driven by unfavorable changes to estimated sales deductions of 8% and 5%, respectively, partially offset by volume growth outside the United States and higher net selling price.

Nplate

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Nplate — U.S.	$ 214	$ 176	22 %	$ 404	$ 422	(4) %
Nplate — ROW	132	134	(1) %	259	250	4 %
Total Nplate	$ 346	$ 310	12 %	$ 663	$ 672	(1) %

The increase in global Nplate sales for the three months ended June 30, 2024 was driven by higher net selling price and volume growth.

Global Nplate sales for the six months ended June 30, 2024 decreased 1%. Excluding a U.S. government order of $82 million in the first quarter of 2023 from this comparison, Nplate sales increased 12% for the six months ended June 30,

2024, driven by higher net selling price and volume growth.

KRYSTEXXA

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
KRYSTEXXA — U.S.	$ 294	$ —	N/A	$ 529	$ —	N/A
KRYSTEXXA — ROW	—	—	N/A	—	—	N/A
Total KRYSTEXXA	$ 294	$ —	N/A	$ 529	$ —	N/A

N/A = not applicable

KRYSTEXXA was acquired on October 6, 2023 from our Horizon acquisition and generated $294 million and $529 million in product sales for the three and six months ended June 30, 2024, respectively. As KRYSTEXXA was acquired on October 6, 2023, there were no recorded product sales for the comparative prior periods.

Vectibix

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Vectibix — U.S.	$ 133	$ 118	13 %	$ 253	$ 229	10 %
Vectibix — ROW	137	130	5 %	264	252	5 %
Total Vectibix	$ 270	$ 248	9 %	$ 517	$ 481	7 %

The increase in global Vectibix sales for the three and six months ended June 30, 2024 was driven by higher net selling price and volume growth, partially offset by unfavorable changes to foreign currency exchange rates.

BLINCYTO

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
BLINCYTO — U.S.	$ 165	$ 145	14 %	$ 318	$ 271	17 %
BLINCYTO — ROW	99	61	62 %	190	129	47 %
Total BLINCYTO	$ 264	$ 206	28 %	$ 508	$ 400	27 %

The increase in global BLINCYTO sales for the three and six months ended June 30, 2024 was driven by volume growth resulting from broad prescribing across academic and community segments for patients with B-ALL. In June 2024, BLINCYTO was granted approval by the FDA in frontline consolidation for patients with CD-19 positive Philadelphia chromosome-negative B-ALL.

TEZSPIRE

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
TEZSPIRE — U.S.	$ 234	$ 133	76 %	$ 407	$ 229	78 %

The increase in TEZSPIRE sales for the three and six months ended June 30, 2024 was primarily driven by volume growth.

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,		
	2024	2023	Change	2024	2023	Change
MVASI — U.S.	$ 100	$ 123	(19) %	$ 205	$ 244	(16) %
MVASI — ROW	57	74	(23) %	154	155	(1) %
AMJEVITA — U.S.[1]	(9)	19	N/A	21	70	(70) %
AMGEVITA — ROW	142	131	8 %	280	244	15 %
Neulasta — U.S.	75	199	(62) %	162	410	(60) %
Neulasta — ROW	30	37	(19) %	61	75	(19) %
Parsabiv — U.S.	67	54	24 %	132	112	18 %
Parsabiv — ROW	39	33	18 %	79	66	20 %
RAVICTI — U.S.[2]	96	—	N/A	188	—	N/A
RAVICTI — ROW[2]	1	—	N/A	3	—	N/A
UPLIZNA — U.S.[2]	77	—	N/A	147	—	N/A
UPLIZNA — ROW[2]	15	—	N/A	25	—	N/A
LUMAKRAS — U.S.	55	50	10 %	108	98	10 %
LUMYKRAS — ROW	30	27	11 %	59	53	11 %
Aimovig — U.S.	80	78	3 %	145	142	2 %
Aimovig — ROW	5	4	25 %	10	9	11 %
TAVNEOS — U.S.	61	29	*	106	52	*
TAVNEOS — ROW	10	1	*	16	1	*
PROCYSBI — U.S.[2]	54	—	N/A	103	—	N/A
PROCYSBI — ROW[2]	4	—	N/A	5	—	N/A
EPOGEN — U.S.	32	61	(48) %	73	121	(40) %
IMDELLTRA — U.S.	12	—	N/A	12	—	N/A
Other — U.S.[3]	237	162	46 %	498	347	44 %
Other — ROW[3]	56	62	(10) %	107	117	(9) %
Total other products	$ 1,326	$ 1,144	16 %	$ 2,699	$ 2,316	17 %
Total U.S. — other products	$ 937	$ 775	21 %	$ 1,900	$ 1,596	19 %
Total ROW — other products	389	369	5 %	799	720	11 %
Total other products	$ 1,326	$ 1,144	16 %	$ 2,699	$ 2,316	17 %

N/A = not applicable

* Change in excess of 100%

[1] U.S. AMJEVITA product sales for the three and six months ended June 30, 2024, included unfavorable changes to estimated sales deductions.

[2] RAVICTI, UPLIZNA and PROCYSBI were acquired from our Horizon acquisition on October 6, 2023, and include product sales in the periods after the acquisition date.

[3] Consists of product sales from (i) KANJINTI, RIABNI, Corlanor, NEUPOGEN, AVSOLA, IMLYGIC, BEKEMV, Sensipar/Mimpara and WEZLANA/WEZENLA; and (ii) ACTIMMUNE, RAYOS, BUPHENYL, PENNSAID, QUINSAIR and DUEXIS in the periods after our Horizon acquisition on October 6, 2023.

Operating expenses

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

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Operating expenses:						
Cost of sales	$ 3,236	$ 1,813	78 %	$ 6,436	$ 3,533	82 %
% of product sales	40.2 %	27.1 %		42.5 %	28.2 %	
% of total revenues	38.6 %	26.0 %		40.6 %	27.0 %	
Research and development	$ 1,447	$ 1,113	30 %	$ 2,790	$ 2,171	29 %
% of product sales	18.0 %	16.7 %		18.4 %	17.3 %	
% of total revenues	17.3 %	15.9 %		17.6 %	16.6 %	
Selling, general and administrative	$ 1,785	$ 1,294	38 %	$ 3,593	$ 2,552	41 %
% of product sales	22.2 %	19.4 %		23.7 %	20.4 %	
% of total revenues	21.3 %	18.5 %		22.7 %	19.5 %	
Other	$ 11	$ 82	(87) %	$ 116	$ 230	(50) %
Total operating expenses	$ 6,479	$ 4,302	51 %	$ 12,935	$ 8,486	52 %

Cost of sales

Cost of sales increased to 38.6% and 40.6% of total revenues for the three and six months ended June 30, 2024, respectively, driven by higher amortization expense from Horizon acquisition-related assets and, to a lesser extent, higher royalty and profit share expense. The increases were partially offset by the impact of the 2022 Puerto Rico tax law change, which replaced an excise tax with an income tax beginning in 2023. See Note 4, Income taxes, to the condensed consolidated financial statements.

Research and development

The increase in R&D expense for the three months ended June 30, 2024, was driven by higher spend in later-stage clinical programs and research and early pipeline, including Horizon-acquired programs.

The increase in R&D expense for the six months ended June 30, 2024, was driven by higher spend in later-stage clinical programs, marketed product support and research and early pipeline, including Horizon-acquired programs.

Selling, general and administrative

The increase in SG&A expense for the three and six months ended June 30, 2024, was primarily driven by expenses from the acquired Horizon business and other commercial expenses.

Other

Other operating expenses for the three months ended June 30, 2024, consisted primarily of changes in the fair values of contingent consideration liabilities related to our Teneobio, Inc. acquisition from 2021. Other operating expenses for the six months ended June 30, 2024, consisted primarily of a net impairment charge associated with an IPR&D asset and changes in the fair values of contingent consideration liabilities, both related to our Teneobio, Inc. acquisition.

Other operating expenses for the three and six months ended June 30, 2023, consisted primarily of expenses related to our restructuring plan initiated in the first quarter of 2023 and a net impairment charge associated with an IPR&D asset.

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,	
	2024	2023	2024	2023
Interest expense, net	$ (808)	$ (752)	$ (1,632)	$ (1,295)
Other (expense) income, net	$ (307)	$ (318)	$ (542)	$ 1,746
Provision for income taxes	$ 48	$ 235	$ 93	$ 836
Effective tax rate	6.0 %	14.6 %	12.8 %	16.5 %

Interest expense, net

The increase in Interest expense, net, for the three and six months ended June 30, 2024, was primarily due to higher average debt outstanding and higher weighted-average fixed and variable interest rates on the debt.

Other (expense) income, net

The change in Other (expense) income, net, for the three months ended June 30, 2024, was primarily due to lower unrealized losses on our strategic equity investments, primarily BeiGene and Neumora, offset by reduced interest income as a result of lower average cash balances.

The change in Other (expense) income, net, for the six months ended June 30, 2024, was primarily due to current year unrealized losses on our strategic equity investments, primarily BeiGene and Neumora, compared with net unrealized gains in the prior comparative period. Prior period net gains were principally composed of amounts recognized on our BeiGene investment in the first quarter of 2023 as a result of a change from the equity method of accounting to recording this investment at fair value, with changes in fair value recognized in earnings. See Note 6, Investments, to the condensed consolidated financial statements.

Income taxes

The decrease in our effective tax rate for the three months ended June 30, 2024, was primarily due to the earnings mix as a result of the inclusion of the Horizon business (including the amortization of Horizon acquired assets). The decrease in our effective tax rate for the six months ended June 30, 2024, was primarily due to the earnings mix as a result of the inclusion of the Horizon business (including the amortization of Horizon acquired assets) and the year-to-date 2024 unrealized losses on our equity investments. See Note 6, Investments—*BeiGene, Ltd.* and *Neumora Therapeutics, Inc.,* to the condensed consolidated financial statements.

As previously reported, the OECD reached an agreement to align countries on a minimum corporate tax rate and an expansion of the taxing rights of market countries. Effective January 1, 2024, selected individual countries, including the United Kingdom and EU member countries, have enacted the global minimum tax agreement. Our legal entities in the countries that have enacted the agreement, along with their direct and indirect subsidiaries, are now subject to a 15% minimum tax rate on adjusted financial statement income. Other countries, including the United States and the U.S. territory of Puerto Rico, have not yet enacted the OECD agreement, and implementation remains highly uncertain. The continued enactment of the agreement, either by all OECD participants or unilaterally by individual countries, could result in tax increases or double taxation in the United States or foreign jurisdictions.

As of January 1, 2023, 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. We qualify for and are subject to 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 under the U.S. Treasury final foreign tax credit regulations. See Note 4, 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. The trial is currently scheduled to begin on 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.

See our Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1A, Risk Factors—*We could be subject to additional tax liabilities, including from an adverse outcome in our ongoing tax dispute with the IRS and other tax examinations, enactment of the OECD minimum corporate tax rate agreement and the adoption and interpretation of new tax legislation, and we anticipate additional tax liabilities from certain provisions of the 2017 Tax Act that will go into effect in 2026; such tax liabilities could adversely affect our profitability and results of operations,* and Note 4, 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, 2024	December 31, 2023
Cash and cash equivalents	$ 9,301	$ 10,944
Total assets	$ 90,907	$ 97,154
Current portion of long-term debt	$ 5,528	$ 1,443
Long-term debt	$ 57,117	$ 63,170
Stockholders’ equity	$ 5,925	$ 6,232

Cash and cash equivalents

Our balance of cash and cash equivalents was $9.3 billion as of June 30, 2024. 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 investing in our business while reducing our debt and returning capital to stockholders through the payment of cash dividends and stock repurchases. This reflects our desire to optimize our cost of capital and our confidence in the future cash flows of our business. 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, debt levels and debt service requirements, our credit rating, availability of financing on acceptable terms, changes to applicable tax laws or corporate laws, changes to 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, accelerated share repurchases and market transactions.

In March 2024 and December 2023, our Board of Directors declared quarterly cash dividends of $2.25 per share of common stock, which were paid in June 2024 and March 2024, respectively, and was an increase of 6% over the quarterly cash dividends paid each quarter in 2023. In August 2024, our Board of Directors declared a quarterly cash dividend of $2.25 per share of common stock that will be paid in September 2024.

During the six months ended June 30, 2024, we did not repurchase any of our common stock under our stock repurchase program. As of June 30, 2024, $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, 2024 and December 31, 2023. Our accumulated deficit is not anticipated to affect our future ability to operate, repurchase stock, pay dividends or repay our debt given our strong financial position.

During the six months ended June 30, 2024 and 2023, debt repayments totaled $1.4 billion and $704 million, respectively. In addition, we opportunistically repurchase our debt when market conditions are favorable. During the six months ended June 30, 2024 and 2023, we spent $410 million and $420 million, respectively, to extinguish principal amounts of debt of $544 million and $539 million, respectively.

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, as well as our plans to reduce debt, 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 Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1A. Risk Factors—*Global economic conditions may negatively affect us and may magnify certain risks that affect our business.*

Certain of our financing arrangements contain nonfinancial covenants. In addition, our revolving credit agreement and term loan credit agreement include 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 respective agreements. We were in compliance with all applicable covenants under these arrangements as of June 30, 2024.

Cash flows

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

	Six months ended June 30,	
	2024	2023
Net cash provided by operating activities	$ 3,148	$ 5,173
Net cash (used in) provided by investing activities	$ (434)	$ 1,147
Net cash (used in) provided by financing activities	$ (4,357)	$ 20,299

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, 2024, decreased compared with the prior year period due to timing of payments to the IRS, including repatriation taxes of $1.5 billion paid in the second quarter of 2024 and an advance deposit of $800 million paid in the first quarter of 2024.

Investing

Cash used in investing activities during the six months ended June 30, 2024, was primarily due to capital expenditures of $468 million, including construction costs of new plants in North Carolina and Ohio. 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. We currently estimate 2024 spending on capital projects to be approximately $1.3 billion.

Financing

Cash used in financing activities during the six months ended June 30, 2024, was primarily due to the payment of dividends of $2.4 billion and the repayment and extinguishment of debt of $1.4 billion and $410 million, respectively. 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 $704 million and $420 million, respectively. See Note 9, Financing arrangements, and Note 10, 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, 2023.

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, 2023, and is incorporated herein by reference. There were no material changes during the six months ended June 30, 2024, 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, 2023.

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, 2024.

Management determined that as of June 30, 2024, 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 13, Contingencies and commitments, to the condensed consolidated financial statements included in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2024 and June 30, 2024, for discussions that are limited to certain recent developments concerning our legal proceedings. Those discussions should be read in conjunction with Part IV—Note 20, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023.

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, 2023, 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 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 the IRA law 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 (IRA Inflation Penalties). 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. In March 2024, the Administration released its budget plan for fiscal year 2025 that included proposals to expand the IRA's drug price setting to more drugs and sooner after launch and making IRA Inflation Penalties applicable to commercial health insurance. Government actions or ballot initiatives at the state level also represent a highly active area of policymaking and experimentation, including proposals that limit drug reimbursement under state run Medicaid programs based on decisions of drug affordability boards, use of 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, 2023. 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). The Medicare price setting process began in August 2023 when CMS announced the first 10 drugs for Medicare price setting, which includes ENBREL, currently a product that generates considerable revenue. Effective July 30, 2024, CMS has set a price for ENBREL in Medicare Part D that will be applicable beginning on January 1, 2026, which we expect will negatively impact its profitability. See Part I, Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of operations—Product sales—ENBREL. Depending on the growth and success of our medicines, other of our medicines may also be subject to selection by CMS in the next, or in a future, cycle of mandatory Medicare price setting. If other of our medicines are selected by CMS for mandatory price setting, we may be required to accept a price set by the government similar to the process that was applied to ENBREL. Also under the IRA, starting on January 1, 2024, Medicare Part D was redesigned to cap beneficiary out-of-pocket costs and, beginning January 1, 2025, Federal reinsurance will 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 D and January 1, 2023 for Medicare Part B, but CMS has not yet issued invoices and has some discretion as to when to issue such invoices to manufacturers. We expect that several of 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 changes. For example, in April 2024, CMS finalized policy changes that will give Part D plans more flexibility to substitute biosimilars for reference products on formularies in 2025. In early 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 work with states that seek 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 perceived 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 the fourth quarter of 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 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, legislation, government actions, and 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, PDABs, 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 referencing the IRA and seeking to regulate the 340B Drug Pricing Program. For example, following the passage of the IRA, bills have been proposed in multiple states that would apply the drug price caps set by HHS for Medicare to drug prices in an individual state, and such references to IRA price caps have also been included in PDAB legislation. For Medicaid patients, states have established a Medicaid drug spending cap (New York) and implemented a new review and supplemental rebate negotiation process (Massachusetts). Eight states (Colorado, Maine, New Hampshire, New Jersey, Maryland, Minnesota, Oregon and Washington) have enacted laws that establish PDABs to identify drugs that pose affordability challenges, and four such states include authority for the state PDAB to set upper payment limits on certain drugs for in-state patients, payers and providers. In 2024, no fewer than 16 states introduced PDAB legislation. The eight states with enacted PDAB laws are in various phases of implementation, with Colorado's PDAB being the furthest along. In August 2023, the Colorado PDAB announced the first five drugs to undergo an affordability review, three of which, including ENBREL, have since been deemed "unaffordable" and will be subject to rulemaking to establish an Upper Payment Limit (UPL). For ENBREL, a UPL could be effective as soon as the second quarter of 2025. Further, Louisiana, Arkansas, West Virginia, Minnesota, Kansas, Mississippi, Missouri and Maryland have enacted laws with mandates on manufacturers participating in the 340B drug pricing program, and, thus far in 2024, no fewer than 25 states have considered similar legislation. These bills vary, but include provisions on 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. In March 2024, the U.S. Court of Appeals for the 8th Circuit ruled that Arkansas' Act 1103, which prohibits drugmakers from restricting the acquisition or delivery of 340B drugs to covered entities and their contract pharmacies, was not preempted by the federal 340B statute. The decision could increase the number of states that will consider similar legislation. Further, in *Genesis Health Care, Inc. v. Becerra*, the U.S. District Court for the District of South Carolina issued an order in November 2023 that enjoins the Health Resources and Services Administration from enforcing its more restrictive interpretation of what is considered a patient under the 340B program, to the potential benefit of healthcare systems seeking to expand the application of 340B discounts.

Additionally, on January 5, 2024, the FDA authorized Florida to move forward with its importation program proposal. Colorado, Maine, New Hampshire, New Mexico, Texas and Vermont have also enacted state importation laws, and some have submitted plans for approval to the FDA. 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. While the U.S. District Court for the District of Columbia struck down this policy in September 2023 and further clarified in December 2023 that its ruling had the effect of reinstating the co-pay accumulator adjustment policy from 2020, CMS and HHS have signaled that they do not intend to enforce certain restrictions from the 2020 policy that would reduce the adoption of 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 2024, 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, and in July 2024, the FTC published initial findings from its investigation. 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 inquiries 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, 2023, Part I, Item 1A. Risk Factors *—Concentration of sales at certain of our wholesaler distributors, and consolidation of private payers, such as insurers, and PBMs has negatively affected, and may continue to 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, 2023. Pressures to decrease drug expenditures may intensify as governments take actions to address budgets strained by high inflation, expenditures to respond to the COVID-19 pandemic and weak economic conditions, including in Europe where the effects of the Russia–Ukraine conflict have challenged the economies in that region. Further, the EU is currently undergoing a review and revision of its pharmaceutical legislation that, while full implementation is not expected before 2027, has led to proposals that would reduce intellectual property protection for new products (including potentially shortening the duration of regulatory data exclusivity and orphan drug exclusivity protections), as well as change the reimbursement and regulatory landscape. 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 caps on product sales, 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 EMA’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 hospitals 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.

A breakdown of our information technology systems, cyberattack or information security breach could significantly compromise the confidentiality, integrity and availability of our information technology systems, network-connected control systems and/or our data, interrupt the operation of our business and/or affect our reputation.

To achieve our business objectives, we rely on sophisticated information technology systems, including hardware, software, technology infrastructure, online sites and networks for both internal and external operations, mobile applications, cloud services and network-connected control systems, some of which are managed, hosted, provided or serviced by third parties. Internal or external events that compromise the confidentiality, integrity and availability of our systems and data may significantly interrupt the operation of our business, result in significant costs and/or adversely affect our reputation.

Our information technology systems are highly integrated into our business, including our R&D efforts, our clinical and commercial manufacturing processes and our product sales and distribution processes. Further, as the majority of our employees work remotely for some portion of their jobs in our hybrid work environment, our reliance on our and third-party information technology systems has increased substantially and is expected to continue to increase. Remote and hybrid working arrangements, including those of at many third-party providers, can increase cybersecurity risks due to the challenges associated with managing remote computing assets and security vulnerabilities that are present in many non-corporate and home networks. The complexity and interconnected nature of software, hardware and our systems make them vulnerable to breakdown or other service interruptions, and to software errors or defects, misconfiguration and other security vulnerabilities. For example, in July 2024, businesses worldwide were affected by an information technology outage due to a faulty software update issued by a cybersecurity firm. Although our systems and operations were temporarily affected by the outage, the impact of this firm’s faulty update on the Company was immaterial to our business operations. However, there can be no assurance that a future similar incident would not result in a material adverse effect on our business or results of operations. Upgrades or changes to our systems or the software that we use have resulted and we expect, in the future, will result in the introduction of new cybersecurity vulnerabilities and risks. In 2022, we identified a number of security vulnerabilities introduced into our information systems as a result of flaws that we subsequently identified in software that we had purchased and installed, and these flaws required that we apply emergency patches to certain of our systems. While we did not experience any significant adverse effects as a result of these vulnerabilities, there can be no assurance that we will timely identify and address future vulnerabilities. Our systems are also subject to frequent perimeter network reconnaissance and scanning, phishing and other cyberattacks. For example, as a result of our cybersecurity monitoring of the Horizon legacy information systems, we detected phishing activity in the accounts of two Horizon executives. These accounts were de-activated, the incidents were investigated and the determination was made separately by both our internal cybersecurity team and our external digital forensics and incident response supplier that no confidential information had been exfiltrated. As the cyber-threat landscape evolves, these attacks are growing in frequency, sophistication, and intensity, and are becoming increasingly difficult to detect and increasingly sophisticated in using techniques and tools—including artificial intelligence—that circumvent security controls, evade detection and remove forensic evidence. Such attacks could include the use of harmful and virulent malware, including ransomware or other denials of service, which can be deployed through various means, including the software supply chain, e-mail, malicious websites and/or the use of social engineering/phishing.

We have also experienced denial of service attacks against our network, and, although such attacks did not succeed, there can be no assurance that our efforts to guard against the wide and growing variety of potential attack techniques will be successful in the future. Attacks such as those experienced by government entities (including those that approve and/or regulate our products, such as the EMA) and other multi-national companies, including some of our peers, could leave us unable to utilize key business systems or access or protect important data, and could have a material adverse effect on our ability to operate our business, including developing, gaining regulatory approval for, manufacturing, selling and/or distributing our products. For example, in 2017, a pharmaceutical company experienced a cyberattack involving virulent malware that significantly disrupted its operations, including its research and sales operations and the production of some of its medicines and vaccines. As a result of the cyberattack, its orders and sales for certain products were negatively affected. In late 2020, SolarWinds Corporation, a leading provider of software for monitoring and managing information technology infrastructure, disclosed that it had suffered a cybersecurity incident whereby attackers had inserted malicious code into legitimate software updates for its products that were installed by myriad private and government customers, enabling the attackers to access a backdoor to such systems. In 2022, Okta, Inc., a provider of software that helps companies manage user authentication, disclosed that several hundred of its corporate customers were vulnerable to a security breach that allowed attackers to access Okta’s internal network. Although this breach did not have a significant effect on our business, there can be no assurance that a

similar future breach would not result in a material adverse effect on our business or results of operations.

Our systems also contain and use a high volume of sensitive data, including intellectual property, trade secrets and other proprietary business information, financial information, regulatory information, strategic plans, sales trends and forecasts, litigation materials and/or personal identifiable information belonging to us, our staff, our patients, customers and/or other parties. In some cases, we utilize third-party service providers to collect, process, store, manage or transmit such data, which have increased our risk. Intentional or inadvertent data privacy or security breaches (including cyberattacks) resulting from attacks or lapses by employees, service providers (including providers of information technology-specific services), business partners, nation states (including groups associated with or supported by foreign intelligence agencies), organized crime organizations, "hacktivists" or others, create risks that our sensitive data may be exposed to unauthorized persons, our competitors or the public. System vulnerabilities and/or cybersecurity breaches experienced by our third-party service providers have constituted a substantial share of the information security risks that have affected us. For example, in the first half of 2021, a supplier experienced a data breach in which an unauthorized third party acquired access to certain information provided to the supplier in the course of its provision of services to us, including business documents and certain personally identifiable patient information (not including social security or other financial or health insurance information). As required, we promptly notified the applicable state attorneys general and the individuals whose personally identifiable information was affected of this data breach at the supplier. In the third quarter of 2022, another service provider experienced a similar cybersecurity breach in which an attacker exfiltrated certain data (including non-significant Amgen data) from the service provider's systems. Additionally, in April 2024, one of our former vendors notified us that its subsidiary that had provided us with certain patient support services until mid-2022, experienced a cybersecurity incident that it discovered in February 2024 and that data containing individually identifiable health information of over 1.7 million Amgen patients (that was retained as required by FDA regulations) was involved in the incident. Pursuant to the Health Breach Notification Rule requirements, we notified the FTC of this incident. Although these supplier data breaches have not resulted in material adverse effects on our business, there can be no assurance that a similar future cybersecurity incident would not result in a material adverse effect on our business or results of operations. Further, the timeliness of our awareness of a cybersecurity incident affects our ability to respond to and work to mitigate the severity of such events. For example, in 2020 and 2022, two of our vendors experienced cyberattacks and each initially reported to us that neither event involved our data. However, upon further investigation, they each subsequently informed us that the attackers had accessed limited, non-significant Amgen information. Although neither of these breaches had a significant adverse effect on our business, in the future we may again not receive timely reporting of cybersecurity events and such events could have a material adverse effect on our business.

Cyberattackers are also increasingly exploiting vulnerabilities in commercially available software from shared or open-source code. We rely on third party commercial software that have had and may have such vulnerabilities, but as use of open-source code is frequently not disclosed, our ability to fully assess this risk to our systems is limited. For example, in December 2021, a remote code execution vulnerability was discovered in a software library that is widely used in a variety of commercially available software and services. Although this vulnerability has not resulted in any significant adverse effects on us, there can be no assurances that a similar future vulnerability in the software and services that we use would not result in a material adverse effect on our business or results of operations.

Domestic and global government regulators, our business partners, suppliers with whom we do business, companies that provide us or our partners with business services and companies we have acquired or may acquire face similar risks. Security breaches of their systems or service outages have adversely affected systems and could, in the future, affect our systems and security, leave us without access to important systems, products, raw materials, components, services or information, or expose our confidential data or sensitive personal information. For example, in 2019, two vendors that perform testing and analytical services that we use in developing and manufacturing our products experienced cyberattacks, and in April and September of 2020, vendors that provide us with information technology services and clinical data services, respectively, each experienced ransomware attacks. Although there was no breach of our systems, each of these incidents required us to disconnect our systems from those vendors' systems. While we were able to reconnect our systems following restoration of these vendors' capabilities without significantly affecting product availability, a more extended service outage affecting these or other vendors, particularly where such vendor is the single source from which we obtain the services, could have a material adverse effect on our business or results of operations. In February 2024, Change Healthcare, a large U.S. insurance claim and co-pay card processing clearinghouse, experienced a ransomware attack that has caused significant disruptions to healthcare provider and pharmacy operations. While Change Healthcare does not directly provide us with services, disruptions to co-pay card support, insurance billing and Medicaid rebate processing led to lost sales and required us to take action to help patients access their medications and to provide extended payment terms to certain customers. Although services have been rerouted and restored, and the impact on our business has been immaterial, similar disruptions may occur in the future stemming from the interconnectedness of the U.S. healthcare ecosystem and industry reliance on centralized claims processing systems and networks, and such future disruptions may have a material adverse effect on our business or results of operations. In addition, we distribute our products in the United States primarily through three pharmaceutical wholesalers, and a security breach that impairs the distribution operations of our wholesalers could significantly impair our ability to deliver our products to healthcare

providers and patients. There can be no assurance that our cybersecurity risk management program and processes, including our policies, controls, or procedures, will be fully implemented, complied with or effective in protecting our information technology systems and sensitive data.

Although we have experienced system breakdowns, attacks and information security breaches, we do not believe such breakdowns, attacks and breaches have had a material adverse effect on our business or results of operations. We will continue to experience varying degrees of cyberattacks and other incidents in the future. Even though we continue to invest in the monitoring, protection and resilience of our critical and/or sensitive data and systems, there can be no assurances that our efforts will detect, prevent or fully recover systems or data from all breakdowns, service interruptions, attacks and/or breaches of our systems that could adversely affect our business and operations and/or result in the loss or exposure of critical, proprietary, private, confidential or otherwise sensitive data, which could result in material financial, legal business or reputational harm to us or negatively affect our stock price. While we maintain cyber-liability insurance, our insurance is not sufficient to cover us against all losses that could potentially result from a service interruption, breach of our systems or loss of our critical or sensitive data.

We are also subject to various laws and regulations globally regarding cybersecurity, privacy and data protection, including laws and regulations relating to the collection, storage, handling, use, disclosure, transfer and security of personal data. The legislative and regulatory environment regarding privacy and data protection is continuously evolving and developing and the subject of significant attention globally. For example, we are subject to the EU's General Data Protection Regulation (GDPR), which became effective in May 2018, and the California Consumer Privacy Act (CCPA), which became effective in January 2020, both of which provide for substantial penalties for noncompliance. The CCPA was amended in late 2020, to create the California Privacy Rights Act to create opt in requirements for the use of sensitive personal data and the formation of a new dedicated agency for the enforcement of the law, the California Privacy Protection Agency. Similar consumer privacy laws went into effect in nine other states, have been enacted (but not yet in effect) in in 11 other states, and have been proposed in six additional states. Outside the United States, other jurisdictions where we operate have passed, or continue to propose, data privacy or cybersecurity legislation and/or regulations. For example, in China, the Personal Information Protection Law and the Data Security Law, which regulate data processing activities associated with personal and nonpersonal data, are in effect and build upon the existing Cybersecurity Law. Further, in March 2024, the European Parliament adopted the Artificial Intelligence Act that provides for EU-wide rules on data quality, transparency, human oversight and accountability with respect to the use of artificial intelligence. In April 2024, the EU also revised its Cybersecurity Directive NIS2 rules that create new cybersecurity risk management and reporting obligations. Failure to comply with these current and future laws could result in significant penalties and reputational harm and could have a material adverse effect on our business and results of operations.

Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.

Manufacturing biologic and small molecule human therapeutic products is difficult, complex and highly regulated. We manufacture many of our commercial products and product candidates internally. In addition, we use third-party contract manufacturers to produce, or assist in the production of, a number of our products, and we currently use contract manufacturers to produce, or assist in the production of, a number of our late-stage product candidates and drug delivery devices. The number of third-party contract manufacturers that we use has increased with our recent acquisition of Horizon, as Horizon required such contract manufacturers for all of its products. See our Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1. Business—Manufacturing, Distribution and Raw Materials—Manufacturing; and Part I, Item 1A, Risk Factors— *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*. Our ability to adequately and timely manufacture and supply our products (and product candidates to support our clinical trials) is dependent on the uninterrupted and efficient operation of our facilities and those of our third-party contract manufacturers, which may be affected by:

- capacity of manufacturing facilities;
- contamination by microorganisms or viruses, or foreign particles from the manufacturing process;
- natural or other disasters, including hurricanes, earthquakes, volcanoes or fires;
- labor disputes or shortages, including the effects of health emergencies (such as novel viruses or pandemics) or natural disasters;
- compliance with regulatory requirements;
- changes in forecasts of future demand;
- timing and actual number of production runs and production success rates and yields;

- updates of manufacturing specifications;
- contractual disputes with our suppliers and contract manufacturers;
- timing and outcome of product quality testing;
- power failures and/or other utility failures;
- cyberattacks on supplier systems;
- breakdown, failure, substandard performance or improper installation or operation of equipment (including our information technology systems and network-connected control systems or those of our contract manufacturers or third-party service providers);
- delays in the ability of the FDA or foreign regulatory agencies to provide us necessary reviews, inspections and approvals, including as a result of a subsequent extended U.S. federal or other government shutdowns; and/or
- geopolitical conflicts (such as the ongoing conflicts in Ukraine and the Middle East).

If any of these or other problems affect production in one or more of our facilities or those of our third-party contract manufacturers, or if we do not accurately forecast demand for our products or the amount of our product candidates required in clinical trials, we may be unable to start or increase production in our unaffected facilities to meet demand. If the efficient manufacture and supply of our products or product candidates is interrupted, we may experience delayed shipments, delays in our clinical trials, supply constraints, stock-outs, adverse event trends, contract disputes and/or recalls of our products. From time to time, we have initiated recalls of certain lots of our products. For example, in July 2014 we initiated a voluntary recall of an Aranesp lot distributed in the EU after particles were detected in a quality control sample following distribution of that lot, and in April 2018 we initiated a precautionary recall of two batches of Vectibix distributed in Switzerland after potential crimping defects were discovered in the metal seals on some product vials. If we are at any time unable to provide an uninterrupted supply of our products to patients, we may lose patients and physicians may elect to prescribe competing therapeutics instead of our products, which could have a material adverse effect on our product sales, business and results of operations.

Our manufacturing processes, those of our third-party contract manufacturers and those of certain of our third-party service providers must undergo regulatory approval processes and are subject to continued review by the FDA and other regulatory authorities. It can take longer than five years to build, validate and license another manufacturing plant, and it can take longer than three years to qualify and license a new contract manufacturer or service provider. If we elect or are required to make changes to our manufacturing processes because of new regulatory requirements, new interpretations of existing requirements or other reasons, this could increase our manufacturing costs and result in delayed shipments, delays in our clinical trials, supply constraints, stock-outs, adverse event trends or contract negotiations or disputes. Such manufacturing challenges may also occur if our existing contract manufacturers are unable or unwilling to timely implement such changes, or at all.

In addition, regulatory agencies conduct routine monitoring and inspections of our manufacturing facilities and processes as well as those of our third-party contract manufacturers and service providers. If regulatory authorities determine that we or our third-party contract manufacturers or certain of our third-party service providers have violated regulations, they may mandate corrective actions and/or issue warning letters, or even restrict, suspend or revoke our prior approvals, prohibiting us from manufacturing our products or conducting clinical trials or selling our marketed products until we or the affected third-party contract manufacturers or third-party service providers comply, or indefinitely. See our Annual Report on Form 10-K for the year ended December 31, 2023, Part I, Item 1A. Risk Factors—*Our current products and products in development cannot be sold without regulatory approval.* Such issues may also delay the approval of product candidates we have submitted for regulatory review, even if such product candidates are not directly related to the products, devices or processes at issue with regulators. Because our third-party contract manufacturers and certain of our third-party service providers are subject to the FDA and foreign regulatory authorities, alternative qualified third-party contract manufacturers and third-party service providers may not be available on a timely basis, or at all. If we or our third-party contract manufacturers or third-party service providers cease or interrupt production or if our third-party contract manufacturers and third-party service providers fail to supply materials, products or services to us, we may experience delayed shipments, delays in our clinical trials, supply constraints, contract disputes, stock-outs and/or recalls of our products. Additionally, we distribute a substantial volume of our commercial products through our primary distribution centers in Louisville, Kentucky for the United States and in Breda, Netherlands for Europe and much of the rest of the world. We also conduct most of the labeling and packaging of our products distributed in Europe and much of the rest of the world in Breda. Our ability to timely supply products is dependent on the uninterrupted and efficient operations of our distribution and logistics centers, our third-party logistics providers and our labeling and packaging facility in Breda. Further, we rely on commercial transportation, including air and sea freight, for the

distribution of our products to our customers, which has been negatively affected by the COVID-19 pandemic, labor unrest, natural disasters and geopolitical security threats.

Changes in laws or regulations with respect to the use and/or presence of certain chemicals in our products or the components used in the research, development, manufacture and/or packaging of our products could also disrupt or restrict our ability to develop, produce or sell our products in the affected jurisdictions. For example, the EU, the U.S. Congress, the U.S. Environmental Protection Agency, and several U.S. states are considering legislation and/or policies to address the presence, and/or use, of certain chemicals in certain of the components used in the manufacture or packaging of commercial products, including chemicals known as per- and polyfluorinated substances (PFAS). Proposed legislation in several jurisdictions is under consideration to prohibit or otherwise regulate the importation, manufacture, or distribution of goods containing PFAS, and some such proposals do not provide exemptions for drug products, medical devices, their packaging, or the materials used in the research, development, or manufacture of such products or devices. For example, the EU is considering a ban on PFAS in the manufacturing and packaging of pharmaceutical products that could affect pharmaceutical research and development activities and distribution. Some proposals, if enacted without exemptions for pharmaceutical products, and materials used in their research, development, and manufacture, may cause significant disruptions to our ability to manufacture and supply products to the affected jurisdictions, potentially resulting in a material adverse effect on our business. Additionally, certain jurisdictions and regulatory agencies, including the FDA and EMA, require testing for the presence of nitrosamine impurities in small molecule drugs that are at risk of containing microcrystalline cellulose as an excipient. We are following the regulatorily defined process of evaluating and testing of potentially impacted small molecule products. Testing of our cinacalcet product has indicated the presence of nitrosamines in certain lots above established limits. As a result of such testing, we have worked closely with regulatory agencies to determine the appropriate action in each impacted country. In certain countries we have stopped short term distribution of cinacalcet and filed shortage notifications, and, additionally, we have initiated recalls in certain Middle Eastern countries.

There have also been legislative and administrative proposals seeking to incentivize greater drug manufacturing in the United States with the stated goal of improving supply reliability in the United States. For example, on August 6, 2020, the previous Administration issued an Executive Order aimed at boosting domestic production of essential medicines, medical countermeasures, and critical inputs titled “Executive Order on Ensuring Essential Medicines, Medical Countermeasures, and Critical Inputs are Made in the United States.” Additionally, one legislative proposal would have prohibited the U.S. Department of Veterans Affairs from purchasing certain drugs that have active pharmaceutical ingredients manufactured outside the United States. While we perform a substantial majority of our commercial manufacturing activities in the United States, including in the U.S. territory of Puerto Rico, and a substantial majority of our clinical manufacturing activities at our facility in Thousand Oaks, California, the passage of such legislation could result in foreign governments enacting retaliatory legislation or regulatory actions, which may have an adverse effect on our product sales, business and results of operations.

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

During the three months ended June 30, 2024, we had one outstanding stock repurchase program, under which we had no repurchase activity.

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
April 1–30	—		—	$ 6,979,263,848
May 1–31	(1)	(1)	—	$ 6,979,263,848
June 1–30	—		—	$ 6,979,263,848
Total	—		—	

(1) In May 2024, the Company purchased 312 shares at an average price paid of $307.31 per share from a staff member to satisfy federal law compliance obligations. These shares were not repurchased under our stock repurchase program.

Item 5. OTHER INFORMATION

Trading Arrangements

During the three months ended June 30, 2024, none of our directors or officers (as defined in Rule 16a-1(f) of the Exchange Act) adopted or terminated any "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408 of Regulation S-K.

Item 6. EXHIBITS

Reference is made to the Index to Exhibits included herein.

INDEX TO EXHIBITS

Exhibit No.	Description
2.1	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.)
2.2	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.)
2.3	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.)
2.4	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.)
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 2.600% 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.)
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	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.)
4.33	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, 2023 on February 14, 2024 and incorporated herein by reference.)
10.1+	Amgen Inc. Second Amended and Restated 2009 Equity Incentive Plan. (Filed as Appendix C to the Definitive Proxy Statement on Schedule 14A on April 17, 2024 and incorporated herein by reference.)
10.2+*	Form of Grant of Stock Option Agreement for the Amgen Inc. Second Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on May 31, 2024.)
10.3+*	Form of Restricted Stock Unit Agreement for the Amgen Inc. Second Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on May 31, 2024.)
10.4+*	Amgen Inc. 2009 Performance Award Program. (As Amended and Restated on May 31, 2024.)
10.5+*	Form of Performance Unit Agreement for the Amgen Inc. 2009 Performance Award Program. (As Amended and Restated on May 31, 2024.)
10.6+*	Amgen Inc. 2009 Director Equity Incentive Program. (As Amended and Restated on May 31, 2024.)
10.7+*	Form of Restricted Stock Unit Agreement for the Amgen Inc. 2009 Director Equity Incentive Program. (As Amended and Restated on May 31, 2024.)
10.8+*	Form of Cash-Settled Restricted Stock Unit Agreement for the Amgen Inc. 2009 Director Equity Incentive Program. (As Amended and Restated on May 31, 2024.)
10.9+	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.)
10.9.1+	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.)
10.9.2+	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.)
10.9.3+	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.)
10.9.4+	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.)
10.9.5+	Fifth Amendment to the Amgen Inc. Supplemental Retirement Plan, effective January 1, 2024. (Filed as an exhibit to Form 10-K for the year ended December 31, 2023 on February 14, 2024 and incorporated herein by reference.)

10.10+	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.)
10.11+	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.)
10.12+	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.)
10.12.1+	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.)
10.12.2+	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.)
10.12.3+	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.)
10.12.4+	Fourth Amendment to the Amgen Nonqualified Deferred Compensation Plan, effective January 1, 2024. (Filed as an exhibit to Form 10-K for the year ended December 31, 2023 on February 14, 2024 and incorporated herein by reference.)
10.13+	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.)
10.14+	Agreement between Amgen Inc. and James Bradner, dated December 13, 2023. (Filed as an exhibit to Form 10-K for the year ended December 31, 2023 on February 14, 2024 and incorporated herein by reference.)
10.15	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.)
10.16	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.)
10.17	Collaboration and License Agreement between Amgen Inc. and Celltech R&D Limited dated May 10, 2002 (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.) 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 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, 2023 on February 14, 2024 and incorporated herein by reference.)
10.17.1	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 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, 2023 on February 14, 2024 and incorporated herein by reference.)
10.18	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.)

10.19	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.)
10.19.1	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.)
10.19.2	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.)
10.20	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.)
10.21	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.)
10.21.1	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.)
10.21.2	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.)
10.21.3	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.)
10.22	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.)
10.22.1	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.)
10.22.2	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.)
10.22.3	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.)
10.22.4	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.)

10.22.5	Letter Agreement Regarding the Collaboration Agreement, dated as of December 1, 2023, 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, 2023 on February 14, 2024 and incorporated herein by reference.)
10.23	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) 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, 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 6, 2024

By: /s/ PETER H. GRIFFITH
Peter H. Griffith
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)