UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

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**

Securities registered pursuant to Section 12(g) of the Act: **None**

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or Section 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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

The approximate aggregate market value of voting and non-voting stock held by non-affiliates of the registrant was $137,531,019,585 as of June 30, 2021.(A)

(A) Excludes 811,415 shares of common stock held by directors and executive officers, and any stockholders whose ownership exceeds ten percent of the shares outstanding, at June 30, 2021. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, directly or indirectly, to direct or cause the direction of the management or policies of the registrant, or that such person is controlled by or under common control with the registrant.

557,029,370

(Number of shares of common stock outstanding as of February 11, 2022)

DOCUMENTS INCORPORATED BY REFERENCE

Specified portions of the registrant's Proxy Statement with respect to the 2022 Annual Meeting of Stockholders to be held May 17, 2022, are incorporated by reference into Part III of this annual report.

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Defined Terms and Products

Defined terms

We use several terms in this Form 10-K—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
2017 Tax Act	Tax Cuts and Jobs Act of 2017
AbbVie	AbbVie Inc.
ACA	Affordable Care Act
aHUS	atypical hemolytic uremic syndrome
ALL	acute lymphoblastic leukemia
AMD	age-related macular degeneration
Amended 2009 Plan	Amended and Restated 2009 Equity Incentive Plan
ANDA	Abbreviated New Drug Application
AOCI	accumulated other comprehensive income (loss)
AstraZeneca	AstraZeneca plc
BAFF	B-cell activating factor
BeiGene	BeiGene, Ltd.
BiTE®	bispecific T-cell engager
BLA	Biologics License Application
BMS	Bristol Myers Squibb Company
BPCIA	Biologics Price Competition and Innovation Act of 2009
Celgene	Celgene Corporation
CGRP	calcitonin gene-related peptide
chemotherapy	anticancer medicines
CHMP	Committee for Medicinal Products for Human Use
CIT	chemotherapy-induced thrombocytopenia
CKD	chronic kidney disease
CMS	Centers for Medicare & Medicaid Services
COSO	Committee of Sponsoring Organizations of the Treadway Commission
COVID-19	coronavirus disease 2019
CV	cardiovascular
DaVita	DaVita Inc.
DLL3	delta-like ligand 3
DOJ	U.S. Department of Justice
DoR	duration of response
EC	European Commission
EMA	European Medicines Agency
EPS	earnings per share
ERG	employee resource group
ESA	erythropoiesis-stimulating agent
ESG	environmental, social and governance
ESRD	end-stage renal disease
EU	European Union
FASB	Financial Accounting Standards Board
FCPA	U.S. Foreign Corrupt Practices Act
FDA	U.S. Food and Drug Administration
FDCA	Federal Food, Drug, and Cosmetic Act
FGFR2b	fibroblast growth factor receptor 2b
Fitch	Fitch Ratings, Inc.

Term	Description
Five Prime	Five Prime Therapeutics, Inc.
FOMBPR	Financial Oversight and Management Board for Puerto Rico
FTC	Federal Trade Commission
GAAP	U.S. generally accepted accounting principles
GDPR	General Data Protection Regulation
GEJ	gastroesophageal junction
HeFH	heterozygous familial hypercholesterolemia
HER2	human epidermal growth factor receptor 2
HGRAC	Human Genetic Resources Administration of China
HHS	U.S. Department of Health & Human Services
HLE	half-life extended
HoFH	homozygous familial hypercholesterolemia
ICOSL	inducible costimulatory ligand
IL	interleukin
IND	Investigational New Drug Application
IPR&D	in-process research and development
IRP	international reference pricing
IRS	Internal Revenue Service
ITP	immune thrombocytopenia
J&J	Johnson & Johnson
Janssen	Janssen Biotech, Inc.
K-A	Kirin-Amgen, Inc.
Kirin	Kirin Holdings Company, Limited
KKC	Kyowa Kirin Co., Ltd.
LDL-C	low-density lipoprotein cholesterol
LIBOR	London Interbank Offered Rate
Lilly	Eli Lilly and Company
mCRPC	metastatic castrate-resistant prostate cancer
MD&A	management’s discussion and analysis
MFN	most favored nation
Moody’s	Moody’s Investors Service, Inc.
MRD	minimal residual disease
Neumora	Neumora Therapeutics, Inc.
NOL	net operating loss
Novartis	Novartis Pharma AG
NSCLC	non-small cell lung cancer
Nuevolution	Nuevolution AB
OECD	Organization for Economic Co-operation and Development
OIG	Office of Inspector General
ORR	objective response rate
PBM	pharmacy benefit manager
PCSK9	proprotein convertase subtilisin/kexin type 9
PDE4	phosphodiesterase 4
PDUFA	Prescription Drug User Fee Act
PFS	progression-free survival
PNH	paroxysmal nocturnal hemoglobinuria
Profit Sharing Plan	Amgen Profit Sharing Plan for Employees in Ireland
PROMESA	Puerto Rico Oversight, Management, and Economic Stability Act

Term	Description
PTAB	Patent Trial and Appeal Board
R&D	research and development
RANKL	receptor activator of nuclear factor kappa-B ligand
RAR	Revenue Agent Report
REMS	risk evaluation and mitigation strategy
ROU	right-of-use
ROW	rest of world
RSUs	restricted stock units
S&P	Standard & Poor’s Financial Services LLC
SEC	U.S. Securities and Exchange Commission
SG&A	selling, general and administrative
siRNA	small interfering RNA
sNDA	supplemental New Drug Application
SoC	standard of care
SOFR	Secured Overnight Financing Rate
SRE	skeletal-related event
Takeda	Takeda Pharmaceutical Company Limited
TDAPA	transitional drug add-on payment adjustment
Teneobio	Teneobio, Inc.
TNF	tumor necrosis factor
TPO-RA	thrombopoietin receptor agonist
U.S. Treasury	U.S. Department of Treasury
UCLA	University of California, Los Angeles
USPTO	U.S. Patent and Trademark Office
UTB	unrecognized tax benefit
VEGFR	vascular endothelial growth factor receptor

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
Acapatamab	Acapatamab (formerly AMG 160)
Aimovig	Aimovig® (erenumab-aooe)
AMGEVITA	AMGEVITA™ (adalimumab)
AMJEVITA	AMJEVITA™ (adalimumab-atto)
Aranesp	Aranesp® (darbepoetin alfa)
AutoTouch	AutoTouch®
AVSOLA	AVSOLA® (infliximab-axxq)
BLINCYTO	BLINCYTO® (blinatumomab)
Efavaleukin alfa	Efavaleukin alfa (formerly AMG 592)
ENBREL	Enbrel® (etanercept)
ENBREL Mini	ENBREL Mini®
EPOGEN	EPOGEN® (epoetin alfa)
EVENITY	EVENITY® (romosozumab-aqqg)
IMLYGIC	IMLYGIC® (talimogene laherparepvec)
KANJINTI	KANJINTI® (trastuzumab-anns)
KYPROLIS	KYPROLIS® (carfilzomib)
LUMAKRAS/LUMYKRAS	LUMAKRAS® / LUMYKRAS™ (sotorasib)
MVASI	MVASI® (bevacizumab-awwb)
Neulasta	Neulasta® (pegfilgrastim)
NEUPOGEN	NEUPOGEN® (filgrastim)
Nplate	Nplate® (romiplostim)
Olpasiran	Olpasiran (formerly AMG 890)
Onpro	Onpro®
Ordesekimab	Ordesekimab (formerly AMG 714)
Otezla	Otezla® (apremilast)
Parsabiv	Parsabiv® (etelcalcetide)
Pavurutamab	Pavurutamab (formerly AMG 701)
Prolia	Prolia® (denosumab)
Repatha	Repatha® (evolocumab)
RIABNI	RIABNI™ (rituximab-arrx)
Rozibafusp alfa	Rozibafusp alfa (formerly AMG 570)
Sensipar/Mimpara	Sensipar®/Mimpara™ (cinacalcet)
SureClick	SureClick®
Tarlatamab	Tarlatamab (formerly AMG 757)
TEZSPIRE	TEZSPIRE™ (tezepelumab-ekko)
Vectibix	Vectibix® (panitumumab)
XGEVA	XGEVA® (denosumab)

Products referenced in this report that are not included in the above list are trademarks of their respective owners. They are Avastin®, Cosentyx®, DARZALEX®, DARZALEX FASPRO®, EYLEA®, Fulphila®, Herceptin®, HUMIRA®, POMALYST®/IMNOVID®, PRALUENT®, PROCRIT®, PROMACTA®/REVOLADE™, Remicade®, REVLIMID®, RINVOQ®, Rituxan®/MabThera®, Skyrizi®, SOLIRIS®, STELARA®, Taltz®, Tremfya®, UDENYCA®, VELCADE® and Xeljanz®.

PART I

Item 1. BUSINESS

Amgen Inc. (including its subsidiaries, referred to as "Amgen," "the Company," "we," "our" or "us") is a biotechnology company committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Amgen was incorporated in California in 1980 and became a Delaware corporation in 1987. We have a presence in approximately 100 countries worldwide. Amgen operates in one business segment: human therapeutics.

Significant Developments

Following is a summary of significant developments affecting our business that have occurred and that we have reported since the filing of our Annual Report on Form 10-K for the year ended December 31, 2020.

Business Development

Five Prime Therapeutics acquisition

- On April 16, 2021, Amgen completed its acquisition of Five Prime, a public clinical-stage biotechnology company focused on developing immuno-oncology and targeted cancer therapies, for approximately $1.6 billion in cash, net of cash acquired.
- In April 2021, the FDA granted Breakthrough Therapy designation for bemarituzumab as first-line treatment for patients with FGFR2b overexpressing and HER2-negative metastatic and locally advanced gastric and gastroesophageal adenocarcinoma in combination with fluoropyrimidine, leucovorin and oxaliplatin based on an FDA-approved companion diagnostic assay showing at least 10% of tumor cells overexpressing FGFR2b.

KKC collaboration

- We and KKC entered into an agreement, effective July 30, 2021, to jointly develop and commercialize KKC's potential first-in-class, phase 3-ready anti-OX40 fully human monoclonal antibody in development for the treatment of atopic dermatitis, with potential in other autoimmune diseases.

Teneobio acquisition

- On October 19, 2021, Amgen completed its acquisition of Teneobio, a privately held, clinical-stage biotechnology company developing a new class of biologics called human heavy-chain antibodies, which are single-chain antibodies composed of the human heavy-chain domain, for $900 million as well as future contingent milestone payments potentially worth up to an additional $1.6 billion upon the achievement of certain developmental and regulatory events.

Products/Pipeline

Inflammation

Otezla

- In December 2021, we announced that the FDA had approved the expanded indication for Otezla for the treatment of adult patients with plaque psoriasis, who are candidates for phototherapy or systemic therapy, across all severities.

TEZSPIRE

- In December 2021, we and AstraZeneca announced that the FDA had approved TEZSPIRE for the add-on maintenance treatment of adult and pediatric patients aged 12 years and older with severe asthma.

Oncology/Hematology

LUMAKRAS/LUMYKRAS

- In May 2021, we announced that the FDA had approved LUMAKRAS for the treatment of adult patients with KRAS *G12C*–mutated locally advanced or metastatic NSCLC, as determined by an FDA-approved test, who have received at least one prior systemic therapy. LUMAKRAS received accelerated approval based on ORR and DoR. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial or trials.

- In January 2022, we announced that the EC had granted conditional marketing authorization for LUMYKRAS for the treatment of adults with advanced NSCLC with KRAS G12C mutation and who have progressed after at least one prior line of systemic therapy. We also announced that LUMAKRAS had been approved in Japan for the treatment of KRAS G12C-mutated positive, unresectable, advanced and/or recurrent NSCLC that has progressed after systemic anticancer therapy.

KYPROLIS

- In December 2021, we announced that the FDA had approved the expansion of the KYPROLIS prescribing information to include its use in combination with DARZALEX FASPRO (daratumumab and hyaluronidase-fihj) and dexamethasone for the treatment of adult patients with relapsed or refractory multiple myeloma who have received one to three lines of therapy.

Operations

New manufacturing facilities

We announced plans to expand our United States–based manufacturing footprint.

- In August 2021, we announced plans to build a drug substance plant in North Carolina that will increase our manufacturing network capacity to reliably supply more medicines for patients.

- In November 2021, we broke ground to build an advanced assembly and packaging plant in Ohio. The new facility will assemble and package vials and syringes to support the growing demand for our medicines.

We expect that both of these facilities will be built faster and at lower cost than traditional plants. Once completed, both will also utilize cutting-edge technologies to be more efficient and environmentally friendly than traditional plants.

COVID-19 pandemic

A novel strain of coronavirus (SARS-CoV-2, or severe acute respiratory syndrome coronavirus 2, causing COVID-19) was declared a global pandemic by the World Health Organization on March 11, 2020. Since the onset of the pandemic in 2020, we have been closely monitoring the pandemic's effects on our global operations. To date, we have not experienced disruptions to or shortages of our supply of medicines. We continue to take appropriate steps to minimize risks to our employees. Employee access to company facilities has been in accordance with applicable government health and safety protocols and guidance issued in response to the COVID-19 pandemic. The pandemic has shifted how we work as an organization and in the fourth quarter of 2021, we enabled our U.S. based workforce to return to the workplace for work that benefits from face-to-face interaction, while maintaining appropriate safety measures to ensure staff well-being. For further discussion, see Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Overview, Selected Financial Information and Results of Operations. For a discussion of the risks presented by the COVID-19 pandemic to our results, see Risk Factors in Item 1A.

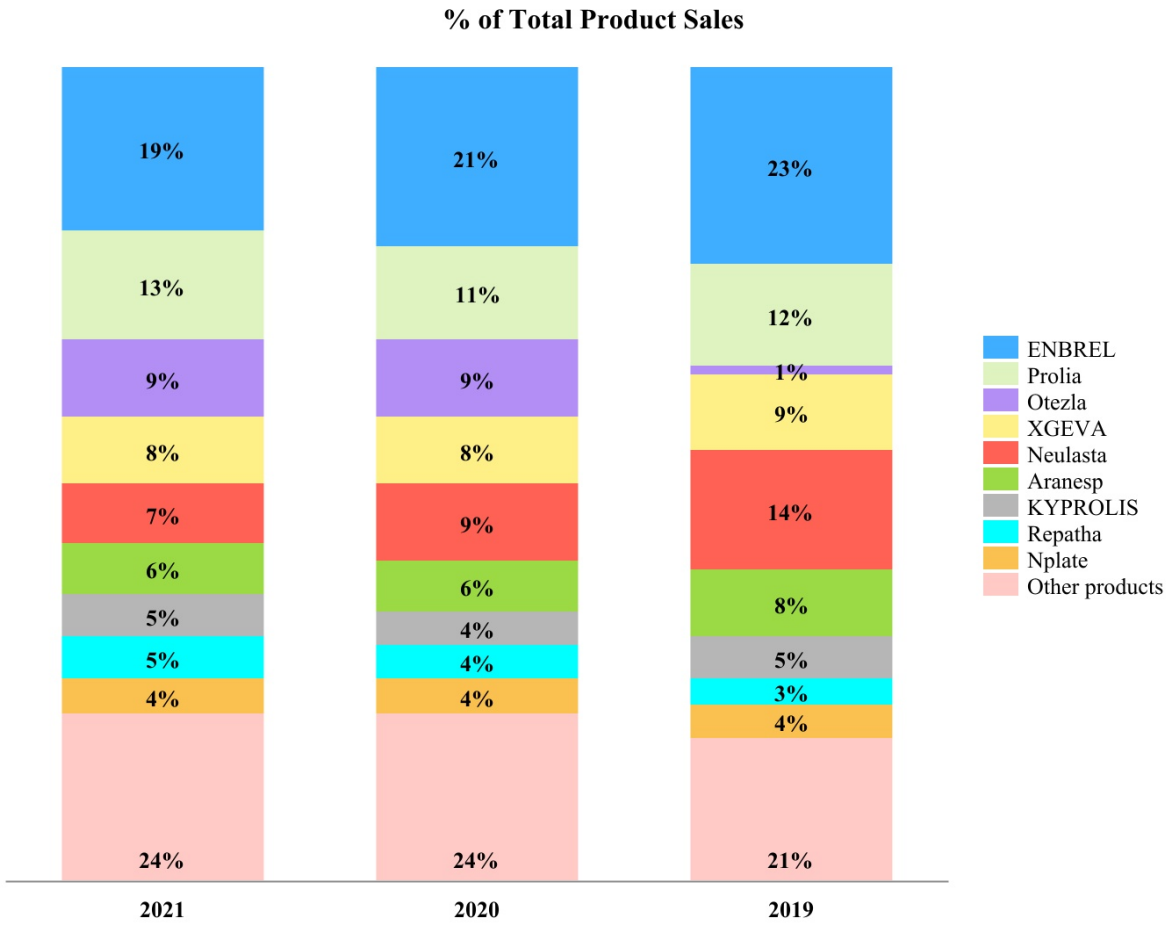
Marketing, Distribution and Selected Marketed Products

The largest concentration of our sales and marketing forces is based in the United States and Europe. In recent years, we have expanded the commercialization and marketing of our products into other geographic territories, including China and Japan and other parts of Asia, the Middle East and Latin America. This expansion has occurred, and is expected to continue to occur, by establishing our own affiliates, by acquiring existing third-party businesses or product rights or by collaborating with third parties. See Business Relationships for our significant alliances. Whether we use our own sales and marketing forces or a third party's services varies across these markets. Such use typically depends on several factors, including the nature of entry into the new market, the size of an opportunity and operational capabilities. Together with our collaborators, we market our products to healthcare providers, including physicians or their clinics, dialysis centers, hospitals and pharmacies.

In the United States, substantially all of our sales are to pharmaceutical wholesale distributors, which are the principal means of distributing our products to healthcare providers. We also market certain products through direct-to-consumer channels, including print, television and online media. For further discussion, see Government Regulation—Regulation in the United States—Regulation of Product Marketing and Promotion. Outside the United States, we sell principally to healthcare providers and/or pharmaceutical wholesale distributors depending on the distribution practice in each country. In the Asia Pacific region, we also sell our products in partnership with other companies, including BeiGene, Daiichi Sankyo, KKC and Takeda.

Our product sales to three large wholesalers, McKesson Corporation, AmerisourceBergen Corporation and Cardinal Health, Inc., each individually accounted for more than 10% of total revenues for each of the years 2021, 2020 and 2019. On a combined basis, these wholesalers accounted for 82%, 83% and 81% of worldwide gross revenues for 2021, 2020 and 2019, respectively. We monitor the financial condition of our larger customers and limit our credit exposure by setting credit limits and, in certain circumstances, by requiring letters of credit or obtaining credit insurance.

Our products are marketed around the world, with the United States as our largest market. The following chart shows our product sales by principal product, and the table below (dollar amounts in millions) shows product sales by geography for the years 2021, 2020 and 2019.



	2021		2020		2019	
Product Sales by Geography:						
U.S.	$ 17,286	71 %	$ 17,985	74 %	$ 16,531	74 %
ROW	7,011	29 %	6,255	26 %	5,673	26 %
Total	$ 24,297	100 %	$ 24,240	100 %	$ 22,204	100 %

ENBREL

We market ENBREL, a tumor necrosis factor blocker, in the United States and Canada. ENBREL was launched in 1998 and is used primarily in indications for the treatment of adult patients with moderately to severely active rheumatoid arthritis, patients with chronic moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy and patients with active psoriatic arthritis.

Prolia

We market Prolia in many countries around the world. Prolia contains the same active ingredient as XGEVA but is approved for different indications, patient populations, doses and frequencies of administration. Prolia was launched in the United States and Europe in 2010. In the United States, it is used primarily in the indication for the treatment of postmenopausal women with osteoporosis at high risk of fracture, defined as a history of osteoporotic fracture, or multiple risk factors for fracture; or in patients who have failed or are intolerant to other available osteoporosis therapy. In Europe, Prolia is used primarily for the treatment of osteoporosis in postmenopausal women at increased risk of fracture.

Otezla

We market Otezla, a small molecule that inhibits PDE4, in many countries around the world. Otezla was acquired from BMS in November 2019 after their acquisition of Celgene. Otezla is an oral therapy approved for the treatment of adult patients with plaque psoriasis across all severities for whom phototherapy or systemic therapy is appropriate, patients with active psoriatic arthritis and patients with oral ulcers associated with Behçet's disease. In Europe, Otezla is approved for second-line use in the treatment of psoriatic arthritis and psoriasis and for patients with oral ulcers associated with Behçet's disease who are candidates for systemic therapy.

XGEVA

We market XGEVA in many countries around the world. XGEVA was launched in 2010 and is used primarily in the indication for prevention of SREs (pathological fracture, radiation to bone, spinal cord compression or surgery to bone) in patients with bone metastases from solid tumors and multiple myeloma.

Neulasta

We market Neulasta, a pegylated protein based on the filgrastim molecule, primarily in the United States and Europe. Neulasta was launched in 2002 and is used primarily in the indication to help reduce the chance of infection due to a low white blood cell count in patients with certain types of cancer (nonmyeloid) who receive anticancer medicines (chemotherapy) that can cause fever and a low blood cell count. In 2015, the Neulasta Onpro kit became available in the United States. The Neulasta Onpro kit provides physicians the opportunity to initiate administration of Neulasta on the same day as chemotherapy, with drug delivery of the recommended dose of Neulasta at home the day after chemotherapy, thereby saving the patient a trip back to the doctor.

Aranesp

We market Aranesp primarily in the United States and Europe. It was launched in 2001 and is indicated to treat a lower-than-normal number of red blood cells (anemia) caused by CKD in both patients on dialysis and patients not on dialysis. Aranesp is also indicated for the treatment of anemia due to concomitant myelosuppressive chemotherapy in certain patients with nonmyeloid malignancies and when chemotherapy will be used for at least two months after starting Aranesp.

Repatha

We market Repatha, a PCSK9 inhibitor, in many countries around the world. Repatha was launched in 2015 and is indicated to reduce the risks of myocardial infarction, stroke and coronary revascularization in adults with established CV disease. Repatha is also indicated to reduce LDL-C in adults with primary hyperlipidemia, including HeFH; in pediatric patients aged 10 years and older with HeFH; and in adults and pediatric patients aged 10 years and older with HoFH.

KYPROLIS

We market KYPROLIS primarily in the United States and Europe. KYPROLIS was launched in 2012 and is indicated in combination with (i) dexamethasone, (ii) lenalidomide plus dexamethasone and (iii) DARZALEX plus dexamethasone for the treatment of patients with relapsed or refractory multiple myeloma who have received one to three prior lines of therapy. It is also approved as a single agent for patients with relapsed or refractory multiple myeloma who have received one or more previous therapies.

Nplate

We market Nplate in many countries around the world. Nplate was launched in 2008 and is indicated to treat thrombocytopenia in patients with chronic ITP who have had an insufficient response to corticosteroids, immunoglobulins or splenectomy.

Other Marketed Products

We also market a number of other products in various markets worldwide, including MVASI, Vectibix, KANJINTI, EVENITY, EPOGEN, BLINCYTO, AMGEVITA, Aimovig, Parsabiv, NEUPOGEN, LUMAKRAS/LUMYKRAS, Sensipar/Mimpara, AVSOLA, RIABNI and TEZSPIRE.

Patents

The following table lists our outstanding material patents for the indicated product by territory, general subject matter and latest expiry date. Certain of the European patents are subjects of supplemental protection certificates that provide additional protection for the products in certain European countries beyond the dates listed in the table. See footnotes to the patent table below.

One or more patents with the same or earlier expiry dates may fall under the same general subject matter and are not listed separately.

Product	Territory	General subject matter	Expiration
Enbrel® (etanercept)	U.S.	Methods of treatment using aqueous formulations	6/8/2023
	U.S.	Formulations	10/19/2037
	U.S.	Fusion protein and pharmaceutical compositions	11/22/2028
	U.S.	DNA encoding fusion protein and methods of making fusion protein	4/24/2029
Prolia®/XGEVA® (denosumab)	U.S.	Methods of treatment	6/25/2022
	U.S.	Nucleic acids encoding RANKL antibodies and methods of producing RANKL antibodies	11/30/2023
	U.S.	RANKL antibodies, including sequences	2/19/2025
	Europe	RANKL antibodies, including sequences[1]	6/25/2022
Otezla® (apremilast)	U.S.	Compositions and compounds	2/16/2028
	U.S.	Crystalline form	12/9/2023
	U.S.	Methods of treatment[2]	5/29/2034
	Europe	Compositions, compounds and methods of treatment[1]	3/20/2023
Aranesp® (darbepoetin alfa)	U.S.	Glycosylation analogs of erythropoietin proteins	5/15/2024
KYPROLIS® (carfilzomib)	U.S.	Compositions and compounds	12/7/2027
	U.S.	Methods of treatment	4/14/2025
	U.S.	Methods of making	5/8/2033
	Europe	Compositions, compounds and methods of treatment[1]	12/7/2025
Repatha® (evolocumab)	U.S.	Antibodies[3]	10/25/2029
	U.S.	Methods of treatment	10/8/2030
	Europe	Compositions[1]	8/22/2028
	Europe	Methods of treatment	5/10/2032
	Europe	Formulation	5/3/2033
Nplate® (romiplostim)	U.S.	Formulation	2/12/2028
	Europe	Thrombopoietic compounds[1]	10/22/2019
	Europe	Formulation	4/20/2027
Vectibix® (panitumumab)	Europe	Human monoclonal antibodies to epidermal growth factor receptor[1]	5/5/2018
EVENITY® (romosozumab-aqqg)	U.S.	Antibodies[3]	4/25/2026
	U.S.	Methods of treatment[3]	1/11/2029
	U.S.	Formulation and methods of using formulation	5/11/2031
	Europe	Antibodies[1]	4/28/2026
	Europe	Methods of treatment	4/18/2032
	Europe	Formulation and methods of using formulation	5/11/2031
BLINCYTO® (blinatumomab)	U.S.	Pharmaceutical compositions and bifunctional polypeptides	4/6/2030
	U.S.	Method of administration	9/28/2027
	Europe	Bifunctional polypeptides[1]	11/26/2024
	Europe	Method of administration	11/6/2029

Product	Territory	General subject matter	Expiration
Aimovig® (erenumab-aooe)	U.S.	CGRP receptor antibodies	5/17/2032
	U.S.	Methods of treatment	4/22/2036
	Europe	CGRP receptor antibodies[1]	12/18/2029
	Europe	Methods of treatment	8/10/2035
Parsabiv® (etelcalcetide)	U.S.	Compound and pharmaceutical composition	2/7/2031
	U.S.	Formulation	6/27/2034
	U.S.	Methods of making	8/9/2035
	Europe	Compound and pharmaceutical composition[1]	7/29/2030
	Europe	Formulation	6/27/2034
LUMAKRAS® /LUMYKRAS™(sotorasib)	U.S.	Compounds and pharmaceutical compositions	5/21/2038
	U.S.	Crystalline form, pharmaceutical compositions and methods of treatment	5/20/2040
	Europe	Compounds, pharmaceutical compositions and methods of treatment	5/21/2038
TEZSPIRE™ (tezepelumab-ekko)	U.S.	Polypeptides[3]	2/3/2029
	U.S.	Methods of treatment	8/23/2038
	Europe	Polypeptides	9/9/2028

(1) A European patent with this subject matter may also be entitled to supplemental protection in one or more countries in Europe, and the length of any such extension will vary by country. For example, supplementary protection certificates have been issued related to the indicated products for patents in at least the following countries:

- denosumab — France, Germany, Italy, Spain and the United Kingdom, expiring in 2025
- apremilast — Italy, Spain and the United Kingdom expiring in 2028
- carfilzomib — France, Germany, Italy, Spain and the United Kingdom expiring in 2030
- evolocumab — France, Spain and the United Kingdom, expiring in 2030
- romiplostim — France, Germany, Italy, Spain and the United Kingdom, expiring in 2024
- panitumumab — France, Germany, Italy, Spain and the United Kingdom, expiring in 2022
- romosozumab — France, Italy and Spain, expiring in 2031
- blinatumomab — France, Italy and Spain, expiring in 2029
- erenumab — France, Italy and Spain, expiring in 2033
- etelcalcetide — France, Germany, Italy, Spain and the United Kingdom, expiring in 2031

(2) U.S. Patent No. 10,092,541 was held invalid by the New Jersey District Court. We disagree with the court's holding and we are in the process of appealing this judgment. See Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements, Amgen Inc. vs. Sandoz Inc., et al.

(3) A patent with this subject matter may be entitled to patent term extension in the United States.

Competition

We operate in a highly competitive environment. A number of our marketed products are indicated for disease areas in which other products or treatments are currently available or are being pursued by our competitors through R&D activities. Additionally, some competitor-marketed products target the same genetic pathways as our recently launched marketed products or are currently in development. This competition could impact the pricing and market share of our products. We continue to pursue ways of increasing the value of our medicines through innovations during their life cycles, which can include expanding the disease areas for which our products are indicated and finding new methods to make the delivery of our medicines easier and less costly. Such activities can offer important opportunities for differentiation. For example, we market the Neulasta Onpro kit, which provides physicians the opportunity to initiate administration of the recommended dose of Neulasta on the same day as chemotherapy, with drug delivery at home the day after chemotherapy, thereby saving the patient a trip back to the doctor. We plan to continue pursuing innovation efforts to strengthen our competitive position. Such position may be based on, among other things, safety, efficacy, reliability, availability, patient convenience, delivery devices, price, reimbursement, access to and timing of market entry and patent position and expiration.

Certain of the existing patents on our principal products have expired, and we face new and increasing competition, including from biosimilars and generics. A biosimilar is another version of a biological product for which marketing approval is sought or has been obtained based on a demonstration that it is "highly similar" to the original reference product. We have experienced adverse effects from biosimilar competition on our originator product sales. Companies have launched biosimilar versions of EPOGEN, NEUPOGEN and Neulasta and have approved biosimilars for ENBREL. Once multiple biosimilar versions of one of our originator products have launched, competition has intensified rapidly, resulting in greater net price declines for both reference and biosimilar products, and a greater effect on product sales. See also Government Regulation—Regulation in the United States—Approval of Biosimilars. Although competitor biosimilars compete on price, we believe many patients, providers and payers will continue to place high value on the reputation, supply reliability and safety of our products. As additional biosimilar competitors come to market, we will continue to leverage our global experience to distinguish against both branded and biosimilar competition.

We also have our own biosimilar products both in the United States and outside of U.S. markets that are competing against branded and biosimilar versions of our competitors' products. In 2019, Amgen launched MVASI, a biosimilar to Avastin, and KANJINTI, a biosimilar to Herceptin; and in 2018, Amgen launched AMGEVITA, a biosimilar to Humira in ex-U.S. markets. We have also received FDA approval of AMJEVITA, a biosimilar to Humira for the U.S. market, and plan to launch in the United States in January 2023. In 2020, we launched AVSOLA, a biosimilar to Remicade; and in January 2021, we launched RIABNI, a biosimilar to Rituxan. We expect additional biosimilar competition against both our branded and biosimilar products in the future across markets.

Although most of our products are biologics, some are small molecule products. Because the FDA approval process permits generic manufacturers to rely on the safety and efficacy data of the innovator product rather than having to conduct their own costly and time-consuming clinical trials, generic manufacturers can often develop and market their competing versions of our small molecule products at much lower prices. For example, following loss of exclusivity of patents directed to cinacalcet, the active ingredient in our small molecule calcimimetic Sensipar, we lost a significant share of the market and corresponding revenues in a very short period of time. See Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

The introduction of new products, the development of new processes or technologies by competitors or the emergence of new information about existing products may result in (i) increased competition for our marketed products, even for those protected by patents and/or (ii) reductions in the prices we receive from selling our products. In addition, the development of new treatment options or standards of care may reduce the use of our products or may limit the utility and application of ongoing clinical trials of our product candidates. (As used in this document, the term *clinical trials* may include prospective clinical trials, observational studies, registries and other studies.) See Item 1A. Risk Factors—*Our products face substantial competition and our product candidates are also likely to face substantial competition* and Item 1A. Risk Factors—*We currently face competition from biosimilars and expect to face increasing competition from biosimilars and generics in the future*.

The following table reflects our significant competitors and is not exhaustive.

Product	Territory	Competitor-marketed product	Competitors
ENBREL	U.S. & Canada	HUMIRA	AbbVie
	U.S.	Xeljanz	Pfizer Inc.
	U.S. & Canada	RINVOQ	AbbVie
Prolia	U.S. & Europe	Alendronate, raloxifene and zoledronate generics	Various
Otezla	U.S. & Europe	HUMIRA†	AbbVie
	U.S. & Europe	Cosentyx	Novartis
	U.S. & Europe	Taltz	Lilly
	U.S. & Europe	Tremfya	Janssen(1)
	U.S. & Europe	Skyrizi(2)	AbbVie
	U.S. & Europe	Methotrexate generics	Various
XGEVA	U.S. & Europe	Zoledronate generics	Various
Neulasta(3)	U.S.	UDENYCA	Coherus BioSciences, Inc.
	U.S.	Fulphila	Mylan Institutional Inc.
	U.S. & Europe	Filgrastim biosimilars	Various
Aranesp	U.S.	PROCRIT(4)	Janssen(1)
	U.S. & Europe	Epoetin alfa biosimilars	Various
Repatha	U.S. & Europe	PRALUENT	Regeneron Pharmaceuticals, Inc. Sanofi
KYPROLIS(5)	U.S.	VELCADE	Millennium Pharmaceuticals, Inc.(6)
	U.S. & Europe	REVLIMID	Celgene(7)
	U.S. & Europe	POMALYST/IMNOVID	Celgene(7)
	U.S. & Europe	DARZALEX	Janssen(1)
Nplate	U.S. & Europe	PROMACTA/REVOLADE	Novartis

† Approved biosimilars available in Europe and Canada.

(1) A subsidiary of J&J.

(2) Dermatology only.

(3) Other biosimilars under regulatory review in the United States and Europe.

(4) PROCRIT competes with Aranesp in supportive cancer care and predialysis settings.

(5) KYPROLIS is facing increased competition from several recently approved products.

(6) A subsidiary of Takeda.

(7) A subsidiary of BMS.

Reimbursement

Sales of our principal products are dependent on the availability and extent of coverage and reimbursement from third-party payers. In many markets around the world, these payers, including government health systems, private health insurers and other organizations, remain focused on reducing the cost of healthcare; and their efforts have intensified as a result of rising healthcare costs, economic pressures and broader challenges generated by the COVID-19 pandemic. Drugs remain heavily scrutinized for cost containment. As a result, payers are becoming more restrictive regarding the use of biopharmaceutical products and are scrutinizing the prices of these products while requiring a higher level of clinical evidence to support the benefits such products bring to patients and the broader healthcare system. These pressures become intensified when our products become subject to competition, including from biosimilars.

In the United States, healthcare providers and other entities such as pharmacies and PBMs are reimbursed for covered services and products they deliver through both private-payer and government healthcare programs such as Medicare and Medicaid. We provide negotiated rebates to healthcare providers, private payers, government payers and PBMs. In addition, we are required to (i) provide rebates or discounts on our products that are reimbursed through certain government programs, including Medicare and Medicaid, and (ii) provide discounts to qualifying healthcare providers under the federal 340B Drug Pricing Program.

Both private and some government payers use formularies to manage access to and utilization of drugs. A drug's inclusion and favorable positioning on a formulary are essential to ensure patients have access to a particular drug. Even when access is available, some patients abandon their prescriptions for economic reasons. Payers continue to institute cost reduction and containment measures that lower drug utilization and/or spending altogether and/or shift a greater portion of the costs to patients. Such measures include, but are not limited to, more-limited benefit plan designs, higher patient co-pays or coinsurance obligations, limitations on patients' use of commercial manufacturer co-pay payment assistance programs (including through co-pay accumulator adjustment or maximization programs), stricter utilization management criteria before a patient may get access to a drug, higher-tier formulary placement that increases the level of patient out-of-pocket costs and formulary exclusion, which effectively encourages patients and providers to seek alternative treatments or pay 100% of the cost of a drug. The use of such measures by PBMs and insurers has continued to intensify and has thereby limited Amgen product usage and sales. Furthermore, during the past few years, many PBMs and insurers have consolidated, resulting in a smaller number of PBMs and insurers overseeing a large portion of total covered lives in the United States. As a result, PBMs and insurers have greater market power and negotiating leverage to mandate stricter utilization criteria and/or exclude drugs from their formularies in favor of competitor drugs or alternative treatments. In highly competitive treatment markets such as the markets for ENBREL, Otezla, Repatha and Aimovig, PBMs are also able to exert negotiating leverage by requiring incremental rebates from manufacturers in order for them to gain and/or maintain their formulary position.

In addition to market actions taken by private and government payers in the United States, policy makers in both of the major U.S. political parties are pursuing policies to lower drug costs. Potential policies cover a wide range of areas, including allowing the importation of drugs from other countries; instituting IRP schemes, which would set the prices of certain drugs based on those available in other countries; implementing policies that in effect would require manufacturers to accept government-set prices for certain drugs, with price ceilings based on a domestic reference-pricing scheme; redesigning the Medicare Part D benefit so as to establish a cap on patient out-of-pocket costs, paired with new requirements that manufacturers cover a share of the costs of Part D drugs; stipulating penalties if drug price benchmarks rise faster than inflation; increasing transparency in drug pricing; and using third-party value assessments to determine drug prices. Examples of such policies include, but are not limited to, the previous Administration's November 2020 interim final rule, which attempts to institute an MFN IRP model in Medicare Part B and a final rule instituting rebate reform in Medicare Part D. Both of the resulting rules are being challenged in court and have not yet been implemented. Further, although CMS withdrew the MFN IRP, policy makers continue to express strong interest in policies to address drug pricing. See Item 1A. Risk Factors—*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*. The Infrastructure Investment and Jobs Act signed into law on November 15, 2021, delays implementation of the rebate reform rule until 2026 and requires manufacturers of certain Part B–covered drugs packaged in single-use containers to give refunds to the government starting in 2023 for discarded amounts. Although the direction of drug-pricing-policy reforms remains unclear at this time, Congress is continuing to consider prescription-drug-pricing reforms, including legislative proposals for a number of the concepts discussed above (including a full repeal of the prior Administration's Part D rebate reform rule).

In many countries other than the United States, government-sponsored healthcare systems are the primary payers for drugs and biologics. With increasing budgetary constraints and/or difficulty in understanding the value of medicines, governments and payers in many countries are applying a variety of measures to exert downward price pressure. These measures can include mandatory price controls, price referencing, therapeutic-reference pricing, increases in mandates, incentives for generic substitution and biosimilar usage and government-mandated price cuts. In this regard, many countries have health technology assessment organizations that use formal economic metrics such as cost-effectiveness to determine prices, coverage and reimbursement of new therapies; and these organizations are expanding in both established and emerging markets. Many countries also limit coverage to populations narrower than those specified on our product labels or impose volume caps to limit utilization. We expect that countries will continue taking aggressive actions to seek to reduce expenditures on drugs and biologics. Similarly, fiscal constraints may also affect the extent to which countries are willing to approve new and innovative therapies and/or allow access to new technologies. The EU is currently undergoing a review and possible revision of its pharmaceutical legislation, scheduled to conclude at the end 2022. There is a risk that this review will lead to proposals that may reduce intellectual property protection for new products, as well as change the reimbursement and regulatory landscape in ways that are difficult to predict at this point.

The dynamics and developments discussed above create pressures on the pricing and potential usage of our products and on the industry. Given the diverse interests in play between payers, biopharmaceutical manufacturers, policy makers, healthcare providers and independent organizations, if and whether the parties involved can achieve alignment on the matters discussed above remain unclear, and the outcome of any such alignment is difficult to predict. We remain focused on pricing our products responsibly and delivering breakthrough treatments for unmet medical needs. Amgen is committed to working with the entire healthcare community to ensure continued innovation and to facilitate patient access to needed medicines. We do this by:

- investing billions of dollars annually in R&D;
- pricing our medicines to reflect the value they provide;
- developing more affordable therapeutic choices in the form of high-quality and reliably supplied biosimilars;
- partnering with payers to share risk and accountability for health outcomes;
- providing patient support and education programs;
- helping patients in financial need access our medicines; and
- working with policy makers, patients and other stakeholders to establish a sustainable healthcare system with access to affordable care and in which patients and their healthcare professionals are the primary decision makers.

See Item 1A. Risk Factors—*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* and Item 1A. Risk Factors—*Guidelines and recommendations published by various organizations can reduce the use of our products.*

Manufacturing, Distribution and Raw Materials

Manufacturing

We believe we are a leader in the manufacture of biologics and that our manufacturing capabilities represent a competitive advantage. The products we manufacture consist of both biologics and small molecule drugs. The majority of our products are biologics that are produced in living cells and that are inherently complex due to naturally occurring molecular variations. Highly specialized knowledge and extensive process and product characterization are required to transform laboratory-scale processes into reproducible commercial manufacturing processes. Further, our expertise in the manufacture of biologics positions us well for leadership in the global biosimilars market. For additional information regarding manufacturing facilities, see Item 2. Properties.

We have been innovating our manufacturing facilities designed to extend our manufacturing advantage by optimizing our manufacturing network and/or by mitigating risks while continuing to ensure adequate supply of our products. For example, our licensed next-generation biomanufacturing plant operating in Singapore, and our recently FDA approved facility in West Greenwich, Rhode Island, incorporate multiple innovative technologies into a single facility. Next-generation biomanufacturing plants require smaller manufacturing footprints and offer greater environmental benefits, including reduced consumption of water and energy and lower levels of carbon emissions. Within such plants, the equipment is portable and smaller, which provides greater flexibility and speed in the manufacture of different medicines simultaneously. This enables Amgen to respond to changing demands for its medicines with increased agility. The Singapore site also has a plant that has been approved by several agencies, including the FDA and EMA, to produce small molecule drugs for commercial manufacturing.

Our internal manufacturing network has commercial production capabilities for bulk manufacturing, formulation, fill, finish, tableting and device assembly. These activities are performed within the United States and its territories in our Puerto Rico, Rhode Island and California facilities as well as internationally in our Ireland, Netherlands and Singapore facilities. In addition, we use third-party contract manufacturers to supplement the capacity or capability of our commercial manufacturing network.

To support our clinical trials, we manufacture product candidates primarily at our California facilities. We also use third-party contract manufacturers to supplement the capacity or capability of our overall clinical manufacturing network.

See Item 1A. Risk Factors for a discussion of the factors that could adversely impact our manufacturing operations and the global supply of our products.

Distribution

We operate distribution centers in Puerto Rico, Kentucky, California and the Netherlands for worldwide distribution of the majority of our commercial and clinical products. We also use third-party distributors to supplement distribution of our products worldwide.

Other

In addition to the manufacturing and distribution activities noted above, each of our manufacturing locations includes key manufacturing support functions such as quality control, process development, engineering, procurement, production scheduling and warehousing. Certain of those manufacturing and distribution activities are highly regulated by the FDA as well as international regulatory agencies. See Government Regulation—Regulation in the United States—Regulation of Manufacturing Standards.

Manufacturing Initiatives

As discussed above, we have been expanding capacity and advancing new innovations with multiple ongoing projects.

Our next-generation biomanufacturing plant at our West Greenwich, Rhode Island, campus, the first of its kind in the United States, received FDA approval in January 2022. This plant expands our capacity to manufacture certain products for U.S. and global markets, as we receive regulatory approval in those markets.

We initiated projects in 2019 to expand our clinical and commercial manufacturing capabilities in Thousand Oaks, California, which we have completed.

In August 2021, we initiated a project to build a new multi-product drug substance manufacturing facility in Holly Springs, North Carolina. The new plant will support both traditional stainless steel-fed batch manufacturing and next-generation single-use technologies, allowing flexibility in the production of multiple products in one plant.

In November 2021, we broke ground for our newest biomanufacturing plant located in New Albany, Ohio. This final product assembly and packaging plant will support the growing demand for Amgen's medicines in the United States and will use state-of-the-art technologies.

See Item 1A. Risk Factors—*Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.*

Raw Materials and Medical Devices

Certain raw materials, medical devices (including companion diagnostics) and components necessary for the commercial and/or clinical manufacturing of our products are provided by and are the proprietary products of unaffiliated third-party suppliers, certain of which may be our only sources for such materials. We currently attempt to manage the risk associated with such suppliers by means of inventory management, relationship management and evaluation of alternative sources when feasible. We also monitor the financial condition of certain suppliers and their ability to supply our needs. See Item 1A. Risk Factors —*We rely on third-party suppliers for certain of our raw materials, medical devices and components.*

We perform various procedures to help authenticate the sources of raw materials, including intermediary materials used in the manufacture of our products; the procedures include verification of country of origin and are incorporated into the manufacturing processes we and our third-party contract manufacturers perform.

To better ensure supply, Amgen has a risk mitigation strategy that uses a combination of methods, including multiple sources or backup inventory of critical raw materials. In response to the COVID-19 pandemic and as part of our ongoing business continuity efforts, we continue to closely monitor our inventory levels and have taken additional measures to mitigate against raw material supply interruption. See Item 1A. Risk Factors for a discussion of the factors that could adversely impact our manufacturing operations and the global supply of our products.

Government Regulation

Regulation by government authorities in the United States and other countries is a significant factor in the production and marketing of our products and our ongoing R&D activities. To clinically test, manufacture and market products for therapeutic use, we must satisfy mandatory procedures and safety and effectiveness standards established by various regulatory bodies. Compliance with these standards is complex, and failure to comply with any of these standards can result in significant implications. See Item 1A. Risk Factors for a discussion of factors, including global regulatory implications, that can adversely impact our development and marketing of commercial products.

Regulation in the United States

In the United States, the Public Health Service Act; the FDCA; and the regulations promulgated thereunder as well as other federal and state statutes and regulations govern, among other things, the production, research, development, testing, manufacture, quality control, labeling, storage, record keeping, approval, advertising, promotion and distribution of our products in addition to the reporting of certain payments and other transfers of value to healthcare professionals and teaching hospitals.

Clinical Development and Product Approval. Drug development in our industry is complex, challenging and risky, and failure rates are high. Product development cycles are typically very long—approximately 10 to 15 years from discovery to market. A potential new medicine must undergo many years of preclinical and clinical testing to establish its safety and efficacy for use in humans at appropriate dosing levels and with an acceptable risk–benefit profile. We continue to work toward reducing cycle times by applying our expertise in human genetics and innovation in technology, clinical trials and real-world evidence.

After laboratory analysis and preclinical testing in animals, we file an IND with the FDA to begin human testing. Typically, we undertake an FDA-designated three-phase human clinical testing program.

- In phase 1, we conduct small clinical trials to investigate the safety and proper dose ranges of our product candidates in a small number of human subjects.
- In phase 2, we conduct clinical trials to investigate side-effect profiles and the efficacy of our product candidates in a patient population larger than phase 1 but still relatively small, who have the disease or condition under study.
- In phase 3, we conduct clinical trials to investigate the short- and long-term safety and efficacy of our product candidates, compared to commonly used treatments, in a large number of patients who have the disease or condition under study.

The FDA monitors the progress of each trial conducted under an IND and may, at its discretion, reevaluate, alter, suspend or terminate the testing based on data accumulated to that point and the FDA's risk–benefit assessment with regard to the patients enrolled in the trial. The results of preclinical and clinical trials are submitted to the FDA in the form of either a BLA for biologic products or a New Drug Application for small molecule products. We are not permitted to market or promote a new product until the FDA has approved our marketing application.

Approval of Biosimilars. The ACA authorized the FDA to approve biosimilars via a separate, abbreviated pathway. The pathway allows sponsors of a biosimilar to seek and obtain regulatory approval based in part on the nonclinical-trial and clinical-trial data of an originator product to which the biosimilar has been demonstrated to be "highly similar" and to have no clinically meaningful differences with regard to safety, purity and potency. The relevance of demonstrating "similarity" is that in many cases, biosimilars can be brought to market without conducting the full suite of clinical trials typically required of originators, because risk–benefit has previously been established. To preserve incentives for future innovation, the law establishes a period of exclusivity for originators' products, which in general prohibits biosimilars from gaining FDA approval based in part on reliance on or reference to the originator's data in their application to the FDA for 12 years after initial FDA approval of the originator product. The law does not change the duration of patents granted on biologic products. As part of the implementation of the abbreviated approval pathway for biosimilars, the FDA released a number of guidance documents, some of which remain in draft form.

Regulation of Product Marketing and Promotion. The FDA regulates the marketing and promotion of drug products. Our product promotions for approved product indications must comply with the statutory standards of the FDCA and the FDA's implemented regulations and guidance. The FDA's review of marketing and promotional activities encompasses but is not limited to direct-to-consumer advertising, healthcare-provider-directed advertising and promotion, sales representative communications to healthcare professionals, promotional programming and promotional activities involving electronic media. The FDA may also review industry-sponsored scientific and educational activities that make representations regarding product safety or efficacy in a promotional context. The FDA may take enforcement action against a company for promoting unapproved uses of a product or for other violations of the FDA's advertising and labeling laws and regulations. Enforcement action may include product seizures, injunctions, civil or criminal penalties or regulatory letters, which may require corrective advertising or other corrective communications to healthcare professionals. Failure to comply with the FDA's regulations also can result in adverse publicity or increased scrutiny of company activities by the U.S. Congress or other legislators. Additionally, as described below, such failure may lead to additional liability under U.S. healthcare fraud and abuse laws.

Regulation of Manufacturing Standards. The FDA regulates and inspects the equipment, facilities, laboratories and processes used in the manufacturing and testing of products prior to granting approval to market products. If after receiving approval from the FDA we make a material change in manufacturing equipment, location or process, additional regulatory review may be required. We also must adhere to current Good Manufacturing Practice regulations and product-specific regulations enforced by the FDA through its facilities inspection program. The FDA conducts regular, periodic visits to reinspect our equipment, facilities, laboratories and processes following an initial approval.

Regulation of Combination Products. Combination products are defined by the FDA as products composed of two or more regulated components (e.g., a biologic and/or drug and a device). Biologics/drugs and devices each have their own regulatory requirements, and combination products may have additional requirements. A number of our marketed products meet this definition and are regulated under this framework, and we expect that a number of our pipeline product candidates will be evaluated for regulatory approval under this framework as well.

Regulation outside the United States

In EU countries as well as in the United Kingdom, Switzerland, Canada, Australia and Japan, regulatory requirements and approval processes are similar in principle to those in the United States.

In the EU, there are currently two potential tracks for seeking marketing approval for a product not authorized in any EU member state: a decentralized procedure and a centralized procedure. In the *decentralized procedure*, identical applications for marketing authorization are submitted simultaneously to the national regulatory agencies. Regulatory review is led by one member state (the reference-member state), and its assessment—based on safety, quality and efficacy—is reviewed and approved (assuming there are no concerns that the product poses a serious risk to public health) by the other member states from which the applicant is seeking approval (the concerned-member states). The decentralized procedure leads to a series of single national approvals in all relevant countries. In the *centralized procedure*, which is required of all products derived from biotechnology, a company submits a single Marketing Authorisation Application to the EMA, which conducts an evaluation of the dossier, drawing upon its scientific resources across Europe. If the drug product is proven to fulfill requirements for quality, safety and efficacy, the EMA's CHMP adopts a positive opinion, which is transmitted to the EC for final decision on granting of the marketing authorization. Even though the EC generally follows the CHMP's opinion, it is not bound to do so. Subsequent commercialization is enabled by country-by-country reimbursement approval.

In the EU, biosimilars are approved under a specialized pathway of the centralized procedure. As with the U.S. pathway, an applicant seeks and obtains regulatory approval for a biosimilar once the data exclusivity period for the original reference product has expired, relying in part on the data submitted for the originator product together with data evidencing that the biosimilar is "highly similar" with regard to quality, safety and efficacy to the original reference product authorized in the European Economic Area.

Other countries such as Russia, Turkey and those in Latin America and the Middle East have review processes and data requirements similar to those of the EU and in some cases can rely on prior marketing approval from U.S. or EU regulatory authorities. The regulatory process in these countries may include manufacturing/testing facility inspections, testing of drug product upon importation and other domestic requirements.

In Asia Pacific, a number of countries such as China, Japan, South Korea and Taiwan may require local clinical-trial data for bridging purposes as part of the drug registration process in addition to global clinical trials, which can add to overall drug development and registration timelines. In most of the Asian markets, registration timelines depend on marketing approval in the United States or the EU. In some markets in Asia, such as China, Indonesia and Thailand, regulatory timelines can be less predictable. The regulatory process may also include manufacturing/testing facility inspections, testing of drug product upon importation and other domestic requirements. Countries such as Australia and Japan have more-mature systems that would allow for submissions under more-competitive time frames. With regard to biosimilars, several of these countries have pathways to register biosimilars (e.g., Australia, India, Singapore, South Korea and Taiwan), and biosimilar products are already present on the markets (e.g., Australia and South Korea).

In some countries, such as Japan and those in the EU, medical devices may be subject to regulatory regimes whereby manufacturers must establish that their medical devices conform to essential requirements set out in the law for the particular device category. For example, in the EU, with limited exceptions, medical devices placed on the market must bear the Conformité Européenne marking to indicate their conformity with legal requirements.

Postapproval Phase

After approval, we continue to monitor adverse events and product complaints reported following the use of our products through routine postmarketing surveillance and studies when applicable. We report such events to the appropriate regulatory agencies as required by local regulations for individual cases and aggregate reports. We proactively monitor (according to good pharmacovigilance practices) and ensure the implementation of signal detection, assessment and the communication of adverse events that may be associated with the use of our products. We also proactively monitor product complaints through our quality systems, which includes assessing our drug delivery devices for device complaints, adverse events and malfunctions. We may also be required by regulatory agencies to conduct further clinical trials on our marketed products as a condition of their approval or to provide additional information on safety and efficacy. Health regulators, including the FDA, have authority to mandate labeling changes to products at any point in a product's life cycle based on new safety information or as part of an evolving label change to a particular class of products.

Health regulators, including the FDA, also have authority both before and after approval to require that a company implement a risk management program for a product to ensure that the benefits of the drug outweigh the risks. Each risk management program is unique and varies depending on the specific factors required. In the United States, such a risk management program is known as a REMS; and we currently have REMSs for Prolia, Nplate and BLINCYTO.

Other Regulation

We are also subject to various laws pertaining to healthcare fraud and abuse, including antikickback laws and false-claims laws. Antikickback laws make it illegal to solicit, offer, receive or pay any remuneration in exchange for or to induce the referral of business, including the purchase or prescribing of a particular drug that is reimbursed by a state or federal program. False-claims laws prohibit knowingly and willingly presenting or causing to be presented for payment to third-party payers (including Medicare and Medicaid) any claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed or claims for medically unnecessary items or services. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including fines and civil monetary penalties, as well as by the possibility of exclusion from federal healthcare programs (including Medicare and Medicaid). Liability under false-claims laws may also arise when violation of certain laws or regulations related to the underlying product (e.g., a violation regarding improper promotional activity or unlawful payments) contributes to the submission of a false claim.

On April 25, 2019, we entered into a settlement agreement with the DOJ and the OIG of the HHS to settle certain allegations related to our support of independent charitable organizations that provide patients with financial assistance to access medicines. Additionally, we entered into a corporate integrity agreement that requires us to both maintain a corporate compliance program and undertake a set of defined corporate integrity obligations for a period of five years. Due to the breadth of the statutory provisions and the absence of guidance in the form of regulations or court decisions addressing some of our practices, it is possible that in the future, our practices might be further challenged under antikickback or similar laws.

The FCPA prohibits U.S. corporations and their representatives from offering, promising, authorizing or making payments to any foreign government official, government staff member, political party or political candidate in an attempt to obtain or retain business abroad. The scope of the FCPA arguably includes interactions with certain healthcare professionals in many countries. Other countries have enacted similar anticorruption laws and/or regulations. Failure by our employees, agents, contractors, vendors, licensees, partners or collaborators to comply with the FCPA and other anticorruption laws and/or regulations could result in significant civil or criminal penalties.

We are subject to various laws and regulations globally with regard to privacy and data protection. These laws and regulations involve the collection, storage, handling, use, disclosure, transfer and security of personal data. The legislative and regulatory environments regarding privacy and data protection are continually evolving and developing because these issues are subjects of increasing amounts of attention in countries globally. For example, we are subject to the EU's GDPR, which became effective on May 25, 2018, the California Consumer Privacy Act of 2018, which became effective on January 1, 2020 and China's Personal Information Protection Law, which became effective on November 1, 2021. Other jurisdictions where we operate have enacted or proposed similar legislation and/or regulations. For example, the Virginia Consumer Data Protection Act and the Colorado Privacy Act are set to become effective on January 1, 2023, and July 1, 2023, respectively. Failure to comply with these laws could result in significant penalties.

Our business has been and will continue to be subject to various other U.S. and foreign laws, rules and regulations. See Reimbursement section above.

Research and Development and Selected Product Candidates

We focus our R&D on novel human therapeutics for the treatment of serious illness. We capitalize on our strengths in human genetics, novel biology and protein engineering. We leverage our biologic expertise and seek to choose the optimal modality for a drug target and disease. And we use cutting-edge science and technology to study subtle biological mechanisms in search of therapies that will improve the lives of those who suffer from diseases.

Our discovery research programs may therefore yield targets that lead to the development of human therapeutics delivered as large molecules, small molecules, other combination modalities or new modalities. We have reshaped our portfolio and have increasingly focused our efforts on human genetics when possible to enhance the likelihood of success.

Since early 2021, COVID-19 global vaccination efforts have been under way to control the pandemic. However, uncertainty remains as to the length of time required for vaccination of a meaningful portion of the population and as to the efficacy of such vaccinations on the trajectory of the pandemic. Challenges to vaccination efforts, new variants and other causes of virus spread may require governments to issue additional restrictions and/or order shutdowns in various geographies. As a result, we expect to see continued volatility for at least the duration of the pandemic as governments respond to current local conditions. With regard to our drug development activities, we are continuously monitoring COVID-19 infection rates, including changes from new variants; we are working to mitigate effects on future study enrollment in our clinical trials; and we are evaluating the impact in all countries where clinical trials occur. We remain focused on supporting our active clinical sites in their providing care for patients and in our providing investigational drug supply.

For the years ended December 31, 2021, 2020 and 2019, our R&D expenses were $4.8 billion, $4.2 billion and $4.1 billion, respectively.

We have major R&D centers in Thousand Oaks and San Francisco, California; Iceland; and the United Kingdom, as well as smaller research centers and development facilities globally. See Item 2. Properties.

Our clinical trial activities are conducted by both our internal staff and third-party contract clinical trial service providers. To increase the number and diversity of patients available for enrollment in our clinical trials, we have opened clinical sites and will continue opening clinical sites and enrolling patients in a number of geographic locations. See Government Regulation—Regulation in the United States—Clinical Development and Product Approval for a discussion of government regulation over clinical development. Also see Item 1A. Risk Factors—*We must conduct clinical trials in humans before we commercialize and sell any of our product candidates or existing products for new indications.*

Some of our competitors are actively engaged in R&D in areas in which we have products or in which we are developing product candidates or new indications for existing products. For example, we compete with other clinical trials for eligible patients, which may limit the number of available patients who meet the criteria for certain clinical trials. The competitive marketplace for our product candidates is greatly dependent on the timing of entry into the market. Early entry may have important advantages in gaining product acceptance, thereby contributing to a product's eventual success and profitability. Accordingly, we expect that in some cases, the relative speed with which we can develop products, complete clinical testing, receive regulatory approval and supply commercial quantities of a product to the market will be important to our competitive position.

In addition to product candidates and marketed products generated from our internal R&D efforts, we acquire companies, acquire and license certain product and R&D technology rights and establish R&D arrangements with third parties to enhance our strategic position within our industry by strengthening and diversifying our R&D capabilities, product pipeline and marketed product base. In pursuing these R&D arrangements and licensing or acquisition activities, we face competition from other pharmaceutical and biotechnology companies that also seek to license or acquire technologies, product candidates or marketed products from those entities performing the R&D.

The following table shows a selection of certain of our product candidates by phase of development in our therapeutic areas of focus as of February 8, 2022, unless otherwise indicated. Additional product candidate information can be found on our website at www.amgen.com. (The website address is not intended to function as a hyperlink, and the information contained on our website is not intended to be a part of this filing.) The information in this section does not include other, nonregistrational clinical trials that we may conduct for purposes other than for submission to regulatory agencies for their approval of a new product indication.

We may conduct nonregistrational clinical trials for various reasons, including to evaluate real-world outcomes or to collect additional safety information with regard to the use of products.

Molecule	Investigational indication
Phase 3 programs	
AMJEVITA	Interchangeability
Bemarituzumab	GEJ adenocarcinoma
BLINCYTO	Ph-negative B-cell precursor Acute lymphoblastic leukemia
EVENITY	Male osteoporosis
KYPROLIS	Weekly dosing for relapsed multiple myeloma
Nplate	Chemotherapy-induced thrombocytopenia
Otezla	Genital psoriasis
Repatha	Cardiovascular disease
TEZSPIRE	Chronic rhinosinusitis with nasal polyps Severe asthma
ABP 654	Investigational biosimilar to STELARA (ustekinumab)
ABP 938	Investigational biosimilar to EYLEA (aflibercept)
ABP 959	Investigational biosimilar to SOLIRIS (eculizumab)
Phase 2 programs	
Efavaleukin alfa	Systemic lupus erythematosus Ulcerative colitis
LUMAKRAS/LUMYKRAS	Advanced colorectal cancer NSCLC monotherapy Other solid tumors with KRAS *G12C* mutations
Olpasiran	Cardiovascular disease
Ordesekimab	Celiac disease
Otezla	Palmoplantar pustulosis
Rozibafusp alfa	Systemic lupus erythematosus
Tarlatamab	Small cell lung cancer
TEZSPIRE	Chronic obstructive pulmonary disease Chronic spontaneous urticaria
AMG 451/KHK 4083	Atopic dermatitis
Phase 1 programs	
Acapatamab	Prostate cancer
Pavurutamab	Multiple myeloma
Tarlatamab	Small-cell lung cancer
AMG 104	Asthma
AMG 119	Small-cell lung cancer
AMG 133	Obesity
AMG 176	Hematologic malignancies
AMG 193	Solid tumors
AMG 199	Metastatic GEJ cancer
AMG 256	Solid tumors
AMG 330	Acute myeloid leukemia
AMG 340	Prostate cancer
AMG 404	Solid tumors
AMG 427	Acute myeloid leukemia
AMG 506	Solid tumors
AMG 509	Prostate cancer
AMG 609	Nonalcoholic steatohepatitis
AMG 650	Solid tumors
AMG 994	Solid tumors

Phase 3	Clinical trials investigate the short- and long-term safety and efficacy of our product candidates, compared to commonly used treatments, in a large number of patients who have the disease or condition under study.
Phase 2	Clinical trials investigate side-effect profiles and efficacy of product candidates in a larger patient population than phase 1, but still relatively small, who have the disease or condition under study.
Phase 1	Clinical trials investigate the safety and proper dose ranges of product candidates in a small number of human subjects.

Phase 3 Product Candidate Program Changes

As of February 2, 2021, we had 13 phase 3 programs. As of February 8, 2022, we continued to have 13 phase 3 programs, as regulatory approvals were received for three programs, four programs initiated phase 3 studies and one program was terminated. These changes are set forth in the following table.

Molecule	Investigational indication	Program change
LUMAKRAS/LUMYKRAS	NSCLC with KRAS G12C mutations	Approved by the FDA and conditional marketing approval by the EC
Otezla	Mild-to-moderate psoriasis	Approved by the FDA
RIABNI	Non-Hodgkin's lymphoma	Approved by the FDA
AMJEVITA	Interchangeability	Initiated phase 3 study
Bemarituzumab	GEJ adenocarcinoma	Initiated phase 3 study
BLINCYTO	Ph-negative B-cell precursor Acute lymphoblastic leukemia	Initiated phase 3 study
TEZSPIRE	Chronic rhinosinusitis with nasal polyps	Initiated phase 3 study
Otezla	COVID-19	Terminated

Phase 3 Product Candidate Patent Information

The following table describes our composition-of-matter patents that have been issued thus far for our product candidates in phase 3 development that have yet to be approved for any indication in the United States or the EU. Patents for products already approved for one or more indications in the United States or the EU but that are currently undergoing phase 3 clinical trials for additional indications have been previously described. See Marketing, Distribution and Selected Marketed Products—Patents.

Molecule	Territory	General subject matter	Estimated expiration*
Bemarituzumab	U.S.	Polypeptides	2029
	Europe	Polypeptides	2029

* Patent expiration estimates are based on issued patents, which may be challenged, invalidated or circumvented by competitors. The estimates do not include any term adjustments, extensions or supplemental protection certificates that may be obtained in the future and thereby extend these dates. Corresponding patent applications are pending in other jurisdictions. Additional patents may be filed or issued and may provide additional exclusivity for the product candidate or its use.

Phases 3 and 2 Program Descriptions

The following provides additional information about selected product candidates that have advanced into human clinical trials.

AMJEVITA

AMJEVITA is a biosimilar to HUMIRA, which is a monoclonal antibody that inhibits binding of TNF-alpha to cell surface TNF receptor / TNF-alpha.

Bemarituzumab

Bemarituzumab is a monoclonal antibody that inhibits FGFR2b. It is being investigated for the treatment of advanced GEJ adenocarcinoma.

In April 2021, Amgen announced that the FDA had granted Breakthrough Therapy designation for bemarituzumab.

BLINCYTO

BLINCYTO is an anti-CD19 x anti-CD3 BiTE® molecule. It is being investigated in newly diagnosed adults age 40 and older with Ph negative B-Cell precursor ALL.

Efavaleukin alfa

Efavaleukin alfa is an IL-2 mutein Fc fusion protein. It is being investigated for the treatment of systemic lupus erythematosus and ulcerative colitis.

EVENITY

EVENITY is a monoclonal antibody that inhibits the action of sclerostin. It is being evaluated as a treatment for male osteoporosis. EVENITY is being developed in collaboration with UCB.

KYPROLIS

KYPROLIS is a small molecule proteasome inhibitor. It is being investigated for weekly dosing in combinations with lenalidomide and dexamethasone for relapsed multiple myeloma.

In December 2021, we announced that the FDA had approved the expansion of the KYPROLIS prescribing information to include its use in combination with DARZALEX FASPRO (daratumumab and hyaluronidase-fihj) and dexamethasone for the treatment of adult patients with relapsed or refractory multiple myeloma who have received one to three lines of therapy.

LUMAKRAS/LUMYKRAS

LUMAKRAS is a KRAS *G12C* small molecule inhibitor. It is being investigated as treatment for a variety of solid tumors, including NSCLC, colorectal cancer and other solid tumor cancers.

In May 2021, we announced that the FDA had approved LUMAKRAS for the treatment of adult patients with KRAS *G12C*–mutated locally advanced or metastatic NSCLC, as determined by an FDA-approved test, who have received at least one prior systemic therapy.

In November 2021, we announced that the EMA's CHMP had adopted a positive opinion and recommended conditional marketing authorization of LUMYKRAS, known as LUMAKRAS in the United States, for the treatment of adults with advanced NSCLC with KRAS *G12C* mutation and who have progressed after at least one prior line of systemic therapy.

In January 2022, we announced that the EC had granted conditional marketing authorization for LUMYKRAS for the treatment of adults with advanced NSCLC with KRAS G12C mutation and who have progressed after at least one prior line of systemic therapy. We also announced that LUMAKRAS had been approved in Japan for the treatment of KRAS G12C-mutated positive, unresectable, advanced and/or recurrent NSCLC that has progressed after systemic anticancer therapy.

Nplate

Nplate is a TPO-RA. It is being investigated for the treatment of CIT.

Olpasiran

Olpasiran is an siRNA that lowers lipoprotein(a), also known as Lp(a). It is being investigated in phase 2 for the treatment of atherosclerotic CV disease.

Ordesekimab

Ordesekimab is a monoclonal antibody that inhibits the action of IL-15. It is being investigated for the treatment of celiac disease and is being developed in collaboration with Provention Bio, Inc.

Otezla

Otezla is a small molecule that inhibits PDE4. It is being investigated in phase 3 studies for the treatment of patients with moderate-to-severe genital psoriasis. It is being investigated in a phase 2 study for treatment of palmoplantar pustulosis.

In February 2021, we announced the submission of an sNDA to the FDA for the treatment of adults with mild-to-moderate plaque psoriasis who are candidates for phototherapy or systemic therapy.

In May 2021, we announced that the FDA had accepted for review our sNDA for the treatment of adults with mild-to-moderate plaque psoriasis who are candidates for phototherapy or systemic therapy. The FDA had set a PDUFA action date of December 19, 2021.

In December 2021, we announced that the FDA had approved the expanded indication for Otezla for the treatment of adult patients with plaque psoriasis, who are candidates for phototherapy or systemic therapy, across all severities.

Repatha

Repatha is a human monoclonal antibody that inhibits PCSK9. It is being investigated as a treatment for atherosclerotic CV disease in high-risk patients with high LDL-C without prior heart attack or stroke.

Rozibafusp alfa

Rozibafusp alfa is a novel antibody-peptide conjugate that simultaneously blocks the BAFF and ICOSL activity. It is being investigated as a treatment for systemic lupus erythematosus.

Tarlatamab

Tarlatamab is an HLE anti- DLL3 x anti-CD3 BiTE® molecule. It is being investigated for the treatment of small cell lung cancer.

TEZSPIRE

TEZSPIRE is a human monoclonal antibody that inhibits the action of thymic stromal lymphopoietin. It is being evaluated in phase 3 studies as a treatment for severe asthma and chronic rhinosinusitis with nasal polyps. It is also being investigated in phase 2 studies as a treatment for chronic obstructive pulmonary disease and chronic spontaneous urticaria. TEZSPIRE is being developed jointly in collaboration with AstraZeneca.

In May 2021, we announced that our partner AstraZeneca had submitted a BLA to the FDA for tezepelumab, a potential first-in-class medicine in severe asthma.

In July 2021, we announced that the FDA had accepted a BLA and granted Priority Review of TEZSPIRE for the treatment of asthma.

In December 2021, we announced that the FDA had approved Amgen and AstraZeneca's TEZSPIRE for the add-on maintenance treatment of adult and pediatric patients aged 12 years and older with severe asthma.

In January 2022, we announced that TEZSPIRE is available for shipment to wholesalers in the United States.

AMG 451/KHK4083

AMG 451/KHK4083 is a monoclonal antibody that inhibits OX-40. It is being investigated for the treatment of moderate-to-severe atopic dermatitis. AMG 451/KHK4083 is being developed in collaboration with KKC.

ABP 654

ABP 654, a biosimilar candidate to STELARA (ustekinumab), is a monoclonal antibody that inhibits IL-12 and IL-23. It is being investigated in a phase 3 study for biosimilarity to STELARA. The reference-product primary conditions are psoriasis, psoriatic arthritis and Crohn’s disease.

ABP 938

ABP 938, a biosimilar candidate to EYLEA, is a VEGFR Fc fusion protein. It is being investigated in a phase 3 study for biosimilarity to EYLEA. The reference-product primary conditions are wet AMD, macular edema following retinal vein occlusion, diabetic macular edema and diabetic retinopathy.

ABP 959

ABP 959, a biosimilar candidate to SOLIRIS, is a monoclonal antibody that specifically binds to the complement protein C5. It is being investigated in a phase 3 study for biosimilarity to SOLIRIS. The reference-product primary conditions are PNH and aHUS.

Business Relationships

From time to time, we enter into business relationships, including joint ventures and collaborative arrangements, for the R&D, manufacture and/or commercialization of products and/or product candidates. In addition, we acquire product and R&D technology rights and establish R&D collaborations with third parties to enhance our strategic position within our industry by strengthening and diversifying our R&D capabilities, product pipeline and marketed-product base. These arrangements generally provide for nonrefundable, upfront license fees, development and commercial-performance milestone payments, cost sharing, royalty payments and/or profit sharing. The activities under these collaboration agreements are performed with no guarantee of either technological or commercial success, and each is unique in nature.

Trade secret protection for our unpatented confidential and proprietary information is important to us. To protect our trade secrets, we generally require counterparties to execute confidentiality agreements upon commencement of a business relationship with us. However, others could either develop independently the same or similar information or unlawfully obtain access to our information.

BeiGene, Ltd.

On January 2, 2020, we acquired a 20.5% stake in BeiGene for approximately $2.8 billion in cash as part of a collaboration to expand our oncology presence in China. Under the collaboration, BeiGene began selling XGEVA in 2020, BLINCYTO in 2021 and KYPROLIS in early 2022 in China, and Amgen shares profits and losses equally during the initial product-specific commercialization periods; thereafter, product rights may revert to Amgen, and Amgen will pay royalties to BeiGene on sales in China of such products for a specified period.

In addition, we jointly develop a portion of our oncology portfolio with BeiGene, which shares in global R&D costs by providing cash and development services of up to $1.25 billion. Upon regulatory approval, BeiGene will assume commercialization rights in China for a specified period, and Amgen and BeiGene will share profits equally until certain of these product rights revert to Amgen. Upon return of the product rights, Amgen will pay royalties to BeiGene on sales in China for a specified period. For product sales outside China, Amgen will also pay royalties to BeiGene.

Novartis

We are in a collaboration with Novartis to jointly develop and commercialize Aimovig. On January 31, 2022, concurrent with the settlement of the previously disclosed litigation between Amgen and Novartis we modified the terms of the collaboration. See Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

Arrangement through December 31, 2021

In the United States, Amgen and Novartis jointly developed and collaborated on the commercialization of Aimovig. Amgen, as the principal, recognized product sales of Aimovig in the United States, shared U.S. commercialization costs with Novartis and paid Novartis a significant royalty on net sales in the United States. Novartis held global co-development rights and exclusive commercial rights outside the United States and Japan for Aimovig (the ex-U.S. Novartis Rights). Novartis paid Amgen double-digit royalties on net sales of the product in the ex-U.S. Novartis Rights territories and funded a portion of global R&D expenses. In addition, Novartis was required to make a payment to Amgen of up to $100 million if certain commercial and expenditure thresholds were achieved with respect to Aimovig in the United States.

Arrangement after January 1, 2022

Pursuant to the amendment effective January 1, 2022, Novartis retains the ex-U.S. Novartis Rights and will continue to pay double-digit royalties on net sales in the ex-U.S. Novartis Rights territories. In the United States, Novartis will no longer collaborate with Amgen, share Aimovig commercialization costs or pay milestones and Amgen will no longer pay royalties to Novartis on sales of Aimovig. Amgen and Novartis will continue to share development expenses worldwide.

Amgen manufactures and supplies Aimovig worldwide.

DaVita Inc.

In January 2017, we entered into a six-year supply agreement with DaVita, which superseded the previously existing, seven-year supply agreement that commenced in 2012. Pursuant to the 2017 agreement, we supply EPOGEN and Aranesp in amounts necessary to meet specified annual percentages of DaVita's and its affiliates' requirements for ESAs used in providing dialysis services in the United States and Puerto Rico. Such percentages vary during the term of the agreement, but in each year are at least 90%. The agreement expires in December 2022. The agreement may be terminated by either party before expiration of its term in the event of certain breaches of the agreement by the other party.

For financial information about our significant collaborative arrangements, see Part IV—Note 8, Collaborations, to the Consolidated Financial Statements.

Human Capital Resources

Overview

Amgen's approach to human capital resource management starts with our mission to serve patients. We strive to serve patients by transforming the promise of science and biotechnology into therapies that have the power to restore health or save lives. The way we approach our business is guided by our Amgen Values:

Amgen Values			
Be Science-Based	Compete Intensely and Win	Create Value for Patients, Staff and Stockholders	Be Ethical
Trust and Respect Each Other	Ensure Quality	Work in Teams	Collaborate, Communicate and Be Accountable

Our staff are also guided by the Company's Code of Conduct, which is designed to help every person who does business on our behalf worldwide (including all staff, management, consultants, contract workers and temporary workers) to understand what is expected of them.

Our industry exists in a complex regulatory and reimbursement environment. The unique demands of our industry, together with the challenges of running an enterprise focused on the discovery, development, manufacture and commercialization of innovative medicines, requires a highly engaged and committed workforce.

As of December 31, 2021, Amgen had approximately 24,200 staff members in over 50 countries, and we have had relatively low global turnover rates. We also supplement our workforce with independent contractors, contingent workers and temporary workers, as needed. Outside of the United States, some of our employees are represented by unions or works councils. We consider our staff relations to be good, supported by regular assessments of staff engagement surveys on a wide range of topics (including engagement in the COVID-19 environment, diversity, inclusion and belonging, and maintaining a culture of compliance). We discuss the results of these surveys with our workforce and our Board of Directors.

Compensation, Benefits and Development

Our approach to employee compensation and benefits is designed to deliver cash, equity and benefit programs that are competitive with those offered by leading companies in the biotechnology and pharmaceutical industries to attract, motivate and retain talent with a focus on encouraging performance, promoting accountability and adherence to Company values and alignment with the interests of the Company's shareholders.

Our base pay program aims to compensate staff members relative to the value of the contributions of their role, which takes into account the skills, knowledge and abilities required to perform each position, as well as the experience brought to the job. We also provide annual incentive programs to reward our staff in alignment with achievement of Company-wide goals that are established annually and designed to drive aspects of our strategic priorities that support and advance our strategy across our Company. The majority of our staff members are also eligible for the grant of equity awards under our long-term incentive program that are designed to align the experience of these staff with that of our shareholders.

All staff also participate in a regular performance measurement process through which staff receive performance and development feedback, and pay is aligned to performance.

To support the development of our staff, we provide a variety of programs, including leadership development programs, virtual instructor-led courses and self-paced learning options.

Our benefit programs are also generally broad-based, promote health and overall well-being and emphasize saving for retirement. All regular U.S. staff members are eligible to participate in the same core health and welfare and retirement savings plans. Other U.S. employee benefits include medical plans, dental plans, adoption assistance, paid parental leave programs, access to childcare, employee assistance programs, employee stock purchase plan, flexible spending accounts, life, long-term care and business travel accident insurance, short and long-term disability benefits, wellness benefits and work-life resources and referrals. Comparable programs and benefits are available globally, with the same health and well-being intent, consistent with statutory requirements.

Our Compensation and Management Development Committee provides oversight of our compensation plans, policies and programs.

Safety and Wellness and Our Response to COVID-19

Creating a safe and healthy workplace for our staff is a priority at Amgen. Our goal is to have a world class safety record through safety leadership, risk management practices and integrating safety throughout our business processes. To foster our safety culture, we implement a comprehensive safety program, driving to understand and mitigate the root cause of safety incidents and manage and control variability. We use leading indicators to assess the effectiveness of our safety programs and make course corrections as needed. Additionally, we perform formal executive management review of functional safety performance for Operations, Global Commercial Operations and R&D on a quarterly basis with a focus on identifying early signals and taking action to drive continuous improvement.

In response to the COVID-19 pandemic and as part of our commitment to work to ensure the safety and well-being of our employees, for 2020 and much of 2021, we have activated our applicable business continuity plans, including having those of our employees who were able to work from home to do so, and for employees returning to the workplace and the field, we took additional safety measures, including implementing occupancy limits, restricting business travel, providing and requiring the use of personal protective equipment, temperature screening and COVID-19 testing to access our workplaces. Staff member access to our facilities has been in accordance with applicable government health and safety protocols and guidance issued in response to the COVID-19 pandemic, and in 2021 we required staff members in the United States and Puerto Rico to be fully vaccinated against COVID-19.[1] In the fourth quarter of 2021, we enabled our U.S. based workforce to return to the workplace for work that benefits from face-to-face interactions, while maintaining appropriate safety measures to ensure staff well-being. This approach intentionally combines the benefits of remote and in-person working at Amgen for the future as COVID-19 restrictions ease around the globe. We will continue to learn and adapt this approach as needed for the future.

Our Corporate Responsibility and Compliance Committee provides general oversight of our safety programs and initiatives, while our Board of Directors, as a whole, has overseen our specific responses to the COVID-19 pandemic.

Diversity, Inclusion and Belonging

We believe that a diverse and inclusive culture fosters innovation, which supports our ability to serve patients. Further, we also believe our global presence is strengthened by having a workforce that reflects the diversity of the patients we serve. It is with these beliefs in mind that we have continued to strengthen and grow our culture of diversity, inclusion and belonging. Our internal efforts include, in 2019, establishing a Diversity, Inclusion and Belonging Council chaired by our Chief Executive Officer. In 2020, we implemented a global unconscious-bias training program, and we launched an ongoing learning journey with tools and resources that guides staff on the role they play in creating diversity, inclusion and belonging throughout the organization. Each of Amgen’s ERGs is sponsored by an executive leader who reports to the CEO. We are leveraging our ERGs to represent and support the diversity of Amgen staff, while also providing opportunities to Amgen’s business and the community.

[1] The vaccination requirement did not apply to staff who were unable to receive a COVID-19 vaccine because of qualifying religious or medical reasons.

Employee Resource Groups	
Amgen Asian Association (AAA)	Amgen Black Employee Network (ABEN)
Ability Bettered through Leadership and Education (ABLE), a resource group for those with disabilities, visible and invisible, including those conditions also experienced by the patients that Amgen serves.	
Amgen Early Career Professionals (AECP)	Amgen Indian Subcontinent Network (AISN)
Amgen Latin Employee Network (ALEN)	Amgen LGBTQ and Allies Network (PRIDE)
Amgen Veterans Employees Network (AVEN)	Women Empowered to be Exceptional (WE2)
Women in Information Systems Enrichment (WISE)	Amgen International Network (AIN)

For 2021, to tangibly deepen and drive our diversity, inclusion and belonging activities enterprise-wide and actively communicate our culture of belonging to all staff, we established an annual diversity, inclusion and belonging goal for leaders at executive director and above levels to establish, document and execute diversity, inclusion and belonging action plans, with a target goal of 75% participation, which we achieved and exceeded in 2021.

In areas of underrepresentation, we develop plans with a goal of bringing our representation in line with availability. We engage in outreach efforts to attract, retain and advance more women and minorities in our workforce. For example, we have worked to enhance our diverse candidate recruiting pool by developing relationships with organizations that can serve as a source of diverse candidates, such as the National Black MBA Association and National Sales Network, as well as historically black colleges and universities. In 2021, a fellowship program between Amgen and Howard University was established to expand the talent pool and diversify ranks in research and development.

Additionally, at the end of 2020, we became a founding member of OneTen, a coalition of the world's largest, best-known companies, that aims to hire one million Black Americans (with a specific focus on those without four-year college degrees) into good-paying, family-sustaining jobs over the next ten years. As a member of OneTen, Amgen is taking a leadership role in the greater Los Angeles region, where the company is headquartered, to help expand the coalition organizations that share our desire to offer opportunities to diverse talent. Other examples of actions that we are taking in this area include investment and participation in the Healthcare Businesswomen's Association (a global organization focused on development and business networking for women in healthcare) and the UCLA Anderson School of Management leadership programs for women and underrepresented talent.

Our 2020 Consolidated EEO-1 Report can be viewed on our website at www.amgen.com (the website address is not intended to function as a hyperlink, and the information contained in our website is not intended to be a part of this filing).

In 2021, our Corporate Responsibility and Compliance Committee provided oversight of our policies, programs and initiatives focusing on workforce diversity and inclusion. In 2022, oversight of diversity, inclusion and belonging shifted to the Compensation and Management Development Committee, which also provides oversight of our human capital management.

Information about Our Executive Officers

The executive officers of the Company as of February 16, 2022, are set forth below.

Mr. Robert A. Bradway, age 59, has served as a director of the Company since 2011 and Chairman of the Board of Directors since 2013. Mr. Bradway has been the Company's President since 2010 and Chief Executive Officer since 2012. From 2010 to 2012, Mr. Bradway served as the Company's President and Chief Operating Officer. Mr. Bradway joined the Company in 2006 as Vice President, Operations Strategy, and served as Executive Vice President and Chief Financial Officer from 2007 to 2010. Prior to joining the Company, Mr. Bradway was a Managing Director at Morgan Stanley in London, where, beginning in 2001, he had responsibility for the firm's banking department and corporate finance activities in Europe. Mr. Bradway has been a director of The Boeing Company, an aerospace company and manufacturer of commercial airplanes, defense, space and securities systems, since 2016. He has served on the board of trustees of the University of Southern California since 2014. From 2011 to 2017, Mr. Bradway was a director of Norfolk Southern Corporation, a transportation company.

Mr. Murdo Gordon, age 55, became Executive Vice President, Global Commercial Operations, in 2018. Prior to joining the Company, Mr. Gordon was Chief Commercial Officer at BMS, a pharmaceutical company, from 2016 to 2018. Mr. Gordon served as Head of Worldwide Markets at BMS from 2015 to 2016. Prior to this, Mr. Gordon served in a variety of leadership roles at BMS for more than 25 years.

Mr. Jonathan P. Graham, age 61, became Executive Vice President, General Counsel and Secretary in 2019. Mr. Graham joined the Company in 2015. From 2015 to 2019, Mr. Graham was Senior Vice President, General Counsel and Secretary. Prior to joining Amgen, from 2006 to 2015, Mr. Graham was Senior Vice President and General Counsel at Danaher Corporation. From 2004 to 2006, Mr. Graham was Vice President, Litigation and Legal Policy, at General Electric Company (GE). Prior to GE, Mr. Graham was a partner at Williams & Connolly LLP.

Mr. Peter H. Griffith, age 63, became Executive Vice President and Chief Financial Officer in 2020. Mr. Griffith joined the Company in 2019 as Executive Vice President, Finance. Prior to joining Amgen, Mr. Griffith was President of Sherwood Canyon Group, LLC, a private equity firm. From 1997 to 2019, Mr. Griffith was a partner at EY, an accounting and professional services firm, and served in a variety of senior leadership roles, with his last position being Global Vice Chair, Corporate Development. Prior to EY, Mr. Griffith was a Managing Director and head of the investment banking division of Wedbush Securities Inc.

Ms. Nancy A. Grygiel, age 54, became Senior Vice President and Chief Compliance Officer in 2020. Ms. Grygiel joined the Company in 2015. From 2016 to 2020, Ms. Grygiel was Vice President, Compliance. Prior to joining Amgen, from 2011 to 2015, Ms. Grygiel served as Vice President, Compliance, Corporate & International, at Allergan, Inc. (Allergan). Prior to Allergan, Ms. Grygiel held several management positions at Mylan Pharmaceuticals, Inc.

Ms. Lori A. Johnston, age 57, became Executive Vice President, Human Resources, in 2019. From 2016 to 2019, Ms. Johnston served as the Company's Senior Vice President, Human Resources. From 2012 to 2016, Ms. Johnston was Executive Vice President and Chief Administrative Officer of Celanese Corporation (Celanese). Prior to Celanese, Ms. Johnston served in a series of progressive leadership roles at Amgen from 2001 to 2012, with her last position being Vice President, Human Resources. Prior to joining the Company, Ms. Johnston held human resources and other positions at Dell Inc.

Ms. Rachna Khosla, age 49, became Senior Vice President, Business Development, in 2021. Ms. Khosla joined the Company in 2013 as Corporate Development Director. From 2016 to 2018, Ms. Khosla was Executive Director, Business Development, and from 2018 to 2021, was Vice President, Business Development. Prior to joining the Company, Ms. Khosla was a Director at Lazard Ltd. (Lazard) responsible for healthcare mergers and acquisitions. Prior to Lazard, Ms. Khosla had various roles at Credit Suisse Group AG, Sanofi Aventis, Aventis Capital, J.P. Morgan Chase & Co., and Salomon Brothers, Inc.

Dr. David M. Reese, age 59, became Executive Vice President, R&D, in 2018. Dr. Reese joined the Company in 2005 and has held leadership roles in development, medical sciences and discovery research. Dr. Reese was Senior Vice President, Translational Sciences and Oncology, from 2017 to 2018 and Senior Vice President, Translational Sciences, from 2015 to 2017. Prior to joining Amgen, Dr. Reese was director of Clinical Research at the Breast Cancer International Research Group from 2001 to 2003 and a cofounder, president and chief medical officer of Translational Oncology Research International, a not-for-profit academic clinical research organization, from 2003 to 2005. Dr. Reese previously served on the faculty at UCLA and the University of California, San Francisco.

Mr. Esteban Santos, age 54, became Executive Vice President, Operations, in 2016. Mr. Santos joined the Company in 2007 as Executive Director, Manufacturing Technologies. From 2008 to 2013, Mr. Santos held a number of Vice President roles at the Company in engineering, manufacturing, site operations and drug product. From 2013 to 2016, Mr. Santos was Senior Vice President, Manufacturing. Prior to joining the Company, Mr. Santos served as Site General Manager of J&J's Cordis operation in Puerto Rico. Prior to J&J, Mr. Santos held several management positions in GE's industrial and transportation businesses.

Geographic Area Financial Information

For financial information concerning the geographic areas in which we operate, see Part IV—Note 3, Revenues and Note 11, Property, plant and equipment, to the Consolidated Financial Statements.

Investor Information

Financial and other information about us is available on our website at www.amgen.com. We make available on our website, free of charge, copies of our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with or furnish it to the U.S. Securities and Exchange Commission (SEC). In addition, we have previously filed registration statements and other documents with the SEC. Any document we file may be inspected without charge at the SEC's website at www.sec.gov. (These website addresses are not intended to function as hyperlinks, and the information contained in our website and in the SEC's website is not intended to be a part of this filing.)

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.

SUMMARY

Risks Related to Economic Conditions and Operating a Global Business, Including During the COVID-19 Pandemic

- The COVID-19 pandemic, and the public and governmental effort to mitigate against the spread of the disease, have had, and are expected to continue to have, an adverse effect, and may have a material adverse effect, on our clinical trials, operations, manufacturing, supply chains, distribution systems, product development, product sales, business and results of operations.
- A breakdown, cyberattack or information security breach could 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.
- Our sales and operations are subject to the risks of doing business internationally, including in emerging markets.

Risks Related to Government Regulations and Third-Party Policies

- 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.
- Guidelines and recommendations published by various organizations can reduce the use of our products.
- The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability.
- Our business may be affected by litigation and government investigations.

Risks Related to Competition

- Our products face substantial competition and our product candidates are also likely to face substantial competition.
- Our intellectual property positions may be challenged, invalidated or circumvented, or we may fail to prevail in current and future intellectual property litigation.
- We currently face competition from biosimilars and generics and expect to face increasing competition from biosimilars and generics in the future.
- Concentration of sales at certain of our wholesaler distributors and at one free-standing dialysis clinic business and consolidation of private payers may negatively affect our business.

Risks Related to Research and Development

- We may not be able to develop commercial products despite significant investments in R&D.
- We must conduct clinical trials in humans before we commercialize and sell any of our product candidates or existing products for new indications.
- Our current products and products in development cannot be sold without regulatory approval.
- Some of our products are used with drug delivery or companion diagnostic devices that have their own regulatory, manufacturing and other risks.
- Some of our pharmaceutical pipeline and our commercial product sales rely on collaborations with third parties, which may adversely affect the development and sale of our products.
- 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.

Risks Related to Operations

- We perform a substantial majority of our commercial manufacturing activities at our facility in the U.S. territory of Puerto Rico and a substantial majority of our clinical manufacturing activities at our facility in Thousand Oaks, California; significant disruptions or production failures at these facilities could significantly impair our ability to supply our products or continue our clinical trials.
- We rely on third-party suppliers for certain of our raw materials, medical devices and components.
- Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.
- Our business and operations may be negatively affected by the failure, or perceived failure, of achieving our environmental, social and governance objectives.
- The effects of global climate change and related natural disasters could negatively affect our business and operations.

General Risk Factors

- Global economic conditions may negatively affect us and may magnify certain risks that affect our business.
- Our stock price is volatile.
- We may not be able to access the capital and credit markets on terms that are favorable to us, or at all.

RISKS RELATED TO ECONOMIC CONDITIONS AND OPERATING A GLOBAL BUSINESS, INCLUDING DURING THE COVID-19 PANDEMIC

The COVID-19 pandemic, and the public and governmental effort to mitigate against the spread of the disease, have had, and are expected to continue to have, an adverse effect, and may have a material adverse effect, on our clinical trials, operations, manufacturing, supply chains, distribution systems, product development, product sales, business and results of operations.

The novel coronavirus identified in late 2019, SARS-CoV-2, which causes the disease known as COVID-19, is an ongoing global pandemic that has resulted in public and governmental efforts to contain or slow the spread of the disease, including widespread shelter-in-place orders, social distancing interventions, quarantines, travel restrictions and various forms of operational shutdowns. The COVID-19 pandemic and the resulting measures implemented in response to the pandemic are adversely affecting, and are expected to continue to adversely affect, our business (including our R&D, clinical trials, operations, manufacturing, supply chains, distribution systems, product development and sales activities), the business activities of our suppliers, customers, third-party payers and our patients. See *Our current products and products in development cannot be sold without regulatory approval*; see also *We must conduct clinical trials in humans before we commercialize and sell any of our product candidates or existing products for new indications*. Due to the pandemic and these measures and their effects, we have experienced, and expect to continue to experience, unpredictable reductions in demand for certain of our products, exacerbated by COVID-19 surges resulting in repeated shutdowns and/or disruptions in certain geographies.

Federal, state and local, and international governmental policies and initiatives designed to reduce the transmission of COVID-19 also have resulted in the cancellation or delay of diagnostic, elective, specialty and other procedures and

appointments to avoid non-essential patient exposure to medical environments and potential infection with COVID-19 and to focus limited resources and personnel capacity toward the treatment of COVID-19. For example, an NPR/Harvard poll in 2021 found that, with hospitals crowded from COVID-19, one in five U.S. households has had to delay care for serious illnesses. These measures and challenges will likely continue to varying degrees for the duration of the pandemic and have significantly reduced patient access to, and administration of, certain of our drugs. For example, Prolia requires administration by a healthcare provider in doctors' offices or other healthcare settings that are affected by COVID-19. The U.S. label for Prolia instructs healthcare professionals who discontinue Prolia to transition the patient to an alternative antiresorptive, including oral treatments that do not require administration by a healthcare provider. Further, as a result of COVID-19, oncology patients, in consultation with their doctors, may be selecting therapies that are less immunosuppressive or therapies that do not require administration in a hospital setting, potentially adversely affecting sales of certain of our products. Also, new patients have been, and are expected to continue to be, less likely to be diagnosed and/or to start therapeutics during the pandemic, and these effects, together with the lower treatment rates during the pandemic, have had, and are expected to continue to have, a cumulative negative effect on the commercial performance of our business. The decrease in diagnoses over the course of the pandemic has suppressed the volume of new patients starting treatment, which we expect to continue to impact our business. Once the pandemic subsides, we anticipate there could be a backlog of patients seeking appointments with physicians relating to a variety of medical conditions, and as a result, patients seeking treatment with certain of our products may have to navigate lower provider capacity, and this lower provider capacity could have a continued adverse effect on our sales following the opening up of various geographies and/or the end of the pandemic. Further, the effects of the COVID-19 pandemic may result in long-term shifts in preferences among healthcare professionals and patients toward treatments that do not require administration by healthcare professionals or visits to medical facilities.

As the pandemic continues, and if conditions worsen or if the duration of the pandemic extends significantly, we expect to experience additional adverse effects on our development, operational and commercial activities, customer purchases and our collections of accounts receivable. It remains uncertain the degree to which these adverse effects would impact our future operational and commercial activities, customer purchases and our collections as conditions begin to improve. There was a resurgence in COVID-19 infections in numerous jurisdictions in 2021, resulting in the reinstatement of stricter restrictions and shutdowns in a number of jurisdictions, including in the United States, Europe and Asia Pacific regions. It is expected that the pandemic will continue to ebb and flow, with different jurisdictions having higher levels of infections than others over the course of the pandemic. New variants of the SARS-CoV-2 virus have emerged, including the delta and omicron variants, and have been shown to be present in many geographies and appear to spread more easily and quickly than other variants. Further, although some studies suggest that antibodies generated with currently authorized vaccines may be effective against these variants, it remains uncertain whether currently available vaccines will retain their efficacy against future variants of the virus. Further, even while vaccine booster shots are available for certain patients, persistent vaccine hesitancy may result in under-vaccinated populations which may prolong the duration of the COVID-19 pandemic and continue to disrupt the availability of healthcare services to the patients we serve. Jurisdictions may implement, continue or reinstate border closures, impose or reimpose prolonged quarantines and further restrict travel and business activity. These measures could significantly affect our ability to support our operations and customers and the ability of our employees to get to their workplaces to discover, study, develop and produce our product candidates and products, disrupt the movement of our products through the supply chain, and further prevent or discourage patients from participating in our clinical trials, seeking healthcare services and the administration of certain of our products. The increased availability of remote working arrangements in response to the COVID-19 pandemic has expanded the pool of companies that can compete for our employees and employment candidates. Further, in connection with the global outbreak and spread of COVID-19 and in an effort to increase the wider availability of needed medical products, we or our suppliers may elect to, or governments may require us or our suppliers to, allocate manufacturing capacity (for example pursuant to the U.S. Defense Production Act) in a way that adversely affects our regular operations, customer relationships and financial results. In the United States, on January 21, 2021, President Biden issued an Executive Order instructing federal agencies to use all available legal authorities, including the Defense Production Act, to improve current and future pandemic response and biological threat preparedness. The rapid reallocation of resources for the treatment and prevention of COVID-19 (including the production of COVID-19 vaccinations or related therapies, such as our agreement to contribute to the production of COVID-19 antibody therapies for Lilly) and/or disruptions and shortages in the global supply chain caused by the pandemic, could also result in increased competition for, or reduced availability of, materials or components used in the development, manufacturing, distribution, or administration of our products. For example, during the second quarter of 2021, an industry-wide shortage of certain lab kit supplies necessary for some activities that support our clinical trials has developed that we are actively monitoring and managing. We have also experienced challenges in obtaining certain COVID-19-related supplies, including COVID-19 antigen rapid test kits for our staff, as a result of high demand and limited supplies during the omicron variant surge. In addition, unpredictable increases in demand for certain of our products could exceed our capacity to meet such demand, which could adversely affect our financial results and customer relationships.

The COVID-19 pandemic and the volatile global economic conditions stemming from it may precipitate or amplify the other risks described in this "Risk Factors" section, which could materially adversely affect our business, operations and

financial condition and results. For example, if a natural disaster or other potentially disruptive event occurs concurrently with the COVID-19 pandemic, such disaster or event could deplete our inventory levels and we could experience a disruption to our manufacturing or ability to supply our products.

The rapid development and fluidity of the pandemic precludes any prediction as to the ultimate effect of COVID-19 on us. The duration of the measures being taken by the authorities to mitigate against the spread of COVID-19 (including the distribution and/or availability of vaccines and boosters), and the extent to which such measures are effective, if at all, remain highly uncertain. The magnitude and degree of COVID-19's adverse effect on our business (including our product development, product sales, operating results and resulting cash flows) and financial condition will be driven by the severity and duration of the pandemic, the pandemic's effect on the United States and global economies and the timing, scope and effectiveness of federal, state, local and international governmental responses to the pandemic. If mitigation of the pandemic continues to require further shelter-in-place and shutdown orders and/or restrictions on individual and/or group conduct, any adverse effects of the COVID-19 pandemic will likely grow and could be enduring, and our business and financial position could be materially adversely affected.

A breakdown, cyberattack or information security breach could 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 software, 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 are working remotely, our reliance on our and third-party information technology systems has increased substantially and is expected to continue to increase. The complexity and interconnected nature of our systems makes them potentially vulnerable to breakdown or other service interruptions. Upgrades or changes to our systems or the software that we use may result in the introduction of new cybersecurity vulnerabilities and risks. Our systems are also subject to frequent cyberattacks. As the cyber-threat landscape evolves, these attacks are growing in frequency, sophistication and intensity, and are becoming increasingly difficult to detect. Such attacks could include the use of harmful and virulent malware, including ransomware or other denials of service, that can be deployed through various means, including the software supply chain, e-mail, malicious websites and/or the use of social engineering. 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 governmental 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 in certain markets were negatively affected. In December 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.

Our systems also contain and utilize a high volume of sensitive data, including intellectual property, trade secrets, financial information, regulatory information, strategic plans, sales trends and forecasts, litigation materials and/or personal information belonging to us, our staff, our patients, customers and/or other parties. In some cases, we utilize third-party service providers to process, store, manage or transmit such data, which may increase 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), 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. For example, a supplier recently 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. Although the supplier data breach did not result in a material adverse effect 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. Another vendor experienced a cyberattack and, while initially reporting that our information was not involved, the vendor subsequently informed us that the attacker had accessed limited, non-significant information. Although this breach did not have a significant adverse effect on us, we may not receive timely reporting of future breaches. Cyberattackers are increasingly exploiting vulnerabilities in commercially available software from shared or open-source code. We rely on third party commercial software that 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 widely used software library that is 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 or may acquire face similar risks, and security breaches of their systems or service outages could adversely affect our 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 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.

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 continue to invest in the monitoring, protection and resilience of our critical and/or sensitive data and systems. However, 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 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 European Union's General Data Protection Regulation, which became effective in May 2018, and the California Consumer Privacy Act of 2018 (CCPA), which became effective in January 2020, both of which provide for substantial penalties for non-compliance. 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. Since then, Virginia and Colorado both passed similar consumer privacy laws that will go into effect in 2023. Other jurisdictions where we operate have passed, or continue to propose, similar legislation and/or regulations. 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.

Our sales and operations are subject to the risks of doing business internationally, including in emerging markets.

As we continue our expansion efforts in emerging markets around the world, through acquisitions and licensing transactions as well as through the development and introduction, both independently and through collaborations such as our collaboration with BeiGene, of our products in new markets, we face numerous risks to our business. There is no guarantee that our efforts and strategies to expand sales in emerging markets will succeed. Our international business, including in China and emerging market countries, may be especially vulnerable to periods of global and local political, legal, regulatory and financial instability, including issues of geopolitical relations, the imposition of international sanctions in response to certain state actions and/or sovereign debt issues. If relations between the United States and other governments deteriorate, our business and investments such markets may also be adversely affected. We may also be required to increase our reliance on third-party agents and unfamiliar operations and arrangements including those previously utilized by companies we partner with or acquire

in emerging markets. See *We must conduct clinical trials in humans before we commercialize and sell any of our product candidates or existing products for new indications*. Our expansion efforts in China and emerging markets around the world is dependent upon the establishment of an environment that is predictable, navigable and supportive of biopharmaceutical innovation, sustained access for our products and predictable pricing controls. For example, China continues to strengthen regulations on the collection, use and transmission of Chinese human genetic resources, and has expanded regulations on the conduct of biotechnology R&D activities in China. Our applications to the HGRAC seeking approval to conduct clinical trials in China are delayed pending further guidance from HGRAC. Our international operations and business may also be subject to less protective intellectual property or other applicable laws, diverse data privacy and protection requirements, changing tax laws and tariffs, trade restrictions or other barriers designed to protect industry in the home country against foreign competition, far-reaching antibribery and anticorruption laws and regulations and/or evolving legal and regulatory environments.

As we expand internationally, we are subject to fluctuations in foreign currency exchange rates relative to the U.S. dollar. While we have a program in place that is designed to reduce our exposure to foreign currency exchange rate fluctuations through foreign currency hedging arrangements, our hedging efforts do not completely offset the effect of these fluctuations on our revenues and earnings. In addition, we have a number of financial instruments referencing the LIBOR. On July 27, 2017, the U.K. Financial Conduct Authority, which regulates LIBOR, announced that it will no longer require banks to submit rates for the calculation of LIBOR to the LIBOR administrator after 2021, and it is anticipated that LIBOR will be completely phased out and replaced by 2023. In March 2020 and in January 2021, the FASB issued a new accounting standard to ease the financial burdens of the expected market transition from LIBOR and other interbank offered rates to alternative reference rates. While it appears likely that SOFR will be the replacement reference rate adopted in the market, the specific mechanisms to replace LIBOR in our existing LIBOR-linked financial instruments have not been finalized. As such, the replacement of LIBOR could have an adverse effect on the market for, or value of, our LIBOR-linked financial instruments. See Part IV—Note 1, Summary of significant accounting policies—Recent accounting pronouncements. We are also subject to the economic and political uncertainties stemming from the United Kingdom's exit from the EU, commonly referred to as "Brexit," which occurred on January 31, 2020. While our manufacturing and packaging activities take place largely outside the United Kingdom, minimizing the need to make costly and significant changes to those operations, we have nevertheless been working to put in place contingency plans to attempt to mitigate the effects of Brexit on us. Overall, the legal and operational challenges of our international business operations, along with government controls, the challenges of attracting and retaining qualified personnel and obtaining and/or maintaining necessary regulatory or pricing approvals of our products, may result in material adverse effects on our international product sales, business and results of operations.

RISKS RELATED TO GOVERNMENT REGULATIONS AND THIRD-PARTY POLICIES

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. These 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 whom 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 in an attempt to lower drug prices. These include proposals that would allow the U.S. government to negotiate drug prices directly, limit drug reimbursement in Medicare and/or the commercial market based on reference prices or permit importation of drugs from Canada. Additional proposals would require a rebate to the government for any price increase in excess of the Consumer Price Index for All Urban Consumers and/or to shift some of the costs of these Medicare Part D reforms to manufacturers to offset the cost. Certain proposals focused on drug pricing have been adopted and additional proposals are likely to be adopted and implemented in some form.

—Changing U.S. federal coverage and reimbursement policies and practices have affected, and may continue to affect access to, pricing 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. Our business has been and will continue to be affected by legislative actions changing U.S. federal reimbursement policy. Congress has been focused on drug pricing reforms and oversight since 2018, and this activity is still ongoing and has intensified. In 2019, 2020 and 2021, a number of Congressional committees debated drug pricing reform proposals and, in 2020, Amgen participated in House Oversight and Reform Committee hearings on drug pricing practices. In 2019, the Senate Finance Committee advanced a bill that would, among other things, penalize pharmaceutical manufacturers for raising prices on drugs

covered by Medicare Parts B and/or D faster than the rate of inflation, cap out-of-pocket expenses for Medicare Part D beneficiaries and require higher/additional manufacturer discounts in Medicare Part D. Additionally, in late 2019, a drug-pricing bill, H.R. 3, passed the House of Representatives, which would, among other things, enable direct price negotiations by the federal government on certain drugs (with the maximum price paid by Medicare capped by prices derived from an international index), include a penalty for failing to reach agreement with the government and require that manufacturers offer these negotiated prices to other payers. In 2021, proposals from H.R. 3 were incorporated and adapted into other proposed legislation. These proposals, which included penalties if drug price benchmarks rise faster than inflation, Medicare price setting for certain drugs paid for under Parts B and D (whereby manufacturers must accept a price established by the government or face a penalty on all U.S. sales), and Part D redesign including a cap on beneficiary spending and a new manufacturer discount program, are also likely to be considered in a reconciliation bill that remains to be further debated between the Senate, House and White House. This framework remains in discussion with policymakers in Congress and the Administration. There are other outstanding proposals that, if enacted and implemented in whole or in part, could also affect access to and sales of our products, including, but not limited to, proposals to allow importation of prescription medications from Canada or other countries. In July 2021, the Administration issued an Executive Order designed to address anticompetitive behavior across multiple sectors, and for the healthcare sector, called for, among other things, the FDA to work with states and Indian Tribes to develop prescription drug importation programs, more scrutiny of anticompetitive activity by the FTC, emphasized the need for actions to allow for greater competition from generics and biosimilars, and included a process and timeline for federal agencies to deliver ideas to address drug pricing to the Administration. Subsequently, in September 2021, HHS released a report that presented guiding principles for the Administration's drug pricing proposals, including changes to promote competition throughout the prescription drug industry, highlighting potential legislative policies that Congress could pursue (including drug price negotiation in Medicare Parts B and D, making those negotiated prices available to commercial plans and legislation to speed the entry of biosimilar and generic drugs) and examples of potential administrative tools available to the HHS (including testing various models and enhanced focus of the FTC and the USPTO to address impediments to generic drug and biosimilar competition). Also, in response to the July 2021 Executive Order, the FDA sent a letter to the USPTO describing ways to strengthen coordination between the two agencies, offering training to help identify prior art, and seeking USPTO's views on practices that extend market exclusivities, whether pharmaceutical patent examiners need additional resources, and the effect of post-grant challenges at the PTAB on drug patents.

Legislation enacted in 2021 has also contained drug pricing reforms, including the Infrastructure Investment and Jobs Act and the American Rescue Plan Act of 2021 that include provisions requiring, starting in 2023, manufacturers to provide refunds to the government for discarded amounts of drugs from single use containers under Medicare Part B, and starting in 2024, increases the Medicaid rebate liability for certain medicines that raise prices in excess of inflation, respectively. The Infrastructure Investment and Jobs Act also delays implementation until January 1, 2026 of a final rule issued by HHS, that revises regulations under the federal antikickback statute to encourage PBMs to use rebates received from biopharmaceutical manufacturers to reduce patient cost-sharing at the point of sale under Medicare Part D. This rule is also subject to litigation, has numerous logistical hurdles to overcome before it can be effectively implemented, and it is unclear how PBMs will respond to the implementation of such rule. Further, a permanent repeal of this rule is also being considered in other legislation.

Our business has been, and is expected to continue to be, affected by changes in U.S. federal reimbursement policy resulting from federal regulations and federal demonstration projects. Over the past several years, federal agencies, including the CMS, announced a number of recommendations, policies, proposals and demonstration projects addressing drug pricing. The Administration has also developed and sought to advance a range of policy proposals that could impact U.S. federal reimbursement policy for drugs and biologics, including changes to Medicare Parts B and D. For example, in 2020, in response to an Executive Order, HHS released a rule to allow states to potentially enable the importation of certain drugs from Canada. While this rule is in litigation, should such litigation be unsuccessful, it could allow for the importation of Canadian versions of certain of Amgen's products (including Otezla), that could have a material adverse effect on Amgen's business. Also in response to an Executive Order, CMS released an interim final rule to implement the MFN pricing approach aimed at setting the reimbursement rate for 50 Medicare Part B drugs (including our products, such as Prolia, XGEVA, KYPROLIS, Neulasta, Nplate, EPOGEN and Aranesp) equal to the lowest adjusted price in 22 OECD nations for these drugs. In December 2021, subsequent to challenges, including procedural defects, CMS announced it was withdrawing the MFN rule. Notwithstanding the withdrawal of the rule, the MFN rule's approach to drug pricing and other similar approaches remain of interest to policymakers. In connection with its withdrawal of the MFN rule, CMS noted that it will "… explore all options to incorporate value into payments for Medicare Part B drugs, improve beneficiaries' access to evidence-based care, and reduce drug spending for consumers and throughout the health care system." Further, we expect continued significant focus on healthcare and similar drug pricing proposals for the foreseeable future, including proposals under which the government would set drug prices or limit drug reimbursement.

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. For example, we believe that CMS' Oncology Care Model demonstration (which has since 2016 provided participating physician practices with performance-based financial

incentives that aim to manage or reduce Medicare costs without negatively affecting the efficacy of care) has reduced utilization of certain of our oncology products by participating physician practices and expect that it will continue to do so in the future. Further, HHS's September 2021 comprehensive plan to address drug pricing included potential future mandatory models that link payment for prescription drugs and biologics to factors such as: improved patient outcomes, reductions in health disparities, patient affordability and lower overall costs; bundled payment models; total cost of care models; models in which Medicare Part B savings from utilization of biosimilars, generics, or other high-value products are shared between prescribing providers and the government; additional Medicare Part D cost-sharing support for biosimilars and generics; and potential expansion of the Part D Senior Savings Model to additional classes of drugs. CMS also recently proposed a national coverage determination for Medicare which limits coverage of certain Alzheimer's disease medications approved by the FDA only to patients in qualifying clinical trials, suggesting that regulatory approval does not necessarily result in full Medicare coverage. In this dynamic environment, particularly in light of the pressures on healthcare budgets as a result of the pandemic, we are unable to predict which or how many federal policy, legislative, regulatory, executive or administrative changes may ultimately be, or effectively estimate the consequences to our business if, enacted and implemented. However, to the extent that these or other federal government initiatives 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 U.S. products, or limit our ability to offer co-pay payment assistance to commercial patients, such actions could have a material adverse effect on our business and results of operations.

We also face risks relating to the reporting of pricing data that affects the reimbursement of and discounts provided for our products. U.S. government price reporting regulations are complex and may require a biopharmaceutical manufacturer 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 also may be required to pay additional rebates and provide additional discounts. CMS finalized a rule in December 2020 providing that, starting January 1, 2023, unless a manufacturer can ensure that the full amount of manufacturer patient assistance programs is passed on to the patient, such amount will be treated as a price reduction that will be taken into account when reporting our Best Price and/or Average Manufacturer Price. Given the use by PBMs and insurers of copay accumulator adjustment programs to apply such patient assistance for the benefit of such companies and not to defray costs to patients, it could be difficult to impossible for manufacturers to ensure that the full value of such amounts is being passed on to the patient. This new policy, if implemented, would have significant implications for our ability to offer copay assistance programs. Although implementation has been delayed by the current Administration, the prior Administration finalized a rule (which was to be effective January 1, 2022) mandating price and cost-sharing transparency for almost all health plans and insurers in the individual and group commercial markets. Additionally, the Administration recently finalized transparency provisions required under the Consolidated Appropriations Act of 2021 for health plans and insurer reporting of certain drug pricing information by December 27, 2022, and each June thereafter, resulting in a biennial public report highlighting drug pricing trends and the impact of prescription drug costs on premiums and out-of-pocket costs. It is unclear how group health plans and health insurers may respond.

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

At the state level, government actions or ballot initiatives can also affect how our products are covered and reimbursed and/or create additional pressure on our pricing decisions. A number of states have adopted, and many other states are considering, drug importation programs or other new pricing actions, including proposals designed to require biopharmaceutical manufacturers publicly to report proprietary pricing information, limit price increases or place a maximum price ceiling or cap on biopharmaceutical products. Existing and proposed state pricing laws have added complexity to the pricing of drugs and may already be affecting industry pricing decisions. For example, a California law, the constitutionality of which is currently being challenged, purports to require biopharmaceutical manufacturers to notify health insurers and government health plans at least 60 days before scheduled prescription drug price increases that exceed certain thresholds. Similar laws exist in Oregon and Washington. States are also seeking to change the way they pay for drugs for patients covered by state programs. California adopted a 2020-21 budget that incorporates international pricing into Medicaid supplemental rebate negotiations and allows its Medicaid program to seek federal approval to extend supplemental rebates to non-Medicaid populations. New York, Massachusetts and Ohio have established Medicaid drug spending caps, and additional states may consider doing so as they face budget deficits from the effects of COVID-19. Additionally, Colorado, Florida, Maine, New Hampshire, New Mexico and Vermont have enacted laws, and several other states have proposed laws, to facilitate the importation of drugs from Canada. 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 the consolidation 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 copay or coinsurance obligations and more significant limitations on patients' use of manufacturer commercial copay assistance programs. Further, government regulation of payers may affect these trends. For example, CMS finalized a policy in May 2020 (for plan years starting on or after January 1, 2021, and remains standing policy for 2022) that has caused commercial payers to more widely adopt copay accumulator adjustment programs. Payers 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, particularly in treatment areas where the payer has taken the position that multiple branded products are therapeutically comparable. Payers also control costs by imposing restrictions on access to or usage of our products, such as Step Therapy, or requiring that patients receive the payer's prior authorization before covering the product or that patients use a mail-order pharmacy or a limited network of payer fully-owned mail-order or specialty pharmacies. Payers have also chosen to exclude certain indications for which our products are approved or chosen to exclude coverage entirely. For example, some payers require physicians to demonstrate or document that the patients for whom Repatha has been prescribed meet payer utilization management criteria, and these requirements have limited, 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. However, affordability of patient out-of-pocket co-pay cost has limited and may continue to limit patient use. For example, in late 2018 and early 2019, in response to a very high percentage of Medicare patients abandoning their Repatha prescriptions rather than pay their co-pay payment, we introduced a set of new National Drug Codes to make Repatha available at a lower list price to attempt to address affordability for patients, particularly those on Medicare, and on December 31, 2019, we discontinued the higher list price option for Repatha. Despite these net and list price reductions, some payers have restricted, and may continue to restrict, patient access and have and may continue to change formulary coverage for Repatha, seek further discounts or rebates or take other actions that could reduce our sales of Repatha. These factors have limited, and may continue to limit, patient affordability and use, and negatively affect 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 2021, the top five integrated health plans and PBMs controlled about 85% of all pharmacy prescriptions. The consolidation among insurers, PBMs and other payers, including through 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. In 2019, 2020 and 2021, CVS, Express Scripts and United Health Group, respectively, each created Rebate Management Organizations that further increase their respective leverage to negotiate deeper discounts. Ultimately, additional discounts, rebates, fees, coverage or 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. See *Concentration of sales at certain of our wholesaler distributors and at one free-standing dialysis clinic business and consolidation of private payers may negatively affect our business.*

—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. See Part I, Item 1. Business—Reimbursement. IRP 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. IRP policies can change quickly and frequently and may not reflect differences in the burden of disease, indications, market structures, or affordability differences across countries or regions. Other expenditure control practices, including but not limited to the use of revenue clawbacks, rebates and percentage caps on price increases, are used in various foreign jurisdictions as well. In addition, countries may refuse to reimburse or may restrict the reimbursed population for a product when their national health technology assessments do not consider a medicine to demonstrate sufficient clinical benefit beyond existing therapies or to meet certain cost effectiveness thresholds. For example, despite the EMA's approval of Repatha for the treatment of patients with established atherosclerotic disease, the reimbursement for Repatha in France prior to 2020 was limited to a narrower patient population (such as those with HoFH) following a national health technology assessment, which had limited our efforts in France to expand Repatha access to the broader patient population covered by the approved label. Some countries decide on reimbursement between potentially competing products through national or regional tenders that often result in one product receiving most or all of the sales in that country or region. Failure to obtain coverage and reimbursement for our products, a deterioration in their existing coverage and

reimbursement, or a decline in the timeliness or certainty of payment by payers to physicians and other providers has negatively affected, and may further negatively affect, the ability or willingness of healthcare providers to prescribe our products for their patients and otherwise negatively affect the use of our products or the prices we realize for them. Such changes have had, and could in the future have, a material adverse effect on our product sales, business and results of operations.

Guidelines and recommendations published by various organizations can reduce the use of our products.

Government agencies promulgate regulations and guidelines directly applicable to us and to our products. Professional societies, practice management groups, insurance carriers, physicians' groups, private health and science foundations and organizations involved in various diseases also publish guidelines and recommendations to healthcare providers, administrators and payers, as well as patient communities. Recommendations by government agencies or other groups and organizations may relate to such matters as usage, dosage, route of administration and use of related therapies. In addition, a growing number of organizations are providing assessments of the value and pricing of biopharmaceutical products, and even organizations whose guidelines have historically been focused on clinical matters have begun to incorporate analyses of the cost effectiveness of various treatments into their treatment guidelines and recommendations. Value assessments may come from private organizations that publish their findings and offer recommendations relating to the products' reimbursement by government and private payers. Some companies and payers have announced pricing and payment decisions based in part on the assessments of private organizations. In addition, government health technology assessment organizations in many countries make reimbursement recommendations to payers in their jurisdictions based on the clinical effectiveness, cost-effectiveness and service effects of new, emerging and existing medicines and treatments. Such health technology assessment organizations have recommended, and may in the future recommend, reimbursement for certain of our products for a narrower indication than was approved by applicable regulatory agencies or may recommend against reimbursement entirely. See *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.* Such recommendations or guidelines may affect our reputation, and any recommendations or guidelines that result in decreased use, dosage or reimbursement of our products could have a material adverse effect on our product sales, business and results of operations. In addition, the perception by the investment community or stockholders that such recommendations or guidelines will result in decreased use and dosage of our products could adversely affect the market price of our common stock.

The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability.

We are subject to income and other taxes in the United States and other jurisdictions in which we do business. As a result, our provision for income taxes is derived from a combination of applicable tax rates in the various places we operate. Significant judgment is required for determining our provision for income tax.

One or more of our legal entities file income tax returns in the U.S. federal jurisdiction, various U.S. state jurisdictions and certain foreign jurisdictions. Our income tax returns are routinely examined by tax authorities in those jurisdictions. Significant disputes can arise 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, and such tax authorities (including the IRS) are becoming more aggressive in their audits and are particularly focused on such matters. In 2017, we received an RAR and a modified RAR from the IRS for the years 2010, 2011 and 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 administrative 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 2010, 2011 and 2012 that we received in May and July 2021 which seek to increase our U.S. taxable income. We firmly believe that the IRS's positions set forth in the Notices are without merit, and are contesting the Notices through the judicial process. See Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations, Income Taxes, and Part IV—Note 6, Income taxes, to the Consolidated Financial Statements.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013, 2014 and 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, 2011 and 2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office. We were unable to reach resolution at the administrative appeals level, and we anticipate that we will receive a statutory notice of deficiency for these years as well. We expect to contest any such notice related to 2013–15 through the judicial process. We are also currently under examination by the IRS for the years 2016, 2017 and 2018 and 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 effect on the results of our operations.

Our provision for income taxes and results of operations in the future could be adversely affected by changes to our operating structure, changes in the mix of income and expenses in countries with differing tax rates, changes in the valuation of deferred tax assets and liabilities and changes in applicable tax laws, regulations or administrative interpretations thereof. The 2017 Tax Act is complex and a large volume of regulations and guidance has been issued and could be subject to different interpretations. We could face audit challenges to our application of the 2017 Tax Act. The Administration proposed and Congress is considering significant changes to existing tax law. These changes, if enacted, could substantially increase taxes we pay to the U.S. government. Further, the OECD recently reached agreement to align countries on a minimum corporate tax rate and an expansion of the taxing rights of market countries. If enacted, this agreement could result in tax increases in both the United States and foreign jurisdictions.

The U.S. Treasury recently released final foreign tax credit regulations that eliminate U.S. creditability of the Puerto Rico Excise Tax beginning 2023, which will increase our U.S. tax liability. The U.S. territory of Puerto Rico is considering changes to its tax system that may minimize or eliminate this impact, but the outcome of such potential changes are uncertain. Changes to existing tax law in the United States, the U.S. territory of Puerto Rico, or other jurisdictions, including the potential changes discussed above, could result in tax increases where we do business and could have a material adverse effect on the results of our operations.

Our business may be affected by litigation and government investigations.

We and certain of our subsidiaries are involved in legal proceedings. See Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements. Civil and criminal litigation is inherently unpredictable, and the outcome can result in costly verdicts, fines and penalties, exclusion from federal healthcare programs and/or injunctive relief that affect how we operate our business. Defense of litigation claims can be expensive, time consuming and distracting, and it is possible that we could incur judgments or enter into settlements of claims for monetary damages or change the way we operate our business, which could have a material adverse effect on our product sales, business and results of operations. In addition, product liability is a major risk in testing and marketing biotechnology and pharmaceutical products. We may face substantial product liability exposure in human clinical trials and for products we sell after regulatory approval. Product liability claims, regardless of their merits, could be costly and divert management's attention and could adversely affect our reputation and the demand for our products. We and certain of our subsidiaries have previously been named as defendants in product liability actions for certain of our products.

We are also involved in government investigations that arise in the ordinary course of our business. In recent years, there has been a trend of increasing government investigations and litigations against companies operating in our industry, both in the United States and around the world. See *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.* Our business activities outside of the United States are subject to the FCPA and similar antibribery or anticorruption laws, regulations or rules of other countries in which we operate, including the U.K. Bribery Act. We cannot ensure that all our employees, agents, contractors, vendors, licensees, partners or collaborators will comply with all applicable laws and regulations. On April 25, 2019, we entered into a settlement agreement with the DOJ and the OIG of the HHS to settle certain allegations relating to our support of independent charitable organizations that provide patients with financial assistance to access their medicines. As a result, we entered into a corporate integrity agreement with the OIG that requires us to maintain a corporate compliance program and to undertake a set of defined corporate integrity obligations for a period of five years. While we expect to fully comply with all of our obligations under the corporate integrity agreement, failure to do so could result in substantial penalties and potential exclusion from government healthcare programs. We may also see new government investigations of or actions against us citing novel theories of recovery. For example, prosecutors are placing greater scrutiny on patient support programs, including commercial copay assistance programs, and further enforcement actions and investigations regarding such programs could limit our ability to provide co-pay assistance to commercial patients. Greater scrutiny has also been placed on sponsorships, speaker programs and other arrangements where healthcare professionals receive remuneration, travel or other value to participate in certain events, and further enforcement actions could limit our ability to participate in such arrangements. Any of these results could have a material adverse effect on our business and results of operations.

RISKS RELATED TO COMPETITION

Our products face substantial competition and our product candidates are also likely to face substantial competition.

We operate in a highly competitive environment. See Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition. We expect that our products and product candidates will compete with existing drugs, new drugs

currently in development, drugs currently approved for other indications that may later be approved for the same indications as those of our products and drugs approved for other indications that are used off-label. Large pharmaceutical companies and generics manufacturers of pharmaceutical products have expanded into, and are expected to continue expanding into, the biotechnology field, and some pharmaceutical companies and generics manufacturers have formed partnerships to pursue biosimilars. With the proliferation of companies pursuing biopharmaceuticals, a number of our product candidates may enter markets with one or more competitors or with competitors soon to arrive. For example, several of our biosimilar products have entered into markets with one or more existing competitors. In addition, some of our competitors may have technical, competitive or other advantages over us for the development of technologies and processes or greater experience in particular therapeutic areas, and consolidation among pharmaceutical and biotechnology companies can enhance such advantages. These advantages may make it difficult for us to compete with them successfully to discover, develop and market new products and for our current products to compete with new products or new product indications they may bring to market. As a result, our products have been competing and may continue to compete, and our product candidates may compete, against products or product candidates that offer higher rebates or discounts, lower prices, equivalent or superior efficacy, better safety profiles, easier administration, earlier market availability or other competitive features. If we are unable to compete effectively, this could reduce sales, which could have a material adverse effect on our business and results of operations.

Our intellectual property positions may be challenged, invalidated or circumvented, or we may fail to prevail in current and future intellectual property litigation.

Our success depends in part on our ability to obtain and defend patent rights and other intellectual property rights that are important to the commercialization of our products and product candidates. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and often involve complex legal, scientific and factual questions. Driven by cost pressures, efforts to limit or weaken patent protection for our industry are increasing. For example, the COVID-19 pandemic has resulted in increased interest in compulsory licenses, march-in rights or other governmental interventions, both in the United States and internationally, related to the procurement of drugs. See *The COVID-19 pandemic, and the public and governmental effort to mitigate against the spread of the disease, have had, and are expected to continue to have, an adverse effect, and may have a material adverse effect, on our clinical trials, operations, manufacturing, supply chains, distribution systems, product development, product sales, business and results of operations.* Third parties have challenged and may continue to challenge, invalidate or circumvent our patents and patent applications relating to our products, product candidates and technologies. Challenges to patents may come from potential competitors or from parties other than those who seek to market a potentially-infringing product. In addition, our patent positions might not protect us against competitors with similar products or technologies because competing products or technologies may not infringe our patents. For certain of our product candidates, there are third parties who have patents or pending patent applications that they may claim necessitate payment of a royalty or prevent us from commercializing these product candidates in certain territories. Patent disputes are frequent, costly and can preclude, delay or increase the cost of commercialization of products. We have been in the past, are currently and expect to be in the future, involved in patent litigation. These matters have included, and may in the future include, litigation with manufacturers of products that purport to be biosimilars of certain of our products for patent infringement and for failure to comply with certain provisions of the BPCIA. A determination made by a court, agency or tribunal concerning infringement, validity, enforceability, injunctive or economic remedy, or the right to patent protection, for example, are typically subject to appellate or administrative review. Upon review, such initial determinations may be afforded little or no deference by the reviewing tribunal and may be affirmed, reversed or made the subject of reconsideration through further proceedings. A patent dispute or litigation has not discouraged, and may not in the future discourage, a potential violator from bringing the allegedly infringing product to market prior to a final resolution of the dispute or litigation. The period from inception until resolution of a patent dispute or litigation is subject to the availability and schedule of the court, agency or tribunal before which the dispute or litigation is pending. We have been, and may in the future be, subject to competition during this period and may not be able to recover fully from the losses, damages and harms we incur from infringement by the competitor product even if we prevail. Moreover, if we lose or settle current or future litigations at certain stages or entirely, we could be subject to competition and/or significant liabilities, be required to enter into third-party licenses for the infringed product or technology or be required to cease using the technology or product in dispute. In addition, we cannot guarantee that such licenses will be available on terms acceptable to us, or at all.

Further, under the Hatch–Waxman Act, our products approved by the FDA under the FDCA have been, and may in the future be, the subject of patent litigation with generics competitors before expiry of the five-year period of data exclusivity provided for under the Hatch-Waxman Act and prior to the expiration of the patents listed for the product. Likewise, our innovative biologic products have been, and may in the future be, the subject of patent litigation prior to the expiration of our patents and, with respect to competitors seeking approval as a biosimilar or interchangeable version of our products, prior to the 12-year exclusivity period provided under the BPCIA. In addition, we have faced, and may in the future face, patent litigation involving claims that the biosimilar product candidates we are working to develop infringe the patents of other companies, including those that manufacture, market or sell the applicable reference products or who are developing or have developed other biosimilar versions of such products. Alternatively, patents held by other entities have contributed, and may in the future

contribute, to a decision by us to not pursue all of the same labeled indications as are held by these companies. Due to the COVID-19 pandemic, there have been delays in ongoing or new patent office and court proceedings in the United States and abroad that have delayed the outcome of such proceedings. While we have attempted, and expect to continue to attempt, to challenge the patents held by other companies, our efforts may be unsuccessful. For examples of and information related to our patent litigation, see Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

Certain of the existing patents on our products have expired or will soon expire. See Item 1. Business—Marketing, Distribution and Selected Marketed Products—Patents. As our patents expire, competitors are able to legally produce and market similar products or technologies, including biosimilars, which has had, and may continue to have, a material adverse effect on our product sales, business and results of operations. In addition, competitors have been, and may continue to be, able to invalidate, design around or otherwise circumvent our patents and sell competing products.

We currently face competition from biosimilars and generics and expect to face increasing competition from biosimilars and generics in the future.

We currently face competition from biosimilars and generics in most of the territories in which we operate, including the United States and Europe, and we expect to face increasing biosimilar and/or generics competition this year and beyond. Expiration or successful challenge of applicable patent rights or expiration of an applicable exclusivity period has accelerated such competition, and we expect to face more litigation regarding the validity and/or scope of our patents. Our products have also experienced greater competition from lower cost biosimilars or generics that come to market when branded products that compete with our products lose their own patent protection. To the extent that governments adopt more permissive regulatory approval standards and competitors are able to obtain broader or expedited marketing approval for biosimilars and generics, the rate of increased competition for our products could accelerate.

In the EU, biosimilars are evaluated for marketing authorization pursuant to a set of general and product class-specific guidelines. In addition, in an effort to spur biosimilar utilization and/or increase potential healthcare savings, some EU countries and some Canadian provinces have adopted, or are considering the adoption of, biosimilar uptake measures such as physician prescribing quotas or automatic pharmacy substitution of biosimilars for the corresponding reference products. Some EU countries impose automatic price reductions upon market entry of one or more biosimilar competitors. While the degree of competitive effects of biosimilar competition differs between EU countries and between products, in the EU the overall use of biosimilars and the rate at which product sales of innovative products are being affected by biosimilar competition is increasing.

In the United States, the BPCIA authorizes the FDA to approve biosimilars via a separate, abbreviated pathway. See Item 1. Business—Government Regulation—Regulation in the United States—Approval of Biosimilars. In the United States, the FDA has approved numerous biosimilars, including biosimilar versions of Neulasta, EPOGEN and ENBREL, and a growing number of companies have announced that they are also developing biosimilar versions of our products. Four biosimilar versions of Neulasta are now marketed in the United States, and we expect other biosimilar versions of Neulasta to receive approval in 2022 and beyond. Impact to our Neulasta sales has accelerated as additional competitors have launched. See Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition. An approved biosimilar version of EPOGEN has also launched in the United States. Manufacturers of biosimilars have attempted, and may in the future attempt, to compete with our products by offering lower list prices, greater discounts or rebates, or contracts that offer longer-term pricing or a broader portfolio of other products. Companies pursuing development of biosimilar versions of our products have challenged and may continue to challenge our patents well in advance of the expiration of our material patents. For examples of and information related to our biosimilars and generics patent litigation, see Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements. See *Our intellectual property positions may be challenged, invalidated or circumvented, or we may fail to prevail in current and future intellectual property litigation.*

The U.S. biosimilar pathway includes the option for biosimilar products that meet certain criteria to be approved as interchangeable with their reference products. Some companies currently developing or already marketing biosimilars may seek to obtain interchangeable status from the FDA, which could potentially allow pharmacists to substitute those biosimilars for our reference products without prior approval from the prescriber in most states. The FDA approved the first interchangeable biosimilar in July 2021, and subsequently granted an interchangeability designation to a second biosimilar in October 2021. In November 2019, the FDA issued draft guidance that provides that comparative immunogenicity studies will not generally be expected for biosimilar and interchangeable insulin products. This may open the door for other product-specific guidance development and the removal of the expectation for certain studies, which may contribute to increased biosimilar competition for our innovative products. For example, the FDA 2021 guidance agenda lists four guidances related to biosimilars, including documents that address exclusivity for the first interchangeable biological product, and product class-specific recommendations for developing biosimilars and interchangeables.

In addition, critics of the 12-year exclusivity period in the biosimilar pathway law will likely continue to seek to shorten the data exclusivity period and/or to encourage the FDA to interpret narrowly the law’s provisions regarding which new

products receive data exclusivity. In late 2019, the previous Administration agreed to remove from the United States-Mexico-Canada Agreement a requirement for at least 10 years of data exclusivity for biologic products. Also, the FDA is considering whether subsequent changes to a licensed biologic would be protected by the remainder of the reference product's original 12-year exclusivity period (a concept known in the generic drug context as "umbrella exclusivity"). If the FDA were to decide that umbrella exclusivity does not apply to biological reference products or were to make other changes to the exclusivity period, this could expose us to biosimilar competition at an earlier time. There also have been, and may continue to be, legislative and regulatory efforts to promote competition through policies enabling easier generic and biosimilar approval and commercialization, including efforts to lower standards for demonstrating biosimilarity or interchangeability, limit patents that may be litigated and/or patent settlements, implement preferential reimbursement policies for biosimilars and pass new laws requiring more disclosure in the FDA's Orange and Purple Books. For example, in 2021 the FDA sent a letter to the USPTO describing ways to strengthen coordination between the two agencies, offered training to help identify prior art, and seeking USPTO's views on practices that extend market exclusivities, whether pharmaceutical patent examiners need additional resources, and the effect of post-grant challenges at the PTAB on drug patents.

Upon the expiration or loss of patent protection and/or applicable exclusivity for one of our small molecule products, we can lose the majority of revenues for that product in a very short period of time. See Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition. Additionally, if one of our small molecule products is the subject of an FDA Written Request for pediatric studies and we are unable to adequately complete these studies, we may not obtain the pediatric exclusivity award that extends existing patents and unexpired regulatory exclusivity for the product by an additional six months.

While we are unable to predict the precise effects of biosimilars and generics on our products, we are currently facing and expect to face greater competition in the United States, Europe and elsewhere as a result of biosimilar and generic competition and, in turn, downward pressure on our product prices and sales. This competition has had, and could increasingly have, a material adverse effect on our product sales, business and results of operations. State laws may also have an impact on our business. For example, California is the first state to have passed legislation, effective on January 1, 2020, against "pay for delay" settlements of patent infringement claims filed by manufacturers of generics or biosimilars where anything of value is given in exchange for settlement. Under this law, such settlement agreements are presumptively anticompetitive. The law may result in prolonged litigation and fewer settlements. Other states, including Connecticut, New York, Illinois and Minnesota, may adopt similar laws or a similar law could be adopted at the federal level.

Concentration of sales at certain of our wholesaler distributors and at one free-standing dialysis clinic business and consolidation of private payers may negatively affect our business.

Certain of our distributors, customers and payers have substantial purchasing leverage, due to the volume of our products they purchase or the number of patient lives for which they provide coverage. The substantial majority of our U.S. product sales is made to three pharmaceutical product wholesaler distributors: McKesson Corporation, AmerisourceBergen Corporation and Cardinal Health, Inc. These distributors, in turn, sell our products to their customers, which include physicians or their clinics, dialysis centers, hospitals and pharmacies. One of our products, EPOGEN, is sold primarily to free-standing dialysis clinics. DaVita owns or manages a large number of the outpatient dialysis facilities located in the United States and accounts for approximately 90% of all EPOGEN sales. Similarly, as discussed above, there has been significant consolidation in the health insurance industry, including that a small number of PBMs now oversee a substantial percentage of total covered lives in the United States. See *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.* The three largest PBMs in the United States are now part of major health insurance providers. The growing concentration of purchasing and negotiating power by these entities has, and may continue to, put pressure on our pricing due to their ability to extract price discounts on our products, fees for other services or rebates, negatively affecting our bargaining position, sales and/or profit margins. In addition, decisions by these entities to purchase or cover less or none of our products in favor of competing products could have a material adverse effect on our product sales, business and results of operations due to their purchasing volume. Further, if one of our significant wholesale distributors encounters financial or other difficulties and becomes unable or unwilling to pay us all amounts that such distributor owes us on a timely basis, or at all, it could negatively affect our business and results of operations. In addition, if one of our significant wholesale distributors becomes insolvent or otherwise unable to continue its commercial relationship with us in its present form, it could significantly disrupt our business and adversely affect our product sales, our business and results of operations unless suitable alternatives are timely found or lost sales are absorbed by another distributor.

RISKS RELATED TO RESEARCH AND DEVELOPMENT

We may not be able to develop commercial products despite significant investments in R&D.

Amgen invests heavily in R&D. Successful product development in the biotechnology industry is highly uncertain, and very few R&D projects yield approved and commercially viable products. Product candidates, including biosimilar product

candidates, or new indications for existing products (collectively, product candidates) that appear promising in the early phases of development have failed to reach the market for a number of reasons, such as:

- the product candidate did not demonstrate acceptable clinical trial results even though it achieved its primary endpoints and/or demonstrated positive preclinical or early clinical trial results, for reasons that could include changes in the standard of care of medicine or expectations of health authorities;
- the product candidate was not effective or not more effective than currently available or potentially competitive therapies in treating a specified condition or illness;
- the product candidate was not cost effective in light of existing or potentially competitive therapeutics;
- the product candidate had harmful side effects in animals or humans;
- the necessary regulatory bodies, such as the FDA or EMA, did not approve the product candidate for an intended use;
- reimbursement for the product candidate is limited despite regulatory approval;
- the product candidate was not economical for us to manufacture and commercialize;
- other parties had or may have had proprietary rights relating to our product candidate, such as patent rights, and did not let us sell it on reasonable terms, or at all;
- we and certain of our licensees, partners, contracted organizations or independent investigators failed to effectively conduct clinical development or clinical manufacturing activities;
- the pathway to regulatory approval or reimbursement for product candidates was uncertain or not well-defined;
- the biosimilar product candidate failed to demonstrate the requisite biosimilarity to the applicable reference product, or was otherwise determined by a regulatory authority to not meet applicable standards for approval; and
- a companion diagnostic device that is required with the use of a product candidate is not approved by the necessary regulatory authority.

We have spent considerable time, energy and resources developing our expertise in human genetics and acquiring access to libraries of genetic information with the belief that genetics could meaningfully aid our search for new medicines and help guide our R&D decisions and investments. We have focused our R&D strategy on drug targets validated by genetic or other compelling human evidence. However, product candidates based on genetically validated targets remain subject to the uncertainties of the drug development process and may not reach the market for a number of reasons, including the factors listed above.

We must conduct clinical trials in humans before we commercialize and sell any of our product candidates or existing products for new indications.

Before a product may be sold, we must conduct clinical trials to demonstrate that our product candidates are safe and effective for use in humans. The results of those clinical trials are used as the basis to obtain approval from regulatory authorities such as the FDA and EMA. See *Our current products and products in development cannot be sold without regulatory approval*. We are required to conduct clinical trials using an appropriate number of trial sites and patients to support the product label claims. The length of time, number of trial sites and number of patients required for clinical trials vary substantially, and we may spend several years and incur substantial expense in completing certain clinical trials. In addition, we may have difficulty finding a sufficient number of clinical trial sites and patients to participate in our clinical trials, particularly if competitors are conducting clinical trials in similar patient populations. See *The COVID-19 pandemic, and the public and governmental effort to mitigate against the spread of the disease, have had, and are expected to continue to have, an adverse effect, and may have a material adverse effect, on our clinical trials, operations, supply chains, distribution systems, product development, product sales, business and results of operations.* Patients may withdraw from clinical trials at any time, and privacy laws and/or other restrictions in certain countries may restrict the ability of clinical trial investigators to conduct further follow-up on such patients, which may adversely affect the interpretation of study results. Delays and complications in planned clinical trials can result in increased development costs, associated delays in regulatory approvals and in product candidates reaching the market and revisions to existing product labels.

Further, to increase the number of patients available for enrollment in our clinical trials, we have opened, and will continue to open, clinical sites and enroll patients in a number of locations where our experience conducting clinical trials is more limited, including Russia, India, China, South Korea, the Philippines, Singapore and some Central and South American countries, either through utilization of third-party contract clinical trial providers entirely or in combination with local staff.

Conducting clinical trials in locations where we have limited experience requires substantial time and resources to understand the unique regulatory environments of individual countries. For other examples of the risks of conducting clinical trials in China, see also *Our sales and operations are subject to the risks of doing business internationally, including in emerging markets*. Further, we must ensure the timely production, distribution and delivery of the clinical supply of our product candidates to numerous and varied clinical trial sites. Additionally, regional disruptions, including natural and man-made disasters or health emergencies (such as novel viruses or pandemics such as the one we are currently experiencing with COVID-19), have significantly disrupted, and in the future could disrupt, the timing of clinical trials. If we fail to adequately manage the design, execution and diverse regulatory aspects of our large and/or complex clinical trials or to manage the production or distribution of our clinical supply, or such sites experience disruptions as a result of a natural/man-made disaster or health emergency, corresponding regulatory approvals may be delayed or we may fail to gain approval for our product candidates or could lose our ability to market existing products in certain therapeutic areas or altogether. For example, our clinical trials have been adversely affected by the COVID-19 pandemic. See *The COVID-19 pandemic, and the public and governmental effort to mitigate against the spread of the disease, have had, and are expected to continue to have, an adverse effect, and may have a material adverse effect, on our clinical trials, operations, supply chains, distribution systems, product development, product sales, business and results of operations*. If we are unable to market and sell our products or product candidates or to obtain approvals in the timeframe needed to execute our product strategies, our business and results of operations could be materially and adversely affected.

We rely on independent third-party clinical investigators to recruit patients and conduct clinical trials on our behalf in accordance with applicable study protocols, laws and regulations. Further, we rely on unaffiliated third-party vendors to perform certain aspects of our clinical trial operations. In some circumstances, we enter into co-development arrangements with other pharmaceutical and medical devices companies that provide for the other company to conduct certain clinical trials for the product we are co-developing or to develop a diagnostic test used in screening or monitoring patients in our clinical trials. See *Some of our pharmaceutical pipeline and our commercial product sales rely on collaborations with third parties, which may adversely affect the development and sale of our products.* We also may acquire companies that have past or ongoing clinical trials or rights to products or product candidates for which clinical trials have been or are being conducted. These trials may not have been conducted to the same standards as ours; however, once an acquisition has been completed we assume responsibility for the conduct of these trials, including any potential risks and liabilities associated with the past and prospective conduct of those trials. If regulatory authorities determine that we or others, including our licensees or co-development partners, or the independent investigators or vendors selected by us, our co-development partners or by a company we have acquired or from which we have acquired rights to a product or product candidate, have not complied with regulations applicable to the clinical trials, those authorities may refuse or reject some or all of the clinical trial data or take other actions that could delay or otherwise negatively affect our ability to obtain or maintain marketing approval of the product or indication. In addition, delays or failures to develop diagnostic tests for our clinical trials can affect the timely enrollment of such trials and lead to delays or inability to obtain marketing approval. If we were unable to market and sell our products or product candidates, our business and results of operations could be materially and adversely affected.

In addition, some of our clinical trials utilize drugs manufactured and marketed by other pharmaceutical companies. These drugs may be administered in clinical trials in combination with one of our products or product candidates or in a head-to-head study comparing the products' or product candidates' relative efficacy and safety. In the event that any of these vendors or pharmaceutical companies have unforeseen issues that negatively affect the quality of their work product or create a shortage of supply, or if we are otherwise unable to obtain an adequate supply of these other drugs, our ability to complete our applicable clinical trials and/or evaluate clinical results may also be negatively affected. As a result, such quality or supply problems could adversely affect our ability to timely file for, gain or maintain regulatory approvals worldwide.

Clinical trials must generally be designed based on the current standard of medical care. However, in certain diseases, such as cancer, the standard of care is evolving rapidly. In some cases, we may design a clinical trial based on the standard of care we anticipate will exist at the time our study is completed. The duration of time needed to complete certain clinical trials may result in the design of such clinical trials being based on standards of medical care that are no longer or that have not become the current standards by the time such trials are completed, limiting the utility and application of such trials. Additionally, the views of regulatory agencies relating to the requirements for accelerated approval may change over time, and trial designs that were sufficient to support accelerated approvals for some oncology products may not be considered sufficient for later candidates. We may not obtain favorable clinical trial results and therefore may not be able to obtain regulatory approval for new product candidates or new indications for existing products and/or maintain our current product labels. Participants in clinical trials of our products and product candidates may also suffer adverse medical events or side effects that could, among other factors, delay or terminate clinical trial programs and/or require additional or longer trials to gain approval.

Even after a product is on the market, safety concerns may require additional or more extensive clinical trials as part of a risk management plan for our product or for approval of a new indication. Additional clinical trials we initiate, including those required by the FDA, could result in substantial additional expense, and the outcomes could result in further label restrictions or

the loss of regulatory approval for an approved indication, each of which could have a material adverse effect on our product sales, business and results of operations. Additionally, any negative results from such trials could materially affect the extent of approvals, the use, reimbursement and sales of our products, our business and results of operations.

Our current products and products in development cannot be sold without regulatory approval.

Our business is subject to extensive regulation by numerous state and federal government authorities in the United States, including the FDA, and by foreign regulatory authorities, including the EMA. We are required in the United States and in the other regions and countries in which we, or our partners and affiliates, sell to obtain approval from regulatory authorities before we manufacture, market and sell our products. Once our products are approved, the FDA and other U.S. and ex-U.S. regulatory agencies have substantial authority to require additional testing and reporting, perform inspections, change product labeling or mandate withdrawals of our products. Failure to comply with applicable regulatory requirements may subject us to administrative and/or judicially imposed sanctions or monetary penalties as well as reputational and other harms. The sanctions could include the FDA's or ex-U.S. regulatory authorities' refusals to approve pending applications, delays in obtaining or withdrawals of approvals, delays or suspensions of clinical trials, warning letters, product recalls or seizures, total or partial suspensions of our operations, injunctions, fines, civil penalties and/or criminal prosecutions.

Obtaining and maintaining regulatory approvals have been, and will continue to be, increasingly difficult, time-consuming and costly. Legislative bodies or regulatory agencies could enact new laws or regulations, change existing laws or regulations or change their interpretations of laws or regulations at any time, which could affect our ability to obtain or maintain approval of our products or product candidates. The rate and degree of change in existing laws and regulations and regulatory expectations have accelerated in established markets, and regulatory expectations continue to evolve in emerging markets. We are unable to predict whether and when any further changes to laws or regulatory policies affecting our business could occur, such as changes to laws or regulations governing manufacturer communications concerning drug products and drug product candidates and whether such changes could have a material adverse effect on our product sales, business and results of operations. Further, we are reliant on regulators having the resources necessary to evaluate and approve our products. In the United States, a partial federal government shutdown halted the work of many federal agencies and their employees from late December 2018 through late January 2019. A subsequent extended shutdown could result in reductions or delays of FDA's activities, including with respect to our ongoing clinical programs, our manufacturing of our products and product candidates and our product approvals.

Regulatory authorities have questioned, and may in the future question, the sufficiency for approval of the endpoints we select for our clinical trials. A number of our products and product candidates have been evaluated in clinical trials using surrogate endpoints that measure an effect that is known to correlate with an ultimate clinical benefit. For example, a therapeutic oncology product candidate may be evaluated for its ability to reduce or eliminate MRD, or to extend the length of time during and after the treatment that a patient lives without the disease worsening, measured by PFS. Demonstrating that the product candidate induces MRD-negative responses or produces a statistically significant improvement in PFS does not necessarily mean that the product candidate will show a statistically significant improvement in overall survival or the time that the patients remain alive. In the CV setting, a heart disease therapeutic candidate may be evaluated for its ability to reduce LDL-C levels, as an elevated LDL-C level has been a surrogate endpoint for CV events such as death, heart attack and stroke. The use of surrogate endpoints such as PFS and LDL-C reduction, in the absence of other measures of clinical benefit, may not be sufficient for broad usage or approval even when such results are statistically significant. Regulatory authorities could also add new requirements, such as the completion of enrollment in a confirmatory study or the completion of an outcomes study or a meaningful portion of an outcomes study, as conditions for obtaining approval or obtaining an indication. For example, despite demonstrating that Repatha reduced LDL-C levels in a broad patient population, only after our large phase 3 outcomes study evaluating the ability of Repatha to prevent CV events met certain of its primary composite endpoint and key secondary composite endpoint did the FDA grant a broader approval of Repatha to reduce the risk of certain CV events. There may also be situations in which demonstrating the efficacy and safety of a product candidate may not be sufficient to gain regulatory approval unless superiority to other existing treatment options can be shown. The imposition of additional requirements or our inability to meet them in a timely fashion, or at all, has delayed, and may in the future delay, our clinical development and regulatory filing efforts, delay or prevent us from obtaining regulatory approval for new product candidates or new indications for existing products, or prevent us from maintaining our current product labels.

Some of our products have been approved by U.S. and ex-U.S. regulatory authorities on an accelerated or conditional basis with full approval conditioned upon fulfilling the requirements of regulators. For example, in March 2018, we announced that the FDA approved BLINCYTO under accelerated approval for the treatment of certain patients with B-cell precursor ALL. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials. Regulatory authorities are placing greater focus on monitoring products originally approved on an accelerated or conditional basis and on whether the sponsors of such products have met the conditions of the accelerated or conditional approvals. If we are unable to fulfill the regulators' requirements that were conditions of a product's accelerated or conditional approval and/or if regulators reevaluate the data or risk-benefit profile of our product, the conditional approval may not result in

full approval or may be revoked or not renewed. Alternatively, we may be required to change the product's labeled indications or even withdraw the product from the market.

Regulatory authorities can also impose post-marketing pediatric study requirements. Failure to fulfill such requirements may result in regulatory or enforcement action, including financial penalties or the invalidation of a product's marketing authorization.

Safety problems or signals can arise as our products and product candidates are evaluated in clinical trials, including investigator sponsored studies, or as our marketed products are used in clinical practice. We are required continuously to collect and assess adverse events reported to us and to communicate to regulatory agencies these adverse events and safety signals regarding our products. Regulatory agencies periodically perform inspections of our pharmacovigilance processes, including our adverse event reporting. In the United States, for our products with approved REMS (see Item 1. Business—Government Regulation—Postapproval Phase), we are required to submit periodic assessment reports to the FDA to demonstrate that the goals of the REMS are being met. REMS and other risk management programs are designed to ensure that a drug's benefits outweigh the risks and vary in the elements they contain. If the FDA is not satisfied with the results of the periodic assessment reports we submit for any of our REMS, the FDA may also modify our REMS or take other regulatory actions, such as implementing revised or restrictive labeling. The drug delivery devices approved for use in combination with our products are also subject to regulatory oversight and review for safety and malfunctions. See *Some of our products are used with drug delivery or companion diagnostic devices that have their own regulatory, manufacturing and other risks.* If regulatory agencies determine that we or other parties (including our clinical trial investigators, those operating our patient support programs or licensees of our products) have not complied with the applicable reporting, other pharmacovigilance or other safety or quality assessment requirements, we may become subject to additional inspections, warning letters or other enforcement actions, including fines, marketing authorization withdrawal and other penalties. Our product candidates and marketed products can also be affected by safety problems or signals occurring with respect to products that are similar to ours or that implicate an entire class of products. Further, as a result of clinical trials, including sub-analyses or meta-analyses of earlier clinical trials (a meta-analysis involves the use of various statistical methods to combine results from previous separate but related studies) performed by us or others, concerns may arise about the sufficiency of the data or studies underlying a product's approved label. Such actual or perceived safety problems or concerns can lead to:

- revised or restrictive labeling for our products, or the potential for restrictive labeling that has resulted, and may in the future result, in our decision not to commercialize a product candidate;
- requirement of risk management or minimization activities or other regulatory agency compliance actions related to the promotion and sale of our products;
- post-marketing commitments, mandated post-marketing requirements or pharmacovigilance programs for our approved products;
- product recalls of our approved products;
- required changes to the processes used in the manufacture of our products, which could increase our manufacturing costs and affect the availability of contract manufacturers we may utilize to assist in such manufacturing;
- revocation of approval for our products from the market completely, or within particular therapeutic areas or patient types;
- increased timelines or delays in being approved by the FDA or other regulatory bodies; and/or
- treatments or product candidates not being approved by regulatory bodies.

For example, after an imbalance in positively adjudicated CV serious adverse events was observed in one of the phase 3 clinical trials for EVENITY but not in another, larger phase 3 study, in April 2019 the FDA approved EVENITY for the treatment of osteoporosis in postmenopausal women at high risk for fracture, along with a post-marketing requirement. The requirement includes a five-year observational feasibility study that could be followed by a comparative safety study or trial.

In addition to our innovative products, we are working to develop and commercialize biosimilar versions of a number of products currently manufactured, marketed and sold by other pharmaceutical companies. In some markets, there is not yet a legislative or regulatory pathway for the approval of biosimilars. In the United States, the BPCIA provided for such a pathway; while the FDA continues to develop regulatory and scientific policies for biosimilars, discussions continue as to the evidence needed to demonstrate biosimilarity or interchangeability for specific products. See *We currently face competition from biosimilars and generics and expect to face increasing competition from biosimilars and generics in the future.* Delays or uncertainties in the development or implementation of such pathways, or changes in existing regulatory pathways, including degradation of regulatory standards, could result in delays or difficulties in getting our biosimilar products approved by regulatory authorities, subject us to unanticipated development costs or otherwise reduce the value of the investments we have

made in the biosimilars area. Further, we cannot predict whether any repeal or reform of the ACA or other legislation or policy initiatives would affect the biosimilar pathway or have a material adverse effect on our development of biosimilars or on our marketed biosimilars. In addition, if we are unable to bring our biosimilar products to market on a timely basis and secure "first-to-market" or other advantageous positions, our future biosimilar sales, business and results of operations could be materially and adversely affected.

Some of our products are used with drug delivery or companion diagnostic devices that have their own regulatory, manufacturing and other risks.

Many of our products and product candidates may be used in combination with a drug delivery device, such as an injector or other delivery system. For example, Neulasta is available as part of the Neulasta Onpro kit, and our AutoTouch reusable autoinjector is used with ENBREL Mini single-dose prefilled cartridges. In addition, some of our products or product candidates, including many of our oncology product candidates and products, including LUMAKRAS, may also require the use of a companion or other diagnostic device such as a device that determines whether the patient is eligible to use our drug or that helps ensure its safe and effective use. In some regions, including the United States, regulatory authorities may require contemporaneous approval of the companion diagnostic device and the therapeutic product; in others the regulatory authorities may require a separate study of the companion diagnostic device. Our product candidates or expanded indications of our products used with such devices may not be approved or may be substantially delayed in receiving regulatory approval if development or approval of such devices is delayed, such devices do not also gain or maintain regulatory approval or clearance, or if such devices do not remain commercially available. When approval of the product and device is sought under a single marketing drug application, the increased complexity of the review process may delay receipt of regulatory approval. In addition, some of these devices may be provided by single-source unaffiliated third-party companies. We are dependent on the sustained cooperation and effort of those third-party companies to supply and/or market the devices and, in some cases, to conduct the studies required for approval or clearance by the applicable regulatory agencies. We are also dependent on those third-party companies continuing to meet applicable regulatory or other requirements. Failure to successfully develop, modify, or supply the devices, delays in or failures of the Amgen or third-party studies, or failure of us or the third-party companies to obtain or maintain regulatory approval or clearance of the devices could result in increased development costs; delays in, or failure to obtain or maintain, regulatory approval; and/or associated delays in a product candidate reaching the market or in the addition of new indications for existing products. We are also required to collect and assess user complaints, adverse events and malfunctions regarding our devices, and actual or perceived safety problems or concerns with a device used with our product can lead to regulatory actions and adverse effects on our products. See *Our current products and products in development cannot be sold without regulatory approval*. Additionally, regulatory agencies conduct routine monitoring and inspections to identify and evaluate potential issues with our devices. For example, in 2017, the FDA reported on its adverse event reporting system that it was evaluating our Neulasta Onpro kit. Subsequently, we implemented device and labeling enhancements to address product complaints received on this device. We continuously monitor complaints and adverse events and implement additional enhancements as needed. Loss of regulatory approval or clearance of a device that is used with our product may also result in the removal of our product from the market. Further, failure to successfully develop, supply, or gain or maintain approval for these devices could adversely affect sales of the related approved products.

Some of our pharmaceutical pipeline and our commercial product sales rely on collaborations with third parties, which may adversely affect the development and sale of our products.

We depend on alliances with other companies, including pharmaceutical and biotechnology companies, vendors and service providers, for the development of a portion of the products in our pharmaceutical pipeline and for the commercialization and sales of certain of our commercial products. For example, we have collaborations with third parties under which we share development rights, obligations and costs and/or commercial rights and obligations. See Item 1. Business—Business Relationships.

Failures by these parties to meet their contractual, regulatory, or other obligations to us or any disruption in the relationships between us and these third parties, could have a material adverse effect on our pharmaceutical pipeline and business. In addition, our collaborative relationships for R&D and/or commercialization and sales often extend for many years and have given, and may in the future give, rise to disputes regarding the relative rights, obligations and revenues of us and our collaboration partners, including the ownership or prosecution of intellectual property and associated rights and obligations. This could result in the loss of intellectual property rights or protection, delay the development and sale of potential pharmaceutical products, affect the effective sale and delivery of our commercialized products and lead to lengthy and expensive litigation, administrative proceedings or arbitration.

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

We seek innovation through significant investment in both internal R&D and external transactions, including collaborations, partnering, alliances, licenses, joint ventures, mergers and acquisitions (collectively, acquisition activity). Acquisition activities may be subject to regulatory approvals or other requirements that are not within our control. There can be no assurance that such regulatory or other approvals will be obtained or that all closing conditions required in connection with our acquisition activities will be satisfied or waived, which could result in us being unable to complete the planned acquisition activities.

Acquisition activities are complex, time consuming and expensive and may result in unanticipated costs, delays or other operational or financial problems related to integrating the acquired company and business with our company, which may divert our management's attention from other business issues and opportunities and restrict the full realization of the anticipated benefits of such transactions within the expected timeframe or at all. We may pay substantial amounts of cash, incur debt or issue equity securities to pay for acquisition activities, which could adversely affect our liquidity or result in dilution to our stockholders, respectively. Further, failures or difficulties in integrating or retaining new personnel or in integrating the operations of the businesses, products or assets we acquire (including related technology, commercial operations, compliance programs, manufacturing, distribution and general business operations and procedures) may affect our ability to realize the benefits of the transaction and grow our business and may result in us incurring asset impairment or restructuring charges. These and other challenges may arise in connection with our acquisition of Otezla, Five Prime, Teneobio and/or our collaborations with BeiGene and KKC, or with other acquisition activities, which could have a material adverse effect on our business, results of operations and stock price.

RISKS RELATED TO OPERATIONS

We perform a substantial majority of our commercial manufacturing activities at our facility in the U.S. territory of Puerto Rico and a substantial majority of our clinical manufacturing activities at our facility in Thousand Oaks, California; significant disruptions or production failures at these facilities could significantly impair our ability to supply our products or continue our clinical trials.

The global supply of our products and product candidates for commercial sales and for use in our clinical trials is significantly dependent on the uninterrupted and efficient operation of our manufacturing facilities, in particular those in the U.S. territory of Puerto Rico and Thousand Oaks, California. See *Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.*

We currently perform a substantial majority of our clinical manufacturing that supports our product candidates at our facility in Thousand Oaks, California. A substantial disruption in our ability to operate our Thousand Oaks manufacturing facility could materially and adversely affect our ability to supply our product candidates for use in our clinical trials, leading to delays in development of our product candidates.

In addition, we currently perform a substantial majority of our commercial manufacturing activities at our facility in the U.S. territory of Puerto Rico. In recent years, Puerto Rico has been affected by natural disasters, including droughts in mid-2020, earthquakes in early 2020 and Hurricane Maria in 2017. These natural disasters have affected, and may continue to affect, public and private properties and Puerto Rico's electric grid and communications networks in the future. While the critical manufacturing areas of our commercial manufacturing facility were not significantly affected by these natural disasters, the restoration of electrical service on the island after Hurricane Maria was a slow process, and our facility operated with electrical power from backup diesel powered generators for some time. We also operated on backup generators for a few weeks after the early 2020 earthquakes in Puerto Rico. In 2021, the baseload power generation units of the Puerto Rico Electric Power Authority malfunctioned due to the lack of adequate maintenance for over a decade. The problems experienced by these units, which are among the oldest in North America, have led to selective outages across the island. Further instability of the electric grid and unreliability on the generation units could require us to increase the use of our generators or to continue using them exclusively. In addition, future storms, earthquakes or other natural disasters or events could cause a more significant effect on our manufacturing operations. Puerto Rico and the rest of the world are facing the effects of the COVID-19 pandemic and the associated health and economic implications. In March 2020, the Governor of Puerto Rico issued Executive Orders requiring the lockdown of businesses and government facilities, imposing restrictions on business operations and a curfew on residents. Our operations and employees were exempted from the lockdown and curfew, but we cannot predict whether the Governor will issue future Executive Orders imposing stricter lockdown and curfew measures should COVID-19 cases rise in Puerto Rico. Additionally, during the summer of 2021, a labor dispute arose between the maritime terminal operation company and its employees, represented by the International Longshoremen's Association (ILA), which resulted in a strike that delayed cargo movement from the San Juan Port Zone for several days. Although our ability to manufacture and supply our products has not,

to date, been significantly affected by these natural disasters, the unreliability of the electric service, the ILA strike or the COVID-19 pandemic, a combination of these challenges or other issues that could give rise to any substantial disruption to our ability to operate our Puerto Rico manufacturing facility or get supplies and manufactured products transported to and from that location could materially and adversely affect our ability to supply our products and affect our product sales. See *Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.*

Hurricane Maria, the earthquakes of early 2020 and the COVID-19 pandemic have placed greater stress on the island's already challenged economy. Beginning in 2016, the government of Puerto Rico defaulted on its roughly $72 billion in debt. In response, the U.S. Congress passed the PROMESA, which established the FOMBPR to provide fiscal oversight. Title III of PROMESA provides Puerto Rico with a judicial process for restructuring its debt similar to, but not identical to, Chapter 9 of the U.S. Bankruptcy Code, including a stay of debtholder litigation. In 2017, the FOMBPR approved and certified the filing in the U.S. District Court for the District of Puerto Rico of a voluntary petition under Title III of PROMESA for the government of Puerto Rico and certain of its governmental entities, including the Puerto Rico Electric Power Authority, which recently privatized its transmission and distribution infrastructure. After years of negotiations with bondholders and other creditors, the FOMBPR reached an agreement with the same and presented a Plan of Adjustment to the Title III Court. The Plan of Adjustment requires the Puerto Rico government to enact legislation authorizing the issuance of new bonds in exchange for older bonds and a reduction of the U.S. territory's debt. On October 26, 2021, Act 53-2021, known as the "Law to End the Bankruptcy of Puerto Rico," was enacted. From November to December 2021, the Court held several hearings regarding the approval of the Plan of Adjustment, and the Modified Eighth Plan of Adjustment was confirmed by the Court on January 18, 2022, to be effective on March 15, 2022.

Each year since 2017, the FOMBPR has updated Puerto Rico's fiscal plans implementing various measures intended to achieve fiscal responsibility and to restore Puerto Rico's access to the capital markets, including significant expense reductions and suggested measures for economic growth. Each plan has stressed the need for fiscal and structural reforms to address Puerto Rico's challenging economic and demographic trends. However, the government has not made significant progress during 2021 on the implementation of the fiscal and structural reforms required in the fiscal plan, in part due to the COVID-19 pandemic.

While the government and the FOMBPR have authorized emergency relief packages due to the COVID-19 pandemic, it is uncertain how, or the degree to which, the pandemic will impact Puerto Rico's fiscal and structural reforms and its economy. In addition, the 2017 Tax Act no longer permits deferral of U.S. taxation on Puerto Rico earnings, although these earnings generally will be taxed in the United States at a reduced rate. Given Puerto Rico's challenged economy, disaster recovery needs and impact from the COVID-19 pandemic, it may be difficult for Puerto Rico to sustain or grow its manufacturing base, which contributes significantly to Puerto Rico's economy, due to competition from other locations subject to similar levels of taxation.

While PROMESA and the actions above continue to be important factors in moving Puerto Rico toward economic stability, Puerto Rico's ongoing economic and demographic trend challenges and political situation, the effects of natural disasters, the unreliability of its electric system, the COVID-19 pandemic and the effects of the 2017 Tax Act or other potential tax law changes have negatively affected, and may in the future negatively affect, the territorial government's provision of utilities or other services in Puerto Rico that we use in the operation of our business and could create the potential for increased taxes or fees to operate in Puerto Rico, result in a migration of workers from Puerto Rico to the mainland United States, or make it more expensive or difficult for us to operate in Puerto Rico. These factors could have a material adverse effect on our ability to supply our products, on our business and on our product sales.

We rely on third-party suppliers for certain of our raw materials, medical devices and components.

We rely on unaffiliated third-party suppliers for certain raw materials, medical devices and components necessary for the manufacturing of our commercial and clinical products. Certain of those raw materials, medical devices and components are proprietary products of those unaffiliated third-party suppliers and are specifically cited in our drug applications with regulatory agencies so that they must be obtained from that specific sole source or sources and could not be obtained from another supplier unless and until the regulatory agency approved such supplier. For example, we rely on a single source for the SureClick autoinjectors used in the drug delivery of Repatha, ENBREL, Aimovig, AMGEVITA and Aranesp. Also, certain of the raw materials required in the commercial and clinical manufacturing of our products are sourced from other countries and/or derived from biological sources, including mammalian tissues, bovine serum and human serum albumin.

Among the reasons we may be unable to obtain these raw materials, medical devices and components include:

- regulatory requirements or action by regulatory agencies or others;
- adverse financial or other strategic developments at or affecting the supplier, including bankruptcy;
- unexpected demand for or shortage of raw materials, medical devices or components;

- failure to comply with our quality standards which results in quality and product failures, product contamination and/or recall;
- a material shortage, contamination, recall and/or restrictions on the use of certain biologically derived substances or other raw materials;
- discovery of previously unknown or undetected imperfections in raw materials, medical devices or components;
- cyberattacks on supplier systems; and
- labor disputes or shortages, including from the effects of health emergencies (such as novel viruses or pandemics such as the one we are currently experiencing with COVID-19) and natural disasters.

For example, in prior years we have experienced shortages in certain components necessary for the formulation, fill and finish of certain of our products in our Puerto Rico facility. Further quality issues that result in unexpected additional demand for certain components have resulted in shortages, and in the future may lead to shortages, of required raw materials or components (such as we have experienced with EPOGEN glass vials). We may experience similar or other shortages in the future resulting in delayed shipments, supply constraints, clinical trial delays, contract disputes and/or stock-outs of our products. These or other similar events could negatively affect our ability to satisfy demand for our products or conduct clinical trials, which could have a material adverse effect on our product sales, 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 currently 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. See Item 1. Business—Manufacturing, Distribution and Raw Materials—Manufacturing. 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 such as the one we are currently experiencing with COVID-19) 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); and/or
- 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.

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 also *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 may be negatively affected by natural disasters, security threats and/or the ongoing COVID-19 pandemic.

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 prohibit 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.

Our business and operations may be negatively affected by the failure, or perceived failure, of achieving our environmental, social and governance objectives.

We continue to work towards operating our business in an environmentally responsible and socially inclusive manner. Stakeholders, including our investors and our employees, have increasingly focused on, and are expected to continue to focus

on, our ESG practices. If our ESG practices fail to meet these stakeholders' expectations and standards, there could be a material adverse effect on our reputation, business and, ultimately, our stock price.

Our ESG report is made available on our website and describes our ESG goals and the progress we have made on the ESG issues deemed most important to our external and internal stakeholders, based on surveys, interviews and certain frameworks for corporate responsibility. Achieving our ESG goals requires long-term investments and broad, coordinated activity, and we may be required to incur additional costs or allocate additional resources towards monitoring, reporting and implementing our ESG practices. Further, we may fail to accurately assess our stakeholders' ESG priorities, as such priorities have evolved and will continue to evolve. While we have achieved most of our goals set in prior years, whether we can achieve our current and future ESG goals continues to be uncertain and remains subject to numerous risks, including evolving regulatory requirements and social expectations affecting ESG practices, our ability to recruit, develop and retain a diverse workforce, the availability of suppliers and collaboration partners that can meet our ESG goals, the effects of the organic growth of our business and potential acquisitions of other businesses on our ESG performance, and the availability and cost of technologies or resources, such as carbon credits, that support our goals. Any failure or perceived failure to meet our ESG program priorities could result in a material adverse effect on our reputation, business and stock price.

The effects of global climate change and related natural disasters could negatively affect our business and operations.

Many of our operations and facilities, including those essential to our manufacturing, R&D and distribution activities, are in locations that are subject to natural disasters, including droughts, fires, hurricanes, tropical storms, and/or floods. For example, in 2017 Hurricane Maria caused catastrophic damage to the U.S. territory of Puerto Rico, where we perform a substantial majority of our commercial manufacturing activities. Although our site was well-protected and suffered minimal damage, there can be no assurances that we would have similar results in the face of future natural disasters. The severity and frequency of weather-related natural disasters has been amplified, and is expected to continue to be amplified by, global climate change. Such natural disasters have caused, and in the future may cause, damage to and/or disrupt our operations, which may result in a material adverse effect on our product sales, business and results of operations. Our suppliers, vendors and business partners also face similar risks, and any disruption to their operations could have an adverse effect on our supply and manufacturing chain. Further, many of our key facilities are located on islands, including Puerto Rico, Singapore and Ireland, which rely on essential port facilities that may be vulnerable to climate change-related or other natural disasters. Although we have detailed business continuity plans in place and periodic assessments of our natural disaster risk, any natural disaster may also result in prolonged interruption to our critical operational and business activities, and we may be required to incur significant costs to remedy the effects of such natural disasters and fully resume operations, which may result in a material adverse effect on our product sales, business and results of operations. See *We perform a substantial majority of our commercial manufacturing activities at our facility in the U.S. territory of Puerto Rico and a substantial majority of our clinical manufacturing activities at our facility in Thousand Oaks, California; significant disruptions or production failures at these facilities could significantly impair our ability to supply our products or continue our clinical trials* and *Manufacturing difficulties, disruptions or delays could limit supply of our products and limit our product sales.*

GENERAL RISK FACTORS

Global economic conditions may negatively affect us and may magnify certain risks that affect our business.

Our operations and performance have been, and may continue to be, affected by global economic conditions. The economic downturn resulting from the COVID-19 pandemic has precipitated a global recession which may be of an extended duration. Additionally, financial pressures may cause government or other third-party payers to more aggressively seek cost containment measures. See *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.* As a result of global economic conditions, some third-party payers may delay or be unable to satisfy their reimbursement obligations. Job losses or other economic hardships (including inflation) may also affect patients' ability to afford health care as a result of increased co-pay or deductible obligations, greater cost sensitivity to existing co-pay or deductible obligations, lost healthcare insurance coverage or for other reasons. We believe such conditions have led and could continue to lead to reduced demand for our products, which could have a material adverse effect on our product sales, business and results of operations. The current inflationary environment related to increased aggregate demand and supply chain constraints have also increased our operating expenses and may continue to affect our operating expenses. Economic conditions may also adversely affect the ability of our distributors, customers and suppliers to obtain the liquidity required to buy inventory or raw materials and to perform their obligations under agreements with us, which could disrupt our operations. Although we monitor our distributors', customers' and suppliers' financial condition and their liquidity to mitigate our business risks, some of our distributors, customers and suppliers may become insolvent, which could have a material adverse effect on our product sales, business and results of operations. A significant worsening of global economic conditions could materially increase these risks we face.

We maintain a significant portfolio of investments disclosed as cash equivalents and marketable securities on our consolidated balance sheets. The global spread of COVID-19 has also led to disruption and volatility in the global capital markets. We have certain assets, including equity investments, that are exposed to market fluctuations that could, in a sustained or recurrent series of market disruptions, result in impairments. The value of our investments may also be adversely affected by interest rate fluctuations, inflation, downgrades in credit ratings, illiquidity in the capital markets and other factors that may result in other-than-temporary declines in the value of our investments. Any of those events could cause us to record impairment charges with respect to our investment portfolio or to realize losses on sales of investments.

Our stock price is volatile.

Our stock price, like that of our peers in the biotechnology and pharmaceutical industries, is volatile. Our revenues and operating results may fluctuate from period to period for a number of reasons. Events such as a delay in product development, changes to our expectations or strategy or even a relatively small revenue shortfall may cause financial results for a period to be below our expectations or projections. As a result, our revenues and operating results and, in turn, our stock price may be subject to significant fluctuations. Announcements or discussions, including via social media channels, of possible restrictive actions by government or private payers that would negatively affect our business or industry if ultimately enacted or adopted may also cause our stock price to fluctuate, whether or not such restrictive actions ever actually occur. Similarly, actual or perceived safety issues with our products or similar products or unexpected clinical trial results can have an immediate and rapid effect on our stock price, whether or not our operating results are materially affected.

We may not be able to access the capital and credit markets on terms that are favorable to us, or at all.

The capital and credit markets may experience extreme volatility and disruption, which may lead to uncertainty and liquidity issues for both borrowers and investors. For example, early in 2020, there were significant disruptions in the commercial paper market and several borrowers were unable to obtain funding at normal rates or maturities, which resulted in a significant increase in draws of corporate credit lines with banks. Similarly, the bond markets experienced extreme volatility in terms of interest rates and credit spreads, with several days without new issuances of corporate bonds. We expect to access the capital markets, from time to time, to supplement our existing funds and cash generated from operations in satisfying our needs for working capital; capital expenditure and debt service requirements; our plans to pay dividends and repurchase stock; and other business initiatives we strategically plan to pursue, including acquisitions and licensing activities. In the event of adverse capital and credit market conditions, we may be unable to obtain capital market financing on similar favorable terms, or at all, which could have a material adverse effect on our business and results of operations. Changes in credit ratings issued by nationally recognized credit-rating agencies could adversely affect our ability to obtain capital market financing and the cost of such financing and have an adverse effect on the market price of our securities.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

As of December 31, 2021, we owned or leased approximately 160 properties. The locations and primary functions of significant properties are summarized in the following tables:

U.S. Location:	Manufacturing	Administrative	R&D	Sales & marketing	Warehouse	Distribution center
Thousand Oaks, CA*	P	P	P	P	P	P
San Francisco, CA			P			
Louisville, KY					P	P
Cambridge, MA			P			
Juncos, Puerto Rico	P	P			P	P
West Greenwich, RI	P	P			P	
Tampa, FL		P				
Other U.S. cities		P		P		

* Corporate headquarters

ROW Location:	Manufacturing	Administrative	R&D	Sales & marketing	Warehouse	Distribution center
Brazil	P	P		P	P	P
Canada		P	P	P		
China		P		P		
Denmark		P	P	P		
Germany		P	P	P		
Iceland		P	P			
Ireland	P	P		P	P	
Japan		P		P		
Netherlands	P	P		P	P	P
Singapore	P	P		P	P	
Switzerland		P		P		
Turkey	P	P		P	P	P
United Kingdom		P	P	P		
Other countries		P	P	P	P	

Excluded from the information above are (i) undeveloped land and leased properties that have been abandoned and (ii) certain buildings we still own but that are no longer used in our business. There are no material encumbrances on our owned properties.

We believe our facilities are suitable for their intended uses and, in conjunction with our third-party contract manufacturing agreements, provide adequate capacity and are sufficient to meet our expected needs. See Item 1A. Risk Factors for a discussion of the factors that could adversely impact our manufacturing operations and the global supply of our products.

See Item 1. Business—Manufacturing, Distribution and Raw Materials.

Item 3. LEGAL PROCEEDINGS

Certain of the legal proceedings in which we are involved are discussed in Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements and are hereby incorporated by reference.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

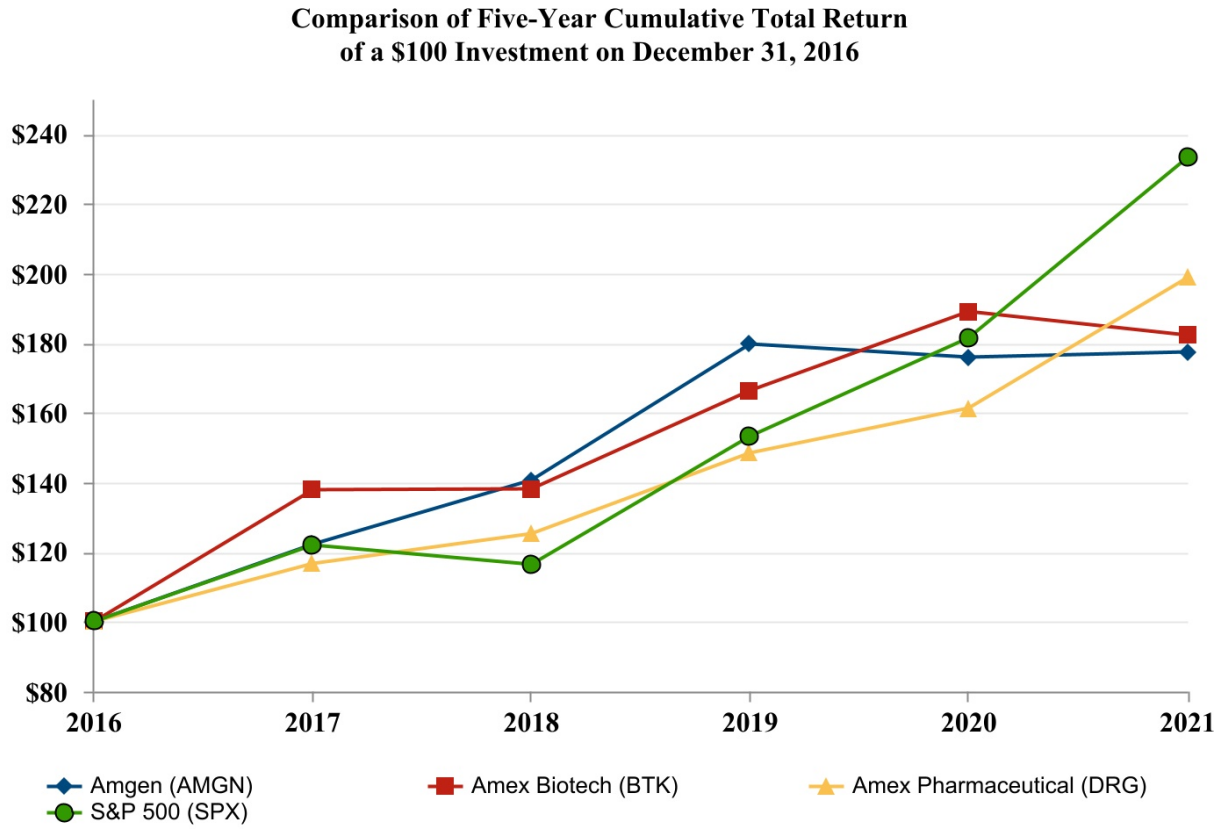
Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Common stock

Our common stock trades on the NASDAQ Global Select Market under the symbol AMGN. As of February 11, 2022, there were approximately 5,069 holders of record of our common stock.

Performance graph

The following graph shows the value of an investment of $100 on December 31, 2016, in each of Amgen common stock, the Amex Biotech Index, the Amex Pharmaceutical Index and Standard & Poor's 500 Index. All values assume reinvestment of the pretax value of dividends and are calculated as of December 31 of each year. The historical stock price performance of the Company's common stock shown in the performance graph is not necessarily indicative of future stock price performance.



	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021
Amgen (AMGN)	$100.00	$122.32	$140.76	$179.65	$176.05	$177.59
Amex Biotech (BTK)	$100.00	$137.81	$138.18	$166.41	$189.00	$182.34
Amex Pharmaceutical (DRG)	$100.00	$116.63	$125.31	$148.36	$161.31	$199.02
Standard & Poor's 500 (SPX)	$100.00	$121.89	$116.56	$153.26	$181.44	$233.47

The material in the above performance graph is not soliciting material, is not deemed filed with the SEC and is not incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, whether made on, before or after the date of this filing and irrespective of any general incorporation language in such filing.

Stock repurchase program

During the three months and year ended December 31, 2021, we had one outstanding stock repurchase program, under which the repurchasing activity was as follows:

	Total number of shares purchased	Average price paid per share[1]	Total number of shares purchased as part of publicly announced program	Maximum dollar value that may yet be purchased under the program[2]
October 1 - October 31	1,874,976	$ 208.06	1,874,976	$ 6,960,277,756
November 1 - November 30	2,484,905	$ 208.35	2,484,905	$ 6,442,554,907
December 1 - December 31	2,559,300	$ 216.14	2,559,300	$ 10,889,377,513
	6,919,181	$ 211.15	6,919,181	
January 1 - December 31	21,730,283	$ 229.50	21,730,283	

[1] Average price paid per share includes related expenses.

[2] In October 2021 and December 2021, our Board of Directors increased the amount authorized under the stock repurchase program by an additional $4.5 billion and an additional $5.0 billion, respectively.

Dividends

For the years ended December 31, 2021 and 2020, we paid quarterly dividends. We expect to continue to pay quarterly dividends, although the amount and timing of any future dividends are subject to approval by our Board of Directors. Additional information required by this item is incorporated herein by reference to Part IV—Note 16, Stockholders' equity, to the Consolidated Financial Statements.

Securities Authorized for Issuance Under Existing Equity Compensation Plans

Information about securities authorized for issuance under existing equity compensation plans is incorporated by reference from Item 12—Securities Authorized for Issuance Under Existing Equity Compensation Plans.

Item 6. RESERVED

Item 7. 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 consolidated financial statements and accompanying notes. 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 Part I, Item 1A. Risk Factors. We have based our forward-looking statements on our management's beliefs and assumptions based on information available to our management at the time the statements are made. We caution you that actual outcomes and results may differ materially from what is expressed, implied or forecasted by our forward-looking statements. Reference is made in particular to forward-looking statements regarding product sales, regulatory activities, clinical trial results, reimbursement, expenses, EPS, liquidity and capital resources, trends, planned dividends, stock repurchases, collaborations and effects of pandemics. Except as required under the federal securities laws and the rules and regulations of the SEC, we do not have any intention or obligation to update publicly any forward-looking statements after the distribution of this report, whether as a result of new information, future events, changes in assumptions or otherwise.

Overview

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

Our principal products are ENBREL, Prolia, Otezla, XGEVA, Neulasta, Aranesp, Repatha, KYPROLIS and Nplate. We also market a number of other products, including MVASI, Vectibix, KANJINTI, EVENITY, EPOGEN, BLINCYTO, AMGEVITA, Aimovig, Parsabiv, NEUPOGEN, LUMAKRAS/LUMYKRAS, Sensipar/Mimpara and TEZSPIRE. For additional information about our products, see Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products.

Our strategy includes integrated activities intended to maintain and strengthen our competitive position in the industry. We focus on six commercial areas: inflammation, oncology/hematology, bone health, CV disease, nephrology and neuroscience. And we conduct discovery research primarily in three therapeutic areas: inflammation, oncology/hematology and general medicine. In 2021, we advanced our innovative pipeline, launched new products, completed several strategic transactions to augment our pipeline and research capabilities, and continued providing uninterrupted supplies of our medicines globally through the second year of the COVID-19 pandemic. We accomplished these objectives while maintaining a strategic and disciplined approach to capital allocation and while advancing our ESG efforts.

In 2021, we continued to advance our pipeline, including achieving key regulatory approvals for LUMAKRAS and TEZSPIRE. Our external business development activities for 2021 included: (i) acquiring Five Prime, including a later-stage gastric cancer bemarituzumab program; (ii) entering into a license agreement with KKC to develop a later-stage molecule for atopic dermatitis and other diseases; and (iii) acquiring Teneobio for its proprietary technologies and oncology programs in development. We also continued to advance our biosimilar program with the launch of RIABNI in the United States and introduced our other biosimilars into new markets. Our biosimilars are expected to continue launching in new markets throughout 2022.

During 2021, while meeting the challenges of a global pandemic and facing increased competition from biosimilars and generics, total product sales were relatively flat as volume growth was offset by lower net selling prices. Product sales decreased 4% in the United States, driven by lower net selling prices, partially offset by volume growth, and increased 12% ROW, driven by volume growth, partially offset by lower net selling prices. Total operating expenses increased 13%, driven by IPR&D expense from the Five Prime acquisition and the upfront payment associated with the KKC licensing agreement.

Cash flows from operating activities totaled $9.3 billion, which supported investment in our business while returning capital to shareholders through the payment of cash dividends and stock repurchases. For 2021, we increased our quarterly cash dividend by 10% to $1.76 per share of common stock. In December 2021, we declared a cash dividend of $1.94 per share of common stock for the first quarter of 2022, an increase of 10% for this period, to be paid in March 2022. We also repurchased 21.7 million shares of our common stock during 2021 at an aggregate cost of $5.0 billion. In 2021, we issued $4.9 billion and repaid $4.2 billion of debt that was coming due in 2022.

Amgen's approach to, and investment in, human capital resource management is directed at attracting, motivating, developing and retaining talent to tackle the challenges of running an enterprise focused on the discovery, development and commercialization of innovative medicines. Our compensation, benefits and development programs are designed to encourage performance, promote accountability and adherence to Company values, and align with the interests of the Company's shareholders. Further, we believe that a diverse and inclusive culture fosters innovation, which supports our ability to serve patients. We are engaging in activities and setting goals to improve our focus on diversity, inclusion and belonging. For further information on these and other efforts, see Part I, Item 1. Business—Human Capital Resources.

We have a long-standing ambition to be environmentally responsible, and we regularly set targets to challenge ourselves to deliver further improvements. In 2020, we met or exceeded our environmental sustainability targets set out in 2013 that called for reducing fleet carbon output by up to 20%, facility carbon output by 10%, water consumption by 10% and waste disposal by 35%.[2] We achieved our 2020 targets while growing revenues, increasing production capacity and expanding to approximately 100 countries over the same 2013–20 period. To continue on our path to greater environmental sustainability, in January 2021 we announced a new set of long-term environmental targets to achieve by 2027, including achieving carbon neutrality, reducing water consumption by 40% and reducing waste disposed by 75%.[2, 3]

[2] Represents reductions against established baselines, taking into account only verified reduction projects, and does not take into account changes associated with contraction or expansion of the Company.
[3] Carbon neutrality goal refers to Scope 1 and 2.

Our long-term success depends, to a great extent, on our ability to continue to discover, develop and commercialize innovative products and acquire or collaborate on therapies currently in development by other companies. We must develop new products to achieve revenue growth and to offset revenue losses from when products lose their exclusivity or when competing products are launched. Certain of our products face increasing pressure from competition, including biosimilars and generics. For additional information, including information on the expirations of patents for various products, see Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Patents, and Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition. We devote considerable resources to R&D activities, but successful product development in the biotechnology industry is highly uncertain. We also face increasing regulatory scrutiny of safety and efficacy both before and after products launch.

Rising healthcare costs and uncertain economic conditions continue to pose challenges to our business, including increasing pressure by third-party payers, such as governments and private payers, to reduce healthcare expenditures. As a result of public and private healthcare-provider focus, the industry continues to be subject to cost containment measures and significant pricing pressures, including net price declines. 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 I, Item 1. Business—Marketing, Distribution and Selected Marketed Products, and Part I, Item 1A. Risk Factors for further discussion of certain factors that could impact our future product sales.

COVID-19 pandemic

Since the onset of the pandemic in 2020, we have been closely monitoring the pandemic's effects on our global operations. We continue to take appropriate steps to minimize risks to our employees, a significant number of whom have continued to work virtually. Employee access to company facilities has been in accordance with applicable government health and safety protocols and guidance issued in response to the COVID-19 pandemic. To date, our remote working arrangements have not significantly affected our ability to maintain critical business operations, and we have not experienced disruptions to or shortages of our supply of medicines.

Since the beginning of the COVID-19 pandemic, we have seen changes in demand for some of our products driven by changes in the frequency of patient visits to doctors' offices that has impacted the provision of treatments to existing patients and reduced diagnoses in new patients. During 2021, there was gradual recovery in both patient visits and diagnoses that approached pre-COVID-19 levels early in the fourth quarter. However late in 2021, the Omicron variant began to impact the healthcare sector and as a result we expect ongoing variability in demand patterns in the first half of 2022. The cumulative decrease in diagnoses over the course of the pandemic has suppressed the volume of new patients starting treatment, which we expect to continue to impact our business. We will continue to closely monitor the effects of emerging COVID-19 variants on patient behavior and access to care.

Since early 2021, global vaccination efforts have been under way to control the pandemic. However, uncertainty remains as to the length of time required for vaccination of a meaningful portion of the population and as to the efficacy of such vaccinations with regard to the trajectory of the pandemic. Challenges to vaccination efforts, new variants and other causes of virus spread may require governments to issue additional restrictions and/or order shutdowns in various geographies. As a result, we expect to see continued volatility for at least the duration of the pandemic as governments respond to current local conditions.

With respect to our drug development activities, we are continuously monitoring COVID-19 infection rates, including changes from new variants, and working to mitigate effects on future study enrollment in our clinical trials and evaluating the impacts in all countries where our clinical trials occur. We remain focused on supporting our active clinical sites in their provision of care to patients and in our provision of investigational drug supply.

Despite the ongoing pandemic and business impacts noted above, 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 expenditures and debt service requirements as well as to engage in capital-return and other business initiatives that we plan to pursue. For a discussion of the risks the COVID-19 pandemic presents to our results, see Risk Factors in Part I, Item 1A. Risk Factors of this Form 10-K.

Selected Financial Information

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020
Product sales:			
U.S.	$ 17,286	(4)%	$ 17,985
ROW	7,011	12 %	6,255
Total product sales	24,297	— %	24,240
Other revenues	1,682	42 %	1,184
Total revenues	$ 25,979	2 %	$ 25,424
Operating expenses	$ 18,340	13 %	$ 16,285
Operating income	$ 7,639	(16)%	$ 9,139
Net income	$ 5,893	(19)%	$ 7,264
Diluted EPS	$ 10.28	(16)%	$ 12.31
Diluted shares	573	(3)%	590

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

Total product sales were relatively flat for 2021, as volume growth was offset by declines in net selling prices. For 2022, we expect that net selling prices will continue to decline at a portfolio level driven by increased competition. Further, the first quarter of a year historically represents the lowest product sales quarter for the year, in part due to plan changes, insurance reverifications and higher co-pay expenses as U.S. patients work through deductibles, particularly for products acquired through pharmacy benefit programs.

Throughout the pandemic, we experienced changes in demand for some of our products. The pandemic has interrupted many physician–patient interactions, which has led to delays in diagnoses and treatments, with varying degrees of impact across our portfolio. In general, declines in the sales of our products that were impacted by the dynamics of the pandemic were most significant in the early months of the pandemic with product demand beginning to show some recovery in late 2020. During 2021, we observed gradual recovery from the COVID-19 pandemic, with patient visits and diagnosis rates that approached pre-pandemic levels early in the fourth quarter. However, late in the year, the Omicron variant began to impact the healthcare sector and as a result, we have seen some shift back to virtual engagement by our field staff and variability in demand patterns. The cumulative decrease in diagnoses over the course of the pandemic has suppressed the volume of new patients starting treatment, which we expect to continue to impact our business. Given the unpredictable nature of the pandemic, we expect there could be ongoing intermittent disruptions in physician–patient interactions, and as a result, we continue to expect quarter-to-quarter variability. In addition, other changes in the healthcare ecosystem have the potential to introduce variability into product sales trends. For example, changes in U.S. employment have led to changes to the insured population. Growth in numbers of Medicaid enrollees and uninsured individuals may have a negative impact on product demand and sales. Overall, uncertainty remains around the timing and magnitude of our sales during the COVID-19 pandemic. See Risk Factors in Part I, Item 1A. of this Form 10-K.

Other revenues increased for 2021, primarily driven by the sale of COVID-19 antibody material resulting from our manufacturing collaboration.

Operating expenses increased for 2021, driven by IPR&D expense related to the bemarituzumab program acquired as part of the Five Prime acquisition and by the upfront payment associated with the KKC licensing agreement.

Although changes in foreign currency exchange rates result in increases or decreases in our reported international product sales, the benefit or detriment that such movements have on our international product sales is partially offset by corresponding increases or decreases in our international operating expenses and our related foreign currency hedging activities. Our hedging activities seek to offset the impacts, both positive and negative, that foreign currency exchange rate changes may have on our net income by hedging our net foreign currency exposure, primarily with respect to product sales denominated in euros. The net impact from changes in foreign currency exchange rates was not material in 2021, 2020 or 2019.

Results of Operations

Product sales

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
ENBREL	$ 4,465	(11)%	$ 4,996	(4)%	$ 5,226
Prolia	3,248	18 %	2,763	3 %	2,672
Otezla	2,249	2 %	2,195	*	178
XGEVA	2,018	6 %	1,899	(2)%	1,935
Neulasta	1,734	(24)%	2,293	(29)%	3,221
Aranesp	1,480	(6)%	1,568	(9)%	1,729
Repatha	1,117	26 %	887	34 %	661
KYPROLIS	1,108	4 %	1,065	2 %	1,044
Nplate	1,027	21 %	850	7 %	795
Other products	5,851	2 %	5,724	21 %	4,743
Total product sales	$ 24,297	— %	$ 24,240	9 %	$ 22,204
Total U.S.	$ 17,286	(4)%	$ 17,985	9 %	$ 16,531
Total ROW	7,011	12 %	6,255	10 %	5,673
Total product sales	$ 24,297	— %	$ 24,240	9 %	$ 22,204

* Change in excess of 100%.

Future sales of our products will depend in part on the factors discussed in the Overview, Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition, in Part I, Item 1A. Risk Factors, and any additional factors discussed in the individual product sections below. In addition, for a list of our products' significant competitors, see Part I, Item 1. Business—Marketing, Distribution and Selected Marketed Products—Competition.

ENBREL

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
ENBREL — U.S.	$ 4,352	(10)%	$ 4,855	(4)%	$ 5,050
ENBREL — Canada	113	(20)%	141	(20)%	176
Total ENBREL	$ 4,465	(11)%	$ 4,996	(4)%	$ 5,226

The decrease in ENBREL sales for 2021 was driven by lower net selling price, unit demand and unfavorable changes in inventory. For 2022, we expect ENBREL to follow the historical pattern of lower sales in the first quarter relative to subsequent quarters due to the impact of benefit plan changes, insurance reverification and increased co-pay expenses as U.S. patients work through deductibles. In addition, for 2022, we expect net selling price to decline.

The decrease in ENBREL sales for 2020 was driven by lower unit demand and net selling price, partially offset by favorable changes to estimated sales deductions and inventory.

Prolia

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Prolia — U.S.	$ 2,150	17 %	$ 1,830	3 %	$ 1,772
Prolia — ROW	1,098	18 %	933	4 %	900
Total Prolia	$ 3,248	18 %	$ 2,763	3 %	$ 2,672

The increase in global Prolia sales for 2021 was primarily driven by higher unit demand.

The increase in global Prolia sales for 2020 was driven by higher unit demand and net selling price.

Otezla

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Otezla — U.S.	$ 1,804	1 %	$ 1,790	*	$ 139
Otezla — ROW	445	10 %	405	*	39
Total Otezla	$ 2,249	2 %	$ 2,195	*	$ 178

* Change in excess of 100%.

The increase in global Otezla sales for 2021 was driven by higher unit demand, partially offset by lower net selling price and unfavorable changes to inventory. For 2022, we expect Otezla to follow the historical pattern of lower sales in the first quarter relative to subsequent quarters due to the impact of benefit plan changes, insurance reverification and increased co-pay expenses as U.S. patients work through deductibles.

Otezla was acquired on November 21, 2019, and generated $2.2 billion and $178 million in global sales for the years ended December 31, 2020 and 2019, respectively.

For a discussion of ongoing litigation related to Otezla, see Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

XGEVA

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
XGEVA — U.S.	$ 1,434	2 %	$ 1,405	(4)%	$ 1,457
XGEVA — ROW	584	18 %	494	3 %	478
Total XGEVA	$ 2,018	6 %	$ 1,899	(2)%	$ 1,935

The increase in global XGEVA sales for 2021 was primarily driven by higher unit demand, partially offset by lower net selling price.

The decrease in global XGEVA sales for 2020 was driven by lower unit demand as a result of the COVID-19 pandemic.

Neulasta

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Neulasta — U.S.	$ 1,514	(24)%	$ 2,001	(29)%	$ 2,814
Neulasta — ROW	220	(25)%	292	(28)%	407
Total Neulasta	$ 1,734	(24)%	$ 2,293	(29)%	$ 3,221

The decreases in global Neulasta sales for 2021 and 2020 was primarily driven by lower net selling price and unit demand. Increased competition as a result of biosimilar versions of Neulasta has had and will continue to have a significant adverse impact on brand sales, including accelerating net price erosion and lower unit demand. We also expect other biosimilar versions, including biosimilars that will use an on-body injector that would compete with our Onpro injector, to be approved in the future.

For a discussion of ongoing patent litigations related to biosimilars, see Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

Aranesp

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Aranesp — U.S.	$ 537	(15)%	$ 629	(17)%	$ 758
Aranesp — ROW	943	— %	939	(3)%	971
Total Aranesp	$ 1,480	(6)%	$ 1,568	(9)%	$ 1,729

The decrease in global Aranesp sales for 2021 was primarily driven by lower net selling price due to competition.

The decrease in global Aranesp sales for 2020 was driven by declines in net selling price and unit demand.

Aranesp continues to face competition from a long-acting ESA and from a biosimilar version of EPOGEN, which will continue to impact sales in the future.

Repatha

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Repatha — U.S.	$ 557	21 %	$ 459	22 %	$ 376
Repatha — ROW	560	31 %	428	50 %	285
Total Repatha	$ 1,117	26 %	$ 887	34 %	$ 661

The increases in global Repatha sales for 2021 and 2020 was driven by higher unit demand, partially offset by lower net selling price. Contracting changes to improve Medicare Part D patient access resulted in the decrease to net selling price.

For a discussion of ongoing litigation related to Repatha, see Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements.

KYPROLIS

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
KYPROLIS — U.S.	$ 736	4 %	$ 710	9 %	$ 654
KYPROLIS — ROW	372	5 %	355	(9)%	390
Total KYPROLIS	$ 1,108	4 %	$ 1,065	2 %	$ 1,044

The increase in global KYPROLIS sales for 2021 was primarily driven by higher unit demand.

The increase in global KYPROLIS sales for 2020 was primarily driven by an increase in net selling price and favorable changes in inventory, partially offset by lower unit demand.

The FDA has reported that it has granted tentative or final approval of ANDAs for generic carfilzomib products filed by a number of companies. The date of approval of those ANDAs for generic carfilzomib products is governed by the Hatch–Waxman Act and any applicable settlement agreements between us and certain companies that seek to develop generic carfilzomib products.

Nplate

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Nplate — U.S.	$ 566	17 %	$ 485	1 %	$ 480
Nplate — ROW	461	26 %	365	16 %	315
Total Nplate	$ 1,027	21 %	$ 850	7 %	$ 795

The increases in global Nplate sales for 2021 and 2020 was primarily driven by higher unit demand.

Other products

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
MVASI — U.S.	$ 826	26 %	$ 656	*	$ 121
MVASI — ROW	340	*	142	*	6
Vectibix — U.S.	347	1 %	342	8 %	316
Vectibix — ROW	526	12 %	469	10 %	428
KANJINTI — U.S.	479	1 %	475	*	118
KANJINTI — ROW	93	1 %	92	(15)%	108
EVENITY — U.S.	331	73 %	191	*	42
EVENITY — ROW	199	25 %	159	8 %	147
EPOGEN — U.S.	521	(13)%	598	(31)%	867
BLINCYTO — U.S.	278	20 %	231	31 %	176
BLINCYTO — ROW	194	31 %	148	9 %	136
AMGEVITA — ROW	439	33 %	331	54 %	215
Aimovig — U.S.	313	(17)%	378	24 %	306
Aimovig — ROW	4	N/A	—	N/A	—
Parsabiv — U.S.	150	(75)%	605	10 %	550
Parsabiv— ROW	130	17 %	111	39 %	80
NEUPOGEN — U.S.	101	(30)%	144	(19)%	178
NEUPOGEN — ROW	67	(17)%	81	(6)%	86
LUMAKRAS — U.S.	82	N/A	—	N/A	—
LUMYKRAS — ROW	8	N/A	—	N/A	—
Sensipar — U.S.	6	(93)%	92	(63)%	252
Sensipar/Mimpara — ROW	78	(60)%	196	(34)%	299
Other — U.S.	202	85 %	109	4 %	105
Other — ROW	137	(21)%	174	(16)%	207
Total other product sales	$ 5,851	2 %	$ 5,724	21 %	$ 4,743
Total U.S. — other products	$ 3,636	(5)%	$ 3,821	26 %	$ 3,031
Total ROW — other products	2,215	16 %	1,903	11 %	1,712
Total other product sales	$ 5,851	2 %	$ 5,724	21 %	$ 4,743

* Change in excess of 100%.

N/A = not applicable

Operating expenses

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

	Year ended December 31, 2021	Change	Year ended December 31, 2020	Change	Year ended December 31, 2019
Cost of sales	$ 6,454	5 %	$ 6,159	41 %	$ 4,356
% of product sales	26.6 %		25.4 %		19.6 %
% of total revenues	24.8 %		24.2 %		18.6 %
Research and development	$ 4,819	15 %	$ 4,207	2 %	$ 4,116
% of product sales	19.8 %		17.4 %		18.5 %
% of total revenues	18.5 %		16.5 %		17.6 %
Acquired in-process research and development	$ 1,505	N/A	$ —	N/A	$ —
% of product sales	6.2 %		— %		— %
% of total revenues	5.8 %		— %		— %
Selling, general and administrative	$ 5,368	(6)%	$ 5,730	11 %	$ 5,150
% of product sales	22.1 %		23.6 %		23.2 %
% of total revenues	20.7 %		22.5 %		22.0 %
Other	$ 194	3 %	$ 189	*	$ 66
Total operating expenses	$ 18,340	13 %	$ 16,285	19 %	$ 13,688

* Change in excess of 100%

N/A = not applicable

Cost of sales

Cost of sales increased to 24.8% of total revenues for 2021, driven by unfavorable product mix and higher profit share and royalties, partially offset by lower amortization expense from acquisition-related assets and lower manufacturing costs.

Cost of sales increased to 24.2% of total revenues for 2020, primarily driven by the amortization of expenses related to our acquisition of Otezla and by higher royalty expenses and profit share, partially offset by lower manufacturing costs.

Research and development

The Company groups all of its R&D activities and related expenditures into three categories: (i) research and early pipeline, (ii) later-stage clinical programs and (iii) marketed products. These categories are described below:

Category	Description
Research and early pipeline	R&D expenses incurred in activities substantially in support of early research through the completion of phase 1 clinical trials, including drug discovery, toxicology, pharmacokinetics and drug metabolism, and process development
Later-stage clinical programs	R&D expenses incurred in or related to phase 2 and phase 3 clinical programs intended to result in registration of a new product or a new indication for an existing product primarily in the United States or the EU
Marketed products	R&D expenses incurred in support of the Company's marketed products that are authorized to be sold primarily in the United States or the EU. Includes clinical trials designed to gather information on product safety (certain of which may be required by regulatory authorities) and their product characteristics after regulatory approval has been obtained, as well as the costs of obtaining regulatory approval of a product in a new market after approval in either the United States or the EU has been obtained

R&D expense by category was as follows (in millions):

	Years ended December 31,		
	2021	2020	2019
Research and early pipeline	$ 1,670	$ 1,405	$ 1,649
Later-stage clinical programs	1,726	1,365	1,062
Marketed products	1,423	1,437	1,405
Total R&D expense	$ 4,819	$ 4,207	$ 4,116

The increase in R&D expense for 2021 was driven by a licensing-related expense from our collaboration with KKC included in later-stage clinical programs and higher spend in research and early pipeline, including other business development activities.

The increase in R&D expense for 2020 was driven by higher spend for later-stage clinical programs, including LUMAKRAS, biosimilar programs and Otezla, and higher spend for Otezla included in marketed-product support. These increases were partially offset by recoveries from our collaboration with BeiGene that reduced expenses in later-stage clinical programs and in research and early pipeline, and lower spend in certain oncology programs included in research and early pipeline.

Acquired in-process research and development

Acquired IPR&D expense for 2021 was related to the bemarituzumab program acquired as part of the Five Prime acquisition.

Selling, general and administrative

The decrease in SG&A expense for 2021 was primarily driven by lower spend for marketed products and lower general and administrative expenses.

The increase in SG&A expense for 2020 was driven by investments in certain marketed products, primarily Otezla, and preparation for product launches, partially offset by a reduction in conference-related expenses due to the impact of COVID-19.

Other

Other operating expenses for 2021 primarily consisted of expenses related to cost-savings initiatives and a legal judgment.

Other operating expenses for 2020 primarily consisted of legal settlement expenses.

Other operating expenses for 2019 primarily consisted of expenses related to cost-savings initiatives.

Nonoperating expenses/income and income taxes

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

	Years ended December 31,		
	2021	2020	2019
Interest expense, net	$ (1,197)	$ (1,262)	$ (1,289)
Other income, net	$ 259	$ 256	$ 753
Provision for income taxes	$ 808	$ 869	$ 1,296
Effective tax rate	12.1 %	10.7 %	14.2 %

Interest expense, net

The decrease in Interest expense, net, for 2021 was primarily due to net higher costs associated with the early retirement of debt in 2020 and lower LIBOR rates in 2021 on debt for which we effectively pay a variable rate of interest through the use of interest rate swaps, partially offset by higher overall debt outstanding.

The decrease in Interest expense, net, for 2020 was primarily due to lower LIBOR rates on debt for which we effectively pay a variable rate of interest, partially offset by net costs associated with the early retirement of debt.

Other income, net

The increase in Other income, net, for 2021 was primarily due to lower losses incurred in connection with our BeiGene investment compared with 2020, partially offset by lower income on our interest-bearing investments in 2021 and other nonrecurring gains recognized in 2020.

The decrease in Other income, net, for 2020 was primarily due to reduced interest income as a result of lower average cash balances and a decline in interest yields and losses incurred in connection with our BeiGene investment, partially offset by gains recognized on our investments in publicly traded equity securities and limited partnerships. See Part IV—Note 9, Investments, to the Consolidated Financial Statements.

Income taxes

The increase in our effective tax rate for 2021 compared with 2020 was primarily driven by the non-deductible IPR&D expense arising from the acquisition of Five Prime, partially offset by earnings mix and adjustments to prior-year tax liabilities.

The decrease in our effective tax rate for 2020 compared with 2019 was primarily driven by favorable items, including audit settlements, adjustments to prior-year tax liabilities, lower interest expense on uncertain tax positions and amortization related to the Otezla acquisition, partially offset by changes in valuation allowance.

The Administration proposed and Congress is considering significant changes to existing tax law. These changes, if enacted, could substantially increase taxes we pay to the U.S. government. Further, the OECD recently reached agreement to align countries on a minimum corporate tax rate and an expansion of the taxing rights of market countries. If enacted, this agreement could result in tax increases in both the United States and foreign jurisdictions. The U.S. Treasury recently released final foreign tax credit regulations that eliminate U.S. creditability of the Puerto Rico Excise Tax beginning in 2023, which will increase our U.S. tax liability. The U.S. territory of Puerto Rico is considering changes to its tax system that may minimize or eliminate this impact, but the outcome of such potential changes is uncertain. Changes to existing tax law in the United States, the U.S. territory of Puerto Rico, or other jurisdictions, including the potential changes discussed above, could result in tax increases where we do business and could have a material adverse effect on the results of our operations.

In 2017, we received an RAR and a modified RAR from the IRS for the years 2010, 2011 and 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 Notices for 2010, 2011 and 2012 that we received in May and July 2021 which seek to increase our U.S. taxable income. The Notices seek to increase our U.S. taxable income by an amount that would result in additional federal tax of approximately $3.6 billion plus interest. Any additional tax that could be imposed would be reduced by up to approximately $900 million of repatriation tax previously accrued on our foreign earnings. We firmly believe that the IRS's positions set forth in the Notices are without merit, and we are contesting the Notices through the judicial process.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013, 2014 and 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, 2011 and 2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office. We were unable to reach resolution at the administrative appeals level, and we anticipate that we will receive a statutory notice of deficiency for these years as well. We expect to contest any such notice related to 2013–15 through the judicial process. We are also currently under examination by the IRS for the years 2016, 2017 and 2018 and by a number of state and foreign tax jurisdictions.

Final resolution of these complex matters is not likely within the next 12 months. We 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 the 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 consolidated financial statements.

See Part I, Item 1A. Risk Factors—*The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability;* Part II, Item 7. MD&A—Critical Accounting Policies and Estimates—Income taxes; and Part IV—Note 6, Income taxes, to the Consolidated Financial Statements for further discussion.

Financial Condition, Liquidity and Capital Resources

Selected financial data was as follows (in millions):

	December 31,	
	2021	2020
Cash, cash equivalents and marketable securities	$ 8,037	$ 10,647
Total assets	$ 61,165	$ 62,948
Current portion of long-term debt	$ 87	$ 91
Long-term debt	$ 33,222	$ 32,895
Stockholders' equity	$ 6,700	$ 9,409

Cash, cash equivalents and marketable securities

Our balance of cash, cash equivalents and marketable securities was $8.0 billion at December 31, 2021. 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 strategic transactions (including those that expand our portfolio of products in areas of therapeutic interest), repayment of debt, payment of dividends and stock repurchases.

We intend to continue investing in our business while returning capital to stockholders through the payment of cash dividends and stock repurchases, thereby reflecting our confidence in the future cash flows of our business and our desire to optimize our cost of capital. The timing and amount of future dividends and stock repurchases will vary based on a number of factors, including future capital requirements for strategic transactions, availability of financing on acceptable terms, debt service requirements, our credit rating, changes 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.

The Board of Directors declared quarterly cash dividends of $1.76, $1.60 and $1.45 per share of common stock paid in 2021, 2020 and 2019, respectively, an increase of 10% over the prior year in both 2021 and 2020. In December 2021, the Board of Directors declared a cash dividend of $1.94 per share of common stock for the first quarter of 2022, an increase of 10% for this period, to be paid in March 2022.

We also returned capital to stockholders through our stock repurchase program. During 2021, we repurchased and had cash settlements of $5.0 billion of common stock. In 2020, we repurchased and had cash settlements of $3.5 billion of common stock. In 2019, we repurchased $7.6 billion of common stock and had cash settlements of $7.7 billion. In March 2021, October 2021 and December 2021, the Board of Directors increased the amount authorized under our stock repurchase program by $3.4 billion, $4.5 billion and $5.0 billion, respectively. As of December 31, 2021, $10.9 billion remained available under the stock repurchase program.

As a result of stock repurchases and quarterly dividend payments, we have an accumulated deficit as of December 31, 2021 and 2020. Our accumulated deficit is not anticipated to affect our future ability to operate, repurchase stock, pay dividends or repay our debt given our expected continued profitability and strong financial position.

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

Financing arrangements

To help meet our liquidity requirements, we have entered into various financing arrangements. The noncurrent portions of our long-term borrowings as of December 31, 2021 and 2020, were $33.2 billion and $32.9 billion, respectively. The carrying values of our long-term borrowings are net of fair value adjustments for interest rate swaps and unamortized discounts, premiums and offering costs. As of December 31, 2021, S&P, Moody's and Fitch assigned credit ratings to our outstanding senior notes of A– with a stable outlook, Baa1 with a stable outlook and BBB+ with a stable outlook, respectively, which are considered investment grade. Unfavorable changes to these ratings may have an adverse impact on future financings.

During 2021 and 2020, we issued debt with aggregate principal amounts of $5.0 billion and $9.0 billion, respectively. During 2019, we did not issue any debt or debt securities. During 2021, 2020 and 2019, we repaid/redeemed debt of $4.2 billion, $6.5 billion and $4.5 billion, respectively. In addition, during 2020, we exchanged $0.7 billion of certain of our outstanding note issuances with $0.9 billion of newly issued notes with a lower interest rate and later maturity date.

To achieve a desired mix of fixed-rate and floating-rate debt, we entered into interest rate swap contracts that effectively converted a fixed-rate interest coupon for certain of our debt issuances to a floating, LIBOR-based coupon over the lives of the respective notes. These interest rate swap contracts qualify and are designated as fair value hedges. As of December 31, 2021 and 2020, we had interest rate swap contracts with aggregate notional amounts of $6.7 billion and $5.9 billion, respectively.

To hedge our exposure to foreign currency exchange rate risk associated with certain of our long-term notes denominated in foreign currencies, we entered into cross-currency swap contracts, which effectively convert the interest payments and principal repayment of the respective notes from euros, pounds sterling and Swiss francs to U.S. dollars. These cross-currency swap contracts qualify and are designated as cash flow hedges. As of both December 31, 2021 and 2020, we had cross-currency swap contracts with aggregate notional amounts of $3.4 billion and $4.8 billion, respectively.

As of December 31, 2021, we had a commercial paper program that allows us to issue up to $2.5 billion of unsecured commercial paper to fund our working-capital needs. During 2021, 2020 and 2019, we did not issue any commercial paper. No commercial paper was outstanding as of December 31, 2021 and 2020.

In 2019, we amended and restated our $2.5 billion syndicated, unsecured, revolving credit agreement, which is available for general corporate purposes or as a liquidity backstop to our commercial paper program. The commitments under the revolving credit agreement may be increased by up to $750 million with the agreement of the banks. Each bank that is a party to the agreement has an initial commitment term of five years. This term may be extended for up to two additional one-year periods with the agreement of the banks. Annual commitment fees for this agreement are 0.09% of the unused portion of the facility based on our current credit rating. Generally, we would be charged interest for any amounts borrowed under this facility, based on our current credit rating, at (i) LIBOR plus 1% or (ii) the highest of (A) the syndication agent bank base commercial lending rate, (B) the overnight federal funds rate plus 0.50% or (C) one-month LIBOR plus 1%. The agreement contains provisions related to the determination of successor rates to address the possible phaseout or unavailability of designated reference rates. As of December 31, 2021 and 2020, no amounts were outstanding under this facility.

It is anticipated that the U.S. dollar LIBOR rate will be phased out and replaced by 2023. The Alternative Reference Rates Committee, a group of private-market participants convened by the Federal Reserve Board and the Federal Reserve Bank of New York to help ensure a successful transition from U.S. dollar LIBOR to a more robust reference rate, recommends SOFR as the U.S. dollar LIBOR alternative. As such, we expect SOFR to become widely adopted by market participants. We do not expect this change to have a material impact on our financial statements. See Part I, Item 1A. Risk Factors—*Our sales and operations are subject to the risks of doing business internationally, including in emerging markets.*

In February 2020, we filed a shelf registration statement with the SEC that allows us to issue unspecified amounts of debt securities; common stock; preferred stock; warrants to purchase debt securities, common stock, preferred stock or depositary shares; rights to purchase common stock or preferred stock; securities purchase contracts; securities purchase units; and depositary shares. Under this shelf registration statement, all of the securities available for issuance may be offered from time to time with terms to be determined at the time of issuance. This shelf registration statement expires in February 2023.

Certain of our financing arrangements contain nonfinancial covenants. In addition, our revolving credit agreement includes a financial covenant that requires us to maintain a specified minimum interest coverage ratio of (i) the sum of consolidated net income, interest expense, provision for income taxes, depreciation expense, amortization expense, unusual or nonrecurring charges and other noncash items (Consolidated EBITDA) to (ii) Consolidated Interest Expense, each as defined and described in the credit agreement. We were in compliance with all applicable covenants under these arrangements as of December 31, 2021.

These financing arrangements are more fully discussed in Part IV—Note 15, Financing arrangements, and Note 18, Derivative instruments, to the Consolidated Financial Statements.

Cash flows

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

	Years ended December 31,		
	2021	2020	2019
Net cash provided by operating activities	$ 9,261	$ 10,497	$ 9,150
Net cash provided by (used in) investing activities	$ 733	$ (5,401)	$ 5,709
Net cash used in financing activities	$ (8,271)	$ (4,867)	$ (15,767)

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 decreased during 2021 primarily due to the monetization of interest rate swaps that occurred in 2020 and the timing of payments for sales incentives and discounts. Cash provided by operating activities increased during 2020 primarily due to higher Net income after adding back the noncash amortization related to the acquisition of Otezla, the monetization of interest rate swap contracts and working-capital adjustments.

Investing

Cash provided by investing activities during 2021 was primarily due to net cash inflows related to marketable securities of $4.3 billion, partially offset by cash used in the acquisitions of Teneobio and Five Prime of $2.5 billion. Cash used in investing activities during 2020 was primarily due to our $3.2 billion of purchases of equity method investments, primarily BeiGene, and net cash outflows related to marketable securities of $1.5 billion. Cash provided by investing activities during 2019 was primarily due to net cash inflows related to marketable securities of $20.0 billion which occurred primarily to fund our acquisition of Otezla and investment in BeiGene. Capital expenditures were $880 million, $608 million and $618 million in 2021, 2020 and 2019, respectively. We currently estimate 2022 spending on capital projects to be approximately $950 million. A majority of the increase in expenditures relates to expansion of manufacturing capacity to enable supply of products and product candidates.

Financing

Cash used in financing activities during 2021 was primarily due to payments to repurchase our common stock of $5.0 billion and the payment of dividends of $4.0 billion, partially offset by proceeds from the issuance of debt, net of repayments of $0.8 billion. Cash used in financing activities during 2020 was primarily due to the payment of dividends of $3.8 billion and payments to repurchase our common stock of $3.5 billion, partially offset by proceeds from issuance of debt, net of repayments of $2.5 billion. Cash used in financing activities during 2019 was primarily due to payments to repurchase our common stock of $7.7 billion, repayment of debt of $4.5 billion and payments of dividends of $3.5 billion.

See Part IV—Note 9, Investments; Note 15, Financing arrangements; and Note 16, Stockholders' equity, to the Consolidated Financial Statements.

Capital requirements

We have material cash requirements to pay third parties under various contractual obligations discussed below.

We are obligated to pay interest and repay principal under our various financing arrangements, including amounts under interest rate swap and cross-currency swap contracts related to certain of our long-term debt obligations. For information on scheduled debt maturities and payments under derivative contracts associated with our long-term debt obligations, see Part IV—Note 15, Financing arrangements, and Note 18, Derivative instruments, to the Consolidated Financial Statements.

We are obligated to make payments for operating leases, including rental commitments on abandoned leases and leases that have not yet commenced. For information on these obligations, see Part IV—Note 13, Leases, to the Consolidated Financial Statements.

Under the 2017 Tax Act, we elected to pay in eight annual installments the repatriation tax related primarily to prior indefinitely invested earnings of our foreign operations. For information on the remaining scheduled repatriation tax installments, see Part IV—Note 19, Contingencies and commitments—Commitments—U.S. Repatriation tax, to the Consolidated Financial Statements.

We have purchase obligations of $3.2 billion primarily related to (i) R&D commitments (including those related to clinical trials) for new and existing products, (ii) capital expenditures and (iii) open purchase orders for the acquisition of goods and services in the ordinary course of business. Most of these obligations are expected to be paid within one year, and payment of certain of these amounts may be reduced based on certain future events.

In addition to the purchase obligations noted above, we are contractually obligated to pay additional amounts that in the aggregate are significant, upon the achievement of various development, regulatory and commercial milestones for agreements we have entered into with third parties, including contingent consideration incurred in the acquisitions of Teneobio and K-A. These payments are contingent upon the occurrence of various future events, substantially all of which have a high degree of uncertainty of occurring, and any resulting cash requirements are managed through our operational budgeting processes. Except with respect to the fair value of the contingent consideration of approximately $0.3 billion, these obligations are not recorded on our Consolidated Balance Sheets. As of December 31, 2021, the maximum amount that may be payable in the future for agreements we have entered into with third parties is $7.4 billion, including $1.6 billion of contingent consideration payments in connection with our Teneobio acquisition.

We have recorded liabilities for UTBs that, because of their nature, have a high degree of uncertainty regarding the timing of future cash payment and other events that extinguish these liabilities. See Part IV—Note 6, Income taxes, to the Consolidated Financial Statements.

Critical Accounting Policies and Estimates

The preparation of our 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. Our significant accounting policies are included in Part IV—Note 1, Summary of significant accounting policies. The following are considered critical to our consolidated financial statements because they require the most difficult, subjective or complex judgments, often because of the need to make estimates about matters that are inherently uncertain.

Product sales and sales deductions

Revenue from product sales is recognized upon transfer of control of a product to a customer, generally upon delivery, based on an amount that reflects the consideration to which we expect to be entitled, net of accruals for estimated rebates, wholesaler chargebacks, discounts and other deductions (collectively, sales deductions) and returns established at the time of sale.

We analyze the adequacy of our accruals for sales deductions quarterly. Amounts accrued for sales deductions are adjusted when trends or significant events indicate that adjustment is appropriate. Accruals are also adjusted to reflect actual results. Amounts recorded in Accrued liabilities in the Consolidated Balance Sheets for sales deductions were as follows (in millions):

	Rebates	Chargebacks	Other deductions	Total
Balance as of December 31, 2018	$ 2,589	$ 454	$ 127	$ 3,170
Amounts charged against product sales	6,825	7,090	1,292	15,207
Payments	(6,249)	(6,985)	(1,263)	(14,497)
Balance as of December 31, 2019	3,165	559	156	3,880
Amounts charged against product sales	9,167	8,223	1,818	19,208
Payments	(8,353)	(8,191)	(1,735)	(18,279)
Balance as of December 31, 2020	3,979	591	239	4,809
Amounts charged against product sales	10,195	9,619	2,065	21,879
Payments	(10,027)	(9,413)	(2,074)	(21,514)
Balance as of December 31, 2021	$ 4,147	$ 797	$ 230	$ 5,174

For the years ended December 31, 2021, 2020 and 2019, total sales deductions were 47%, 44% and 41% of gross product sales, respectively. The increase in the total sales deductions balance as of December 31, 2021, compared with December 31, 2020, was primarily driven by the impact of higher U.S. chargeback and commercial rebate discount rates and an increase in gross sales, partially offset by timing of payments. Included in the amounts are immaterial net adjustments related to prior-year sales due to changes in estimates.

In the United States, we use wholesalers as the principal means of distributing our products to healthcare providers such as physicians or their clinics, dialysis centers, hospitals and pharmacies. Products we sell in Europe are distributed principally to hospitals and/or wholesalers depending on the distribution practice in each country where the products are sold. We monitor the inventory levels of our products at our wholesalers by using data from our wholesalers and other third parties, and we believe wholesaler inventories have been maintained at appropriate levels (generally two to three weeks) given end-user demand. Accordingly, historical fluctuations in wholesaler inventory levels have not significantly affected our method of estimating sales deductions and returns.

Accruals for sales deductions are based primarily on estimates of the amounts earned or to be claimed on the related sales. These estimates take into consideration current contractual and statutory requirements, specific known market events and trends, internal and external historical data and forecasted customer buying patterns. Sales deductions are substantially product specific and therefore, for any given year, can be affected by the mix of products sold.

Rebates include primarily amounts paid to payers and providers in the United States, including those paid to state Medicaid programs, and are based on contractual arrangements or statutory requirements that vary by product, by payer and by individual payer plans. As we sell products, we estimate the amount of rebate we will pay based on the product sold, contractual terms, estimated patient population, historical experience and wholesaler inventory levels; and we accrue these rebates in the period the related sales are recorded. We then adjust the rebate accruals as more information becomes available and to reflect actual claims experience. Estimating such rebates is complicated, in part because of the time delay between the date of sale and the actual settlement of the liability. We believe the methodology we use to accrue for rebates is reasonable and appropriate given current facts and circumstances, but actual results may differ.

Wholesaler chargebacks relate to our contractual agreements to sell products to healthcare providers in the United States at fixed prices that are lower than the prices we charge wholesalers. When healthcare providers purchase our products through wholesalers at these reduced prices, wholesalers charge us for the difference between their purchase prices and the contractual prices between Amgen and the healthcare providers. The provision for chargebacks is based on expected sales by our wholesaler customers to healthcare providers. Accruals for wholesaler chargebacks are less difficult to estimate than rebates are, and they closely approximate actual results because chargeback amounts are fixed at the date of purchase by the healthcare providers and because we generally settle the liability for these deductions within a few weeks.

Product returns

Returns are estimated by comparison of historical return data to their related sales on a production lot basis. Historical rates of return are determined for each product and are adjusted for known or expected changes in the marketplace specific to each product, when appropriate. In each of the past three years, sales return provisions have amounted to less than 1% of gross product sales. Changes in estimates for prior-year sales return provisions have historically been immaterial.

Income taxes

We provide for income taxes based on pretax income and applicable tax rates in the various jurisdictions in which we operate.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the tax authorities based on the technical merits of the position. The tax benefit recognized in the consolidated financial statements for a particular tax position is measured based on the largest benefit that is more likely than not to be realized. The amount of UTBs is adjusted as appropriate for changes in facts and circumstances, such as significant amendments to existing tax law, new regulations or interpretations by tax authorities, new information obtained during a tax examination or resolution of an examination. We believe our estimates for uncertain tax positions are appropriate and sufficient for any assessments that may result from examinations of our tax returns. We recognize both accrued interest and penalties, when appropriate, related to UTBs in income tax expense.

Certain items are included in our tax return at different times than they are reflected in the financial statements, and they cause temporary differences between the tax bases of assets and liabilities and their reported amounts. Such temporary differences create deferred tax assets and liabilities. Deferred tax assets are generally items that can be used as tax deductions or credits in tax returns in future years but for which we have already recorded the tax benefit in the consolidated financial statements. We establish valuation allowances against our deferred tax assets when the amount of expected future taxable income is not likely to support the use of the deduction or credit. Deferred tax liabilities are either (i) tax expenses recognized in the consolidated financial statements for which payment has been deferred, (ii) expenses for which we have already taken a deduction on the tax return but have not yet recognized in the consolidated financial statements or (iii) liabilities for the difference between the book basis and the tax basis of the intangible assets acquired in many business combinations, because future expenses associated with these assets most often will not be tax deductible.

We are a vertically integrated enterprise with operations in the United States and various foreign jurisdictions. In the jurisdictions where we conduct operations, we are subject to income tax based on the tax laws and principles of such jurisdictions and on the functions, risks and activities performed therein. Our pretax income is therefore attributed to domestic or foreign sources based on the operations performed and risks assumed in each location and the tax laws and principles of the respective taxing jurisdictions. For example, we conduct significant operations in Puerto Rico, a territory of the United States that is treated as a foreign jurisdiction for U.S. tax purposes, pertaining to manufacturing, distribution and other related functions to meet our worldwide product demand. Income from our operations in Puerto Rico is subject to tax incentive grants through 2035.

In 2017, we received an RAR and a modified RAR from the IRS for the years 2010, 2011 and 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 Notices for 2010, 2011 and 2012 that we received in May and July 2021, which seek to increase our U.S. taxable income. The Notices seek to increase our U.S. taxable income by an amount that would result in additional federal tax of approximately $3.6 billion plus interest. Any additional tax that could be imposed would be reduced by up to approximately $900 million of repatriation tax previously accrued on our foreign earnings. We firmly believe that the IRS's positions set forth in the Notices are without merit, and we are contesting the Notices through the judicial process.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013, 2014 and 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 and that are similar to those proposed for the years 2010, 2011 and 2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office. We were unable to reach resolution at the administrative appeals level, and we anticipate that we will receive a statutory notice of deficiency for these years as well. We expect to contest any such notice related to 2013–15 through the judicial process. We are also currently under examination by the IRS for the years 2016, 2017 and 2018 and by a number of state and foreign tax jurisdictions.

Final resolution of these complex matters is not likely within the next 12 months. We 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 consolidated financial statements. See Part I, Item 1A. Risk Factors —*The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability;* Part II, Item 7. MD&A—Income Taxes; and Part IV—Note 6, Income taxes, to the Consolidated Financial Statements for further discussion.

Our operations are subject to the tax laws, regulations and administrative practices of the United States, the U.S. territory of Puerto Rico, U.S. state jurisdictions and other countries in which we do business. Significant changes in these rules could have a material adverse effect on our results of operations. See Part I, Item 1A. Risk Factors—*The adoption and interpretation of new tax legislation or exposure to additional tax liabilities could affect our profitability*.

Contingencies

In the ordinary course of business, we are involved in various legal proceedings, government investigations and other matters such as intellectual property disputes, contractual disputes and class action suits that are complex in nature and have outcomes that are difficult to predict. We describe our legal proceedings and other matters that are significant or that we believe could become significant in Part IV—Note 19, Contingencies and commitments, to the Consolidated Financial Statements. 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.

While it is not possible to accurately predict or determine the eventual outcomes of these items, an adverse determination in one or more of these items currently pending could have a material adverse effect on our consolidated results of operations, financial position or cash flows.

Valuation of assets and liabilities in connection with acquisitions

We have acquired and continue to acquire intangible assets in connection with business combinations and asset acquisitions. These intangible assets consist primarily of technology associated with currently marketed human therapeutic products and IPR&D product candidates. Discounted cash flow models are typically used to determine the fair values of these intangible assets for purposes of allocating consideration paid to the net assets acquired in an acquisition. See Part IV—Note 2, Acquisitions, to the Consolidated Financial Statements. These models require the use of significant estimates and assumptions, including but not limited to:

- determining the timing and expected costs to complete in-process projects, taking into account the stage of completion at the acquisition date;
- projecting the probability and timing of obtaining marketing approval from the FDA and other regulatory agencies for product candidates;
- estimating the timing of and future net cash flows from product sales resulting from completed products and in-process projects; and
- developing appropriate discount rates to calculate the present values of the cash flows.

Significant estimates and assumptions are also required to determine the business combination date fair values of any contingent consideration obligations incurred in connection with business combinations. In addition, we must revalue these obligations each subsequent reporting period until the related contingencies are resolved and record changes in their fair values in earnings. The acquisition date fair values of contingent consideration obligations incurred or assumed in the acquisitions were determined using a combination of valuation techniques. Significant estimates and assumptions required for these valuations included but were not limited to the timing and probability of achieving regulatory milestones, product sales projections under various scenarios and discount rates used to calculate the present value of the required payments. These estimates and assumptions are required to be updated in order to revalue these contingent consideration obligations each reporting period. Accordingly, subsequent changes in underlying facts and circumstances could result in changes in these estimates and assumptions, which could have a material impact on the estimated future fair values of these obligations.

We believe the fair values used to record intangible assets acquired and contingent consideration obligations incurred in connection with business combinations and asset acquisitions are based on reasonable estimates and assumptions given the facts and circumstances as of the related valuation dates.

Impairment of long-lived assets

We review the carrying value of our property, plant and equipment and our finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If such circumstances exist, an estimate of undiscounted future cash flows to be generated by the long-lived asset is compared with the carrying value to determine whether an impairment exists. If an asset is determined to be impaired, the loss is measured based on the difference between the asset's fair value and its carrying value.

Indefinite-lived intangible assets, composed of IPR&D projects acquired in a business combination that have not reached technological feasibility or that lack regulatory approval at the time of acquisition, are reviewed for impairment annually, whenever events or changes in circumstances indicate that the carrying amount may not be recoverable and upon establishment of technological feasibility or regulatory approval. We determine impairment by comparing the fair value of the asset to its carrying value. If the asset's carrying value exceeds its fair value, an impairment charge is recorded for the difference, and its carrying value is reduced accordingly.

Estimating future cash flows of an IPR&D product candidate for purposes of an impairment analysis requires us to make significant estimates and assumptions regarding the amount and timing of costs to complete the project and the amount, timing and probability of achieving revenues from the completed product similar to how the acquisition date fair value of the project was determined, as described above. There are often major risks and uncertainties associated with IPR&D projects as we are required to obtain regulatory approvals in order to be able to market these products. Such approvals require completing clinical trials that demonstrate a product candidate is safe and effective. Consequently, the eventual realized value of the acquired IPR&D project may vary from its fair value at the date of acquisition, and IPR&D impairment charges may occur in future periods which could have a material adverse effect on our results of operations.

We believe our estimations of future cash flows used for assessing impairment of long-lived assets are based on reasonable assumptions given the facts and circumstances as of the related dates of the assessments.

Impairment of equity method investments

We review the carrying value of our equity method investments whenever events or changes in circumstances indicate that the carrying amount of an investment may not be recoverable. We record impairment losses on our equity method investments if we deem the impairment to be other-than-temporary. We deem an impairment to be other-than-temporary based on various factors, including but not limited to, the length of time and the extent to which the fair value is below the carrying value, volatility of the security price, the financial condition of the issuer, changes in technology that may impair the earnings potential of the investment and our intent and ability to retain the investment to allow for a recovery in fair value.

We believe our judgments used in assessing impairment of equity method investments are based on reasonable assumptions given the facts and circumstances as of the related dates of the assessments.

Recently Issued Accounting Standards

See Part IV—Note 1, Summary of significant accounting policies, to the Consolidated Financial Statements for a discussion of recently issued accounting pronouncements not yet adopted as of December 31, 2021.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks that may result from changes in interest rates, foreign currency exchange rates and prices of equity instruments as well as changes in general economic conditions in the countries where we conduct business. To reduce certain of these risks, we enter into various types of foreign currency and interest rate derivative hedging transactions as part of our risk management program. We do not use derivatives for speculative trading purposes.

In the discussion that follows, we assumed a hypothetical change in interest rates of 100 basis points from those as of December 31, 2021 and 2020. Except as noted below, we also assumed a hypothetical 20% change in foreign currency exchange rates against the U.S. dollar based on its position relative to other currencies as of December 31, 2021 and 2020.

Interest-rate-sensitive financial instruments

Our portfolio of available-for-sale investments as of December 31, 2021 and 2020, was composed almost entirely of U.S. Treasury securities and money market mutual funds. The fair values of our available-for-sale investments were $7.3 billion and $9.8 billion as of December 31, 2021 and 2020, respectively. Duration is a sensitivity measure that can be used to approximate the change in the value of a security that will result from a 100 basis point change in interest rates. Applying a duration model, a hypothetical 100 basis point increase in interest rates as of December 31, 2021 and 2020, would not have resulted in a material reduction in the fair values of these securities. In addition, a hypothetical 100 basis point decrease in interest rates as of December 31, 2021 and 2020, would not result in a material effect on income in the respective ensuing year.

As of December 31, 2021, we had outstanding debt with a carrying value of $33.3 billion and a fair value of $37.9 billion. As of December 31, 2020, we had outstanding debt with a carrying value of $33.0 billion and a fair value of $39.4 billion. Our outstanding debt was composed of debt with fixed interest rates. Changes in interest rates do not affect interest expense on fixed-rate debt. Changes in interest rates would, however, affect the fair values of fixed-rate debt. A hypothetical 100 basis point decrease in interest rates relative to interest rates as of December 31, 2021 and 2020, would have resulted in an increase of $4.5 billion in the aggregate fair value of our outstanding debt on both of these dates. Analysis of the debt does not consider the impact that hypothetical changes in interest rates would have on related interest rate swap contracts and cross-currency swap contracts, discussed below.

To achieve a desired mix of fixed-rate and floating-rate debt, we entered into interest rate swap contracts that qualified and were designated for accounting purposes as fair value hedges for certain of our fixed-rate debt. These interest rate swap contracts effectively converted a fixed-rate interest coupon to a floating-rate LIBOR-based coupon over the life of the respective notes. Interest rate swap contracts with aggregate notional amounts of $6.7 billion and $5.9 billion were outstanding as of December 31, 2021 and 2020, respectively. A hypothetical 100 basis point increase in interest rates relative to interest rates as of December 31, 2021 and 2020, would have resulted in reductions in fair values of approximately $330 million and $230 million, respectively, on our interest rate swap contracts on these dates. Analysis of the interest rate swap contracts does not consider the impact that hypothetical changes in interest rates would have on the related fair values of debt that these interest-rate-sensitive instruments were designed to offset.

As of December 31, 2021 and 2020, we had outstanding cross-currency swap contracts with aggregate notional amounts of $3.4 billion and $4.8 billion, respectively, that hedge our foreign-currency-denominated debt and related interest payments. These contracts effectively convert interest payments and principal repayment of this debt to U.S. dollars from euros, pounds sterling and Swiss francs and are designated for accounting purposes as cash flow hedges. A hypothetical 100 basis point adverse movement in interest rates relative to interest rates as of December 31, 2021 and 2020, would have resulted in reductions in the fair values of our cross-currency swap contracts of approximately $170 million and $250 million, respectively.

Foreign-currency-sensitive financial instruments

Our international operations are affected by fluctuations in the value of the U.S. dollar compared with foreign currencies, predominantly the euro. Increases and decreases in our international product sales from movements in foreign currency exchange rates are partially offset by corresponding increases or decreases in our international operating expenses. Increases and decreases in our foreign-currency-denominated assets from movements in foreign currency exchange rates are partially offset by corresponding increases or decreases in our foreign-currency-denominated liabilities. To further reduce our net exposure to foreign currency exchange rate fluctuations on our results of operations, we enter into foreign currency forward and cross-currency swap contracts.

As of December 31, 2021, we had outstanding euro-, pound-sterling- and Swiss-franc-denominated debt with a principal carrying value and a fair value of $3.2 billion and $3.6 billion, respectively. As of December 31, 2020, we had outstanding euro-, pound-sterling- and Swiss-franc-denominated debt with a principal carrying value and a fair value of $4.8 billion and $5.4 billion, respectively. A hypothetical 20% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates as of December 31, 2021, would have resulted in an increase in fair value of this debt of approximately $710 million on this date and a reduction in income in the ensuing year of approximately $640 million. A hypothetical 20% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates as of December 31, 2020, would have resulted in an increase in fair value of this debt of $1.1 billion on this date and a reduction in income in the ensuing year of $1.0 billion. The impact on income from these hypothetical changes in foreign currency exchange rates would be substantially offset by the impact such changes would have on related cross-currency swap contracts, which are in place for the related foreign-currency-denominated debt.

We have cross-currency swap contracts that are designated as cash flow hedges of our debt denominated in euros, pounds sterling and Swiss francs, with aggregate notional amounts of $3.4 billion and $4.8 billion as of December 31, 2021 and 2020, respectively. A hypothetical 20% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates on these dates would have resulted in reductions in the fair values of these contracts of approximately $700 million and $1.1 billion on these dates, respectively. The impact of this hypothetical adverse movement in foreign currency exchange rates on ensuing years' income from these contracts would be fully offset by corresponding hypothetical changes in the carrying amounts of the related hedged debt.

We enter into foreign currency forward contracts that are designated for accounting purposes as cash flow hedges of certain anticipated foreign currency transactions. As of December 31, 2021, the fair values of these contracts were a $183 million asset and a $39 million liability. As of December 31, 2020, the fair values of these contracts were a $28 million asset and a $237 million liability. As of December 31, 2021, we had primarily euro-based open foreign currency forward contracts with notional amounts of $5.7 billion. As of December 31, 2020, we had primarily euro-based open foreign currency forward contracts with notional amounts of $5.1 billion. With regard to foreign currency forward contracts that were open as of December 31, 2021, a hypothetical 20% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates as of December 31, 2021, would have resulted in a reduction in fair value of these contracts of approximately $1.1 billion on this date and in the ensuing year, a reduction in income of approximately $390 million. With regard to contracts that were open as of December 31, 2020, a hypothetical 20% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates as of December 31, 2020, would have resulted in a reduction in fair value of these contracts of $1.1 billion on this date and in the ensuing year, a reduction in income of $420 million. The analysis does not consider the impact that hypothetical changes in foreign currency exchange rates would have on anticipated transactions that these foreign-currency-sensitive instruments were designed to offset.

As of December 31, 2021 and 2020, we had open, short-duration, foreign currency forward contracts that mature in one month or less, that had notional amounts of $0.7 billion and $1.0 billion, respectively, and that hedged fluctuations of certain assets and liabilities denominated in foreign currencies but were not designated as hedges for accounting purposes. These contracts had no material net unrealized gains or losses as of December 31, 2021 and 2020. With regard to these foreign currency forward contracts that were open as of December 31, 2021 and 2020, a hypothetical 5% adverse movement in foreign currency exchange rates compared with the U.S. dollar relative to exchange rates on these dates would not have a material effect on the fair values of these contracts or related income in the respective ensuing years. The analysis does not consider the impact that hypothetical changes in foreign currency exchange rates would have on assets and liabilities that these foreign-currency-sensitive instruments were designed to offset.

Market-price-sensitive financial instruments

As of December 31, 2021 and 2020, we were exposed to price risk on equity securities included in our portfolio of investments, which were acquired primarily for the promotion of business and strategic objectives. These investments include publicly and privately held small-capitalization stocks, limited partnerships that invest in early-stage biotechnology companies and our investment in BeiGene. A 20% decrease in the aggregate value of our equity investment portfolio as of December 31, 2021 and 2020, would result in losses in fair value of approximately $1.4 billion and $1.2 billion, respectively.

Counterparty credit risks

Our financial instruments, including derivatives, are subject to counterparty credit risk, which we consider as part of the overall fair value measurement. Our financial risk management policy limits derivative transactions by requiring that transactions be made only with institutions with minimum credit ratings of A– or equivalent by S&P, Moody's or Fitch; and it places exposure limits on the amount with any individual counterparty. In addition, we have an investment policy that limits investments to certain types of debt and money market instruments issued by institutions with investment-grade credit ratings and places restriction on maturities and concentrations by asset class and issuer.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this item is incorporated herein by reference to the financial statements and schedule listed in Item 15(a)1 and (a)2 of Part IV and included in this Annual Report on Form 10-K.

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

None.

Item 9A. 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 is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to Amgen’s management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow 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 have 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 upon 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 December 31, 2021.

Management determined that as of December 31, 2021, there were no changes in our internal control over financial reporting that occurred during the fiscal quarter then ended that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

Management’s Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. The Company’s internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP in the United States. However, all internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and reporting.

Management assessed the effectiveness of the Company’s internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the COSO in Internal Control—Integrated Framework (2013 framework). Based on our assessment, management believes that the Company maintained effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

The effectiveness of the Company’s internal control over financial reporting has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their attestation report appearing below, which expresses an unqualified opinion on the effectiveness of the Company’s internal control over financial reporting as of December 31, 2021.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Amgen Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Amgen Inc.'s internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Amgen Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 and our report dated February 16, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ Ernst & Young LLP

Los Angeles, California
February 16, 2022

Item 9B. OTHER INFORMATION

Not applicable.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information about our Directors is incorporated by reference from the section entitled ITEM 1—ELECTION OF DIRECTORS in our Proxy Statement for the 2022 Annual Meeting of Stockholders to be filed with the SEC within 120 days of December 31, 2021 (the Proxy Statement). Information about the procedures by which stockholders may recommend nominees for the Board of Directors is incorporated by reference from APPENDIX A—AMGEN INC. BOARD OF DIRECTORS GUIDELINES FOR DIRECTOR QUALIFICATIONS AND EVALUATIONS and OTHER MATTERS—Stockholder Proposals for the 2023 Annual Meeting in our Proxy Statement. Information about our Audit Committee, members of the committee and our Audit Committee financial experts is incorporated by reference from the section entitled CORPORATE GOVERNANCE—Audit Committee in our Proxy Statement. Information about our executive officers is contained in the discussion entitled Part I—Item 1. Business—Information about our Executive Officers.

Code of Ethics

We maintain a Code of Ethics for the Chief Executive Officer and Senior Financial Officers applicable to our principal executive officer, principal financial officer, principal accounting officer or controller and other persons performing similar functions. To view this code of ethics free of charge, please visit our website at www.amgen.com. (The website address is not intended to function as a hyperlink, and the information contained in our website is not intended to be a part of this filing.) We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding an amendment to or a waiver from a provision of this code of ethics, if any, by posting such information on our website as set forth above.

Item 11. EXECUTIVE COMPENSATION

Information about director and executive compensation is incorporated by reference from the section entitled EXECUTIVE COMPENSATION in our Proxy Statement. Information about compensation committee matters is incorporated by reference from the sections entitled CORPORATE GOVERNANCE—Compensation and Management Development Committee and CORPORATE GOVERNANCE—Compensation Committee Report in our Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Securities Authorized for Issuance Under Existing Equity Compensation Plans

The following table sets forth certain information as of December 31, 2021, concerning the shares of our common stock that may be issued under any form of award granted under our equity compensation plans in effect as of December 31, 2021 (including upon the exercise of options, upon the vesting of awards of RSUs or when performance units are earned and related dividend equivalents have been granted).

	(a)	(b)	(c)
Plan category	**Number of securities to be issued upon exercise of outstanding options and rights**	**Weighted-average exercise price of outstanding options and rights**	**Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))**
Equity compensation plans approved by Amgen security holders:			
Amended and Restated 2009 Equity Incentive Plan[(1)]	10,217,143	$ 197.27	18,987,053
Amended and Restated 1991 Equity Incentive Plan[(2)]	3,550	—	—
Amended and Restated Employee Stock Purchase Plan	—	—	4,280,585
Total approved plans	10,220,693	197.27	23,267,638
Equity compensation plan not approved by Amgen security holders:			
Amgen Profit Sharing Plan for Employees in Ireland[(3)]	—	—	242,172
Total unapproved plans	—	—	242,172
Total all plans	10,220,693	$ 197.27	23,509,810

(1) The Amended and Restated 2009 Equity Incentive Plan employs a fungible share-counting formula for determining the number of shares available for issuance under the plan. In accordance with this formula, each option or stock appreciation right counts as one share, while each RSU, performance unit or dividend equivalent counts as 1.9 shares. The number under column (a) represents the actual number of shares issuable under our outstanding awards without giving effect to the fungible share-counting formula. The number under column (c) represents the number of shares available for issuance under this plan based on each such available share counting as one share. Commencing with the grants made in April 2012, RSUs and performance units accrue dividend equivalents that are payable in shares only to the extent and when the underlying RSUs vest or underlying performance units have been earned and the related shares are issued to the grantee. The performance units granted under this plan are earned based on the accomplishment of specified performance goals at the end of their respective three-year performance periods; the number of performance units granted represent target performance, and the maximum number of units that could be earned based on our performance is 200% of the performance units granted in 2019, 2020 and 2021.

As of December 31, 2021, the number of outstanding awards under column (a) includes (i) 5,138,659 shares issuable upon the exercise of outstanding options with a weighted-average exercise price of $197.27; (ii) 3,362,823 shares issuable upon the vesting of outstanding RSUs (including 292,972 related dividend equivalents); and (iii) 1,715,660 shares subject to outstanding 2019, 2020 and 2021 performance units (including 88,269 related dividend equivalents). The weighted-average exercise price shown in column (b) is for the outstanding options only. The number of available shares under column (c) represents the number of shares that remain available for future issuance under this plan as of December 31, 2021, employing the fungible share formula and presumes the issuance of target shares under the performance units granted in 2019, 2020 and 2021 and related dividend equivalents. The numbers under columns (a) and (c) do not give effect to the additional shares that could be issuable in the event above target performance on the performance goals under these outstanding performance units is achieved. Maximum performance under these goals could result in 200% of target shares being awarded for performance units granted in 2019, 2020 and 2021.

(2) This plan has terminated as to future grants. The number under column (a) with respect to this plan includes 3,550 shares issuable upon the settlement of deferred RSUs (including 774 related dividend equivalents).

(3) The Profit Sharing Plan was approved by the Board of Directors on July 28, 2011. The Profit Sharing Plan permits eligible employees of the Company's subsidiaries located in Ireland who participate in the Profit Sharing Plan to apply a portion of their qualifying bonus and salary to the purchase of the Company's common stock on the open market at the market price by a third-party trustee as described in the Profit Sharing Plan.

Security Ownership of Directors and Executive Officers and Certain Beneficial Owners

Information about security ownership of certain beneficial owners and management is incorporated by reference from the sections entitled SECURITY OWNERSHIP OF DIRECTORS AND EXECUTIVE OFFICERS and SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS in our Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information about certain relationships and related transactions and director independence is incorporated by reference from the sections entitled CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS and CORPORATE GOVERNANCE—Director Independence in our Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information about the fees for professional services rendered by our independent registered public accountants is incorporated by reference from the section entitled AUDIT MATTERS—Independent Registered Public Accountants in our Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)1. Index to Financial Statements

The following Consolidated Financial Statements are included herein:

(a)2. Index to Financial Statement Schedules

The following Schedule is filed as part of this Annual Report on Form 10-K:

All other schedules are omitted because they are not applicable, not required or because the required information is included in the consolidated financial statements or notes thereto.

(a)3. Exhibits

Exhibit No.	Description
2.1	Asset Purchase Agreement, dated August 25, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 8-K on August 26, 2019 and incorporated herein by reference.)
2.2	Amendment No. 1 to the Asset Purchase Agreement, dated October 17, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 8-K on October 17, 2019 and incorporated herein by reference.)
2.3	Amendment No. 2 to the Asset Purchase Agreement, dated October 17, 2019, by and between Amgen Inc. and Celgene Corporation. (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.)
2.4	Letter Agreement, dated November 21, 2019, by and between Amgen Inc. and the parties named therein re: Treatment of Certain Product Inventory in connection with Amgen's acquisition of Otezla (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.)
2.5	Irrevocable Guarantee, dated August 25, 2019, by and between Amgen Inc. and Bristol-Myers Squibb Company. (Filed as an exhibit to Form 8-K on August 26, 2019 and incorporated herein by reference.)
2.6	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.)

Exhibit No.	Description
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.)

Exhibit No.	Description
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	Form of Permanent Global Certificate for the Company's 0.410% bonds due 2023. (Filed as an exhibit on Form 8-K on March 8, 2016 and incorporated herein by reference.)
4.24	Terms of the Bonds for the Company's 0.410% bonds due 2023. (Filed as an exhibit on Form 8-K on March 8, 2016 and incorporated herein by reference.)
4.25	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.)
4.26	Officer's Certificate of Amgen Inc., dated as of August 19, 2016, including forms of the Company's 2.250% Senior Notes due 2023 and 2.600% Senior Notes due 2026. (Filed as an exhibit to Form 8-K on August 19, 2016 and incorporated herein by reference.)
4.27	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.)
4.28	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.)
4.29	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.)
4.30	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.)
4.31	Registration Rights Agreement, dated as of August 17, 2020, by and among Amgen Inc., BofA Securities, Inc. and J.P. Morgan Securities LLC, as lead dealer managers, and BNP Paribas Securities Corp., Deutsche Bank Securities Inc., RBC Capital Markets, LLC, Blaylock Van, LLC and Siebert Williams Shank & Co., LLC, as co-dealer managers. (Filed as an exhibit to Form 8-K on August 18, 2020 and incorporated herein by reference.)
4.32*	Description of Amgen Inc.'s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.
10.1+	Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (Filed as Appendix C to the Definitive Proxy Statement on Schedule 14A on April 8, 2013 and incorporated herein by reference.)
10.2+	First Amendment to Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, effective March 4, 2015. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2015 on April 27, 2015 and incorporated herein by reference.)
10.3+	Second Amendment to Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, effective March 2, 2016. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2016 on May 2, 2016 and incorporated herein by reference.)
10.4+*	Form of Grant of Stock Option Agreement for the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on December 2, 2021.)

Exhibit No.	Description
10.5+*	Form of Restricted Stock Unit Agreement for the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan. (As Amended and Restated on December 2, 2021.)
10.6+	Amgen Inc. 2009 Performance Award Program. (As Amended on December 12, 2017.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2017 on February 13, 2018 and incorporated herein by reference.)
10.7+*	Form of Performance Unit Agreement for the Amgen Inc. 2009 Performance Award Program. (As Amended and Reinstated on December 2, 2021.)
10.8+	Amgen Inc. 2009 Director Equity Incentive Program. (As Amended and Restated on October 21, 2020.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2020 on February 9, 2021 and incorporated herein by reference.)
10.9+	Form of Grant of Non-Qualified Stock Option Agreement for the Amgen Inc. 2009 Director Equity Incentive Program. (Filed as an exhibit to Form 8-K on May 8, 2009 and incorporated herein by reference.)
10.10+	Form of Restricted Stock Unit Agreement for the Amgen Inc. 2009 Director Equity Incentive Program. (As Amended on December 11, 2019.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.)
10.11+	Form of Cash-Settled Restricted Stock Unit Agreement for the Amgen 2009 Director Equity Incentive Program. (As Amended on December 11, 2019.) (Filed as an exhibit to Form 10-K for the year ended December 31, 2019 on February 12, 2020 and incorporated herein by reference.)
10.12+	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.)
10.13+	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.)
10.14+	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.)
10.15+*	Third Amendment to the Amgen Inc. Supplemental Retirement Plan, effective October 20, 2021.
10.16+	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.)
10.17+	Amgen Inc. Executive Incentive Plan. (As Amended and Restated effective January 1, 2009.) (Filed as an exhibit to Form 10-Q for the quarter ended September 30, 2008 on November 7, 2008 and incorporated herein by reference.)
10.18+	First Amendment to the Amgen Inc. Executive Incentive Plan, effective December 13, 2012. (Filed as an exhibit to Form 10-K for the year ended December 31, 2012 on February 27, 2013 and incorporated herein by reference.)
10.19+	Second Amendment to the Amgen Inc. Executive Incentive Plan, effective January 1, 2017. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2017 on April 27, 2017 and incorporated herein by reference.)
10.20+	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.)
10.21+	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.)
10.22+	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.)

Exhibit No.	Description
10.23+*	Third Amendment to the Amgen Nonqualified Deferred Compensation Plan, effective January 1, 2022.
10.24+	Agreement between Amgen Inc. and Peter Griffith, dated October 18, 2019. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2020 on May 1, 2020 and incorporated herein by reference.)
10.25+*	Aircraft Time Sharing Agreement, dated December 3, 2021, by and between Amgen Inc. and Robert A. Bradway.
10.26	Second Amended and Restated Credit Agreement, dated December 12, 2019, 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 December 12, 2019 and incorporated herein by reference.)
10.27	Collaboration and License Agreement between Amgen Inc. and Celltech R&D Limited dated May 10, 2002 (portions of the exhibit have been omitted pursuant to a request for confidential treatment) and Amendment No. 1, effective June 9, 2003, to Collaboration and License Agreement between Amgen Inc. and Celltech R&D Limited (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-K/A for the year ended December 31, 2012 on July 31, 2013 and incorporated herein by reference.)
10.28	Amendment No. 2 to Collaboration and License Agreement, effective November 14, 2016, between Amgen Inc. and Celltech R&D Limited (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-K for the year ended December 31, 2016 on February 14, 2017 and incorporated herein by reference.)
10.29	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.)
10.30	Collaboration Agreement, dated April 22, 1994, by and between Bayer Corporation (formerly Miles, Inc.) and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2011 by Onyx Pharmaceuticals, Inc. on May 10, 2011 and incorporated herein by reference.)
10.31	Amendment to Collaboration Agreement, dated April 24, 1996, by and between Bayer Corporation and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2006 by Onyx Pharmaceuticals, Inc. on May 10, 2006 and incorporated herein by reference.)
10.32	Amendment to Collaboration Agreement, dated February 1, 1999, by and between Bayer Corporation and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2006 by Onyx Pharmaceuticals, Inc. on May 10, 2006 and incorporated herein by reference.)
10.33	Settlement Agreement and Release, dated October 11, 2011, by and between Bayer Corporation, Bayer AG, Bayer HealthCare LLC and Bayer Pharma AG and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-K for the year ended December 31, 2011 by Onyx Pharmaceuticals, Inc. on February 27, 2012 and incorporated herein by reference.)
10.34	Fourth Amendment to Collaboration Agreement, dated October 11, 2011, by and between Bayer Corporation and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-K for the year ended December 31, 2011 by Onyx Pharmaceuticals, Inc. on February 27, 2012 and incorporated herein by reference.)
10.35	Side Letter Regarding Collaboration Agreement, dated May 29, 2015, by and between Bayer HealthCare LLC and Onyx Pharmaceuticals, Inc. (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2015 on August 5, 2015 and incorporated herein by reference.)
10.36	Side Letter Regarding Collaboration Agreement and Stivarga Agreement, dated February 13, 2020, by and between Onyx Pharmaceuticals, Inc. and Bayer HealthCare LLC. (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2020 on May 1, 2020 and incorporated herein by reference.)
10.37	Sourcing and Supply Agreement, dated January 6, 2017, by and between Amgen USA Inc., a wholly owned subsidiary of Amgen Inc., and DaVita Inc. (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2017 on April 27, 2017 and incorporated herein by reference.)
10.38	Exclusive License and Collaboration Agreement, dated August 28, 2015, by and between Amgen Inc. and Novartis Pharma AG (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2017 on July 26, 2017 and incorporated herein by reference.)

Exhibit No.	Description
10.39	Amendment No. 1 to the Exclusive License and Collaboration Agreement, dated April 21, 2017, by and between Amgen Inc. and Novartis Pharma AG (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2017 on July 26, 2017 and incorporated herein by reference.)
10.40	Amendment No. 2 to the Exclusive License and Collaboration Agreement, dated April 21, 2017, by and between Amgen Inc. and Novartis Pharma AG (portions of the exhibit have been omitted pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2017 on July 26, 2017 and incorporated herein by reference.)
10.41	Amendment No. 3 to the Exclusive License and Collaboration Agreement, dated January 31, 2022, by and between Amgen Inc. and Novartis Pharma AG (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 the Company's Current Report on Form 8-K on January 31, 2022 and incorporated herein by reference.)
10.42	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.)
10.43	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.)
10.44	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.)
10.45	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.)
10.46	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.)
10.47	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 pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-Q for the quarter ended March 31, 2012 on May 8, 2012 and incorporated herein by reference.)
10.48	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 pursuant to a request for confidential treatment). (Filed as an exhibit to Form 10-K for the year ended December 31, 2014 on February 19, 2015 and incorporated herein by reference.)
10.49	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.)
10.50	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.)
10.51*	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.)

Exhibit No.	Description
10.52	License and Collaboration Agreement, dated June 1, 2021, by and between Amgen Inc. and Kyowa Kirin Co., Ltd. (portions of the exhibit have been omitted because they are both (i) not material and (ii) would be competitively harmful if publicly disclosed). (Filed as an exhibit to Form 10-Q for the quarter ended June 30, 2021 on August 4, 2021 and incorporated herein by reference.)
21*	Subsidiaries of the Company.
23	Consent of the Independent Registered Public Accounting Firm. The consent is set forth on page 89 of this Annual Report on the 10-K.
24	Power of Attorney. The Power of Attorney is set forth on page 90 of this Annual Report on Form 10-K.
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)

Item 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

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

AMGEN INC.
(Registrant)

Date: February 16, 2022

By: /s/ PETER H. GRIFFITH

Peter H. Griffith
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- Registration Statement (Form S-3 No. 333-236351) of Amgen Inc.,
- Registration Statement (Form S-8 No. 333-159377) pertaining to the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan,
- Registration Statement (Form S-8 No. 33-39183) pertaining to the Amgen Inc. Amended and Restated Employee Stock Purchase Plan,
- Registration Statements (Form S-8 No. 33-39104, as amended by Form S-8 Nos. 333-144581 and 333-216719) pertaining to the Amgen Retirement and Savings Plan,
- Registration Statements (Form S-8 Nos. 33-47605, 333-144580 and 333-216715) pertaining to The Retirement and Savings Plan for Amgen Manufacturing, Limited (formerly known as the Retirement and Savings Plan for Amgen Manufacturing, Inc.),
- Registration Statements (Form S-8 Nos. 333-81284, 333-177868, 333-216723 and 333-260723) pertaining to the Amgen Nonqualified Deferred Compensation Plan, and
- Registration Statement (Form S-8 Nos. 333-176240 and 333-260724) pertaining to the Amgen Profit Sharing Plan for Employees in Ireland;

of our reports dated February 16, 2022, with respect to the consolidated financial statements of Amgen Inc. and the effectiveness of internal control over financial reporting of Amgen Inc. included in this Annual Report (Form 10-K) of Amgen Inc. for the year ended December 31, 2021.

/s/ Ernst & Young LLP

Los Angeles, California
February 16, 2022

EXHIBIT 24

POWER OF ATTORNEY

KNOW ALL MEN AND WOMEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Robert A. Bradway, Peter H. Griffith and Jonathan P. Graham, or any of them, his or her attorney-in-fact, each with the power of substitution and re-substitution, for him or her in any and all capacities, to sign any amendments to this Report, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/S/ ROBERT A. BRADWAY **Robert A. Bradway**	Chairman of the Board, Chief Executive Officer and President, and Director (Principal Executive Officer)	2/16/2022
/S/ PETER H. GRIFFITH **Peter H. Griffith**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	2/16/2022
/S/ LINDA H. LOUIE **Linda H. Louie**	Vice President, Finance and Chief Accounting Officer (Principal Accounting Officer)	2/16/2022
/S/ WANDA M. AUSTIN **Wanda M. Austin**	Director	2/16/2022
/S/ BRIAN J. DRUKER **Brian J. Druker**	Director	2/16/2022
/S/ ROBERT A. ECKERT **Robert A. Eckert**	Director	2/16/2022
/S/ GREG C. GARLAND **Greg C. Garland**	Director	2/16/2022
/S/ CHARLES M. HOLLEY, JR. **Charles M. Holley, Jr.**	Director	2/16/2022
/S/ S. OMAR ISHRAK **S. Omar Ishrak**	Director	2/16/2022
/S/ TYLER JACKS **Tyler Jacks**	Director	2/16/2022
/S/ ELLEN J. KULLMAN **Ellen J. Kullman**	Director	2/16/2022
/S/ AMY E. MILES **Amy E. Miles**	Director	2/16/2022
/S/ RONALD D. SUGAR **Ronald D. Sugar**	Director	2/16/2022
/S/ R. SANDERS WILLIAMS **R. Sanders Williams**	Director	2/16/2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Amgen Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Amgen Inc. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes and the financial statement schedule listed in the Index at Item 15(a)2 (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 16, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

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

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

Critical Audit Matters

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

Sales deductions

Description of the Matter

As of December 31, 2021, the Company recorded accrued sales deductions of $5.2 billion. As described in Note 1 to the financial statements under the caption “Product sales and sales deductions,” revenues from product sales are recognized net of accruals for estimated rebates, wholesaler chargebacks, discounts and other deductions (collectively sales deductions), which are established at the time of sale.

Auditing the estimation of sales deductions, which are netted against product sales, is complex, requires significant judgment, and the amounts involved are material to the financial statements taken as a whole. Revenue from product sales is recognized upon transfer of control of a product to a customer, generally upon delivery, and is based on an amount that reflects the consideration to which the Company expects to be entitled, which represents an amount that is net of accruals for estimated sales deductions. The estimated sales deductions are based on current contractual and statutory requirements, market events and trends, internal and external historical data, and forecasted customer buying patterns.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of internal controls over the sales deduction processes. This included testing controls over management’s review of significant assumptions and inputs used in the estimate of sales deductions, including actual sales, contractual terms, historical experience, wholesaler inventory levels, demand data and estimated patient population. We also tested management’s controls over the accuracy of forecasting demand activity as well as the completeness and accuracy of the significant components included in the final sales deduction estimates.

To test management’s estimated sales deductions, we obtained management’s calculations for the respective estimates and performed the following procedures, among others. We tested management’s estimation process over the determination of sales discount accruals by developing an independent expectation of the estimated accrual balances, including comparing accrual balances recorded by management to those implied by historical payment trends, performing a lookback analysis using actual historical data to evaluate the forecasted amounts, assessing subsequent events to determine whether there was any new information that would require adjustment to the initial accruals, evaluating trends in actual sales and discount accrual balances, comparing cash receipts to product sales, confirming terms and conditions for a sample of contracts with the Company’s customers, testing a sample of credits issued and payments made throughout the year, and agreeing rates to underlying contract terms.

Unrecognized tax benefits

Description of the Matter

As discussed in Notes 1 and 6 to the consolidated financial statements, the Company operates in various jurisdictions in which differing interpretations of complex tax laws and regulations create uncertainty and necessitate the use of significant judgment in the determination of the Company's unrecognized tax benefits related to allocation of profits among various jurisdictions ("transfer pricing"), particularly in the U.S. federal tax jurisdiction where the Company has significant assets and operations. In this regard, the Company uses significant judgment in (1) determining whether a tax position's technical merits are more-likely-than-not to be sustained and (2) measuring the amount of tax benefit that qualifies for recognition. As of December 31, 2021, the Company accrued $3.5 billion of gross unrecognized tax benefits including those related to transfer pricing. Auditing the assessment of the technical merits and measurement of the Company's unrecognized tax benefits is challenging and can be complex, highly judgmental, and based on interpretations of tax laws and regulations and application of those interpretations to the Company's facts and circumstances.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of internal controls over the Company's process to assess the technical merits of its tax positions, as well as management's process to measure the unrecognized tax benefits of those tax positions, particularly in regard to transfer pricing. This included testing controls over management's review of the inputs, calculations, assumptions and methods selected to measure the amount of tax benefits that qualify for recognition.

We involved tax and transfer pricing specialists to assist in assessing the technical merits and measurement of certain of the Company's unrecognized tax benefits. Depending on the nature of the specific tax position and, as applicable, developments with the relevant tax authorities, our procedures included obtaining and reviewing the Company's correspondence with such tax authorities and evaluating certain third-party advice to support the Company's evaluations and recorded positions. We used our knowledge of and experience with how the income tax laws and regulations related to transfer pricing are applied by the relevant tax authorities to evaluate the Company's accounting for its unrecognized tax benefits. We evaluated developments in the applicable regulatory environments to assess potential effects on the Company's recorded positions. We analyzed the assumptions and data used by the Company when it determined the amount of tax benefits to recognize, including applicable interest and penalties, and we tested the accuracy of those underlying calculations. We have also evaluated the Company's income tax disclosures included in Note 6 in relation to these matters.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1980.
Los Angeles, California
February 16, 2022

AMGEN INC.

CONSOLIDATED STATEMENTS OF INCOME

Years ended December 31, 2021, 2020 and 2019

(In millions, except per-share data)

	2021	2020	2019
Revenues:			
Product sales	$ 24,297	$ 24,240	$ 22,204
Other revenues	1,682	1,184	1,158
Total revenues	25,979	25,424	23,362
Operating expenses:			
Cost of sales	6,454	6,159	4,356
Research and development	4,819	4,207	4,116
Acquired in-process research and development	1,505	—	—
Selling, general and administrative	5,368	5,730	5,150
Other	194	189	66
Total operating expenses	18,340	16,285	13,688
Operating income	7,639	9,139	9,674
Other income (expense):			
Interest expense, net	(1,197)	(1,262)	(1,289)
Other income, net	259	256	753
Income before income taxes	6,701	8,133	9,138
Provision for income taxes	808	869	1,296
Net income	$ 5,893	$ 7,264	$ 7,842
Earnings per share:			
Basic	$ 10.34	$ 12.40	$ 12.96
Diluted	$ 10.28	$ 12.31	$ 12.88
Shares used in the calculation of earnings per share:			
Basic	570	586	605
Diluted	573	590	609

See accompanying notes.

AMGEN INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Years ended December 31, 2021, 2020 and 2019

(In millions)

	2021	2020	2019
Net income	$ 5,893	$ 7,264	$ 7,842
Other comprehensive income (loss), net of reclassification adjustments and taxes:			
(Losses) gains on foreign currency translation	(135)	9	(48)
Gains (losses) on cash flow hedges	324	(438)	(66)
(Losses) gains on available-for-sale securities	(1)	(21)	360
Other	1	(7)	(5)
Other comprehensive income (loss), net of taxes	189	(457)	241
Comprehensive income	$ 6,082	$ 6,807	$ 8,083

See accompanying notes.

AMGEN INC.

CONSOLIDATED BALANCE SHEETS

December 31, 2021 and 2020

(In millions, except per-share data)

	2021	2020
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,989	$ 6,266
Marketable securities	48	4,381
Trade receivables, net	4,895	4,525
Inventories	4,086	3,893
Other current assets	2,367	2,079
Total current assets	19,385	21,144
Property, plant and equipment, net	5,184	4,889
Intangible assets, net	15,182	16,587
Goodwill	14,890	14,689
Other noncurrent assets	6,524	5,639
Total assets	$ 61,165	$ 62,948
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,366	$ 1,421
Accrued liabilities	10,731	10,141
Current portion of long-term debt	87	91
Total current liabilities	12,184	11,653
Long-term debt	33,222	32,895
Long-term tax liabilities	6,594	6,968
Other noncurrent liabilities	2,465	2,023
Contingencies and commitments		
Stockholders' equity:		
Common stock and additional paid-in capital; $0.0001 par value per share; 2,750.0 shares authorized; outstanding—558.3 shares in 2021 and 578.3 shares in 2020	32,096	31,802
Accumulated deficit	(24,600)	(21,408)
Accumulated other comprehensive loss	(796)	(985)
Total stockholders' equity	6,700	9,409
Total liabilities and stockholders' equity	$ 61,165	$ 62,948

See accompanying notes.

AMGEN INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended December 31, 2021, 2020 and 2019

(In millions, except per-share data)

	Number of shares of common stock	Common stock and additional paid-in capital	Accumulated deficit	Accumulated other comprehensive (loss) income	Total
Balance as of December 31, 2018	629.6	$ 31,246	$ (17,977)	$ (769)	$ 12,500
Net income	—	—	7,842	—	7,842
Other comprehensive income, net of taxes	—	—	—	241	241
Dividends declared on common stock ($5.95 per share)	—	—	(3,555)	—	(3,555)
Issuance of common stock in connection with the Company's equity award programs	2.0	97	—	—	97
Stock-based compensation expense	—	323	—	—	323
Tax impact related to employee stock-based compensation expense	—	(135)	—	—	(135)
Repurchases of common stock	(40.2)	—	(7,640)	—	(7,640)
Balance as of December 31, 2019	591.4	31,531	(21,330)	(528)	9,673
Cumulative effect of changes in accounting principles, net of taxes	—	—	(2)	—	(2)
Net income	—	—	7,264	—	7,264
Other comprehensive loss, net of taxes	—	—	—	(457)	(457)
Dividends declared on common stock ($6.56 per share)	—	—	(3,843)	—	(3,843)
Issuance of common stock in connection with the Company's equity award programs	2.1	91	—	—	91
Stock-based compensation expense	—	349	—	—	349
Tax impact related to employee stock-based compensation expense	—	(169)	—	—	(169)
Repurchases of common stock	(15.2)	—	(3,497)	—	(3,497)
Balance as of December 31, 2020	578.3	31,802	(21,408)	(985)	9,409
Net income	—	—	5,893	—	5,893
Other comprehensive income, net of taxes	—	—	—	189	189
Dividends declared on common stock ($7.22 per share)	—	—	(4,098)	—	(4,098)
Issuance of common stock in connection with the Company's equity award programs	1.7	82	—	—	82
Stock-based compensation expense	—	361	—	—	361
Tax impact related to employee stock-based compensation expense	—	(149)	—	—	(149)
Repurchases of common stock	(21.7)	—	(4,987)	—	(4,987)
Balance as of December 31, 2021	558.3	$ 32,096	$ (24,600)	$ (796)	$ 6,700

See accompanying notes.

AMGEN INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31, 2021, 2020 and 2019

(In millions)

	2021	2020	2019
Cash flows from operating activities:			
Net income	$ 5,893	$ 7,264	$ 7,842
Depreciation, amortization and other	3,398	3,601	2,206
Stock-based compensation expense	341	330	308
Deferred income taxes	(453)	(287)	(289)
Acquired in-process research and development	1,505	—	—
Other items, net	(229)	(195)	(186)
Changes in operating assets and liabilities, net of acquisitions:			
Trade receivables, net	(429)	(427)	(504)
Inventories	(165)	(215)	(66)
Other assets	(237)	129	10
Accounts payable	(69)	45	164
Accrued income taxes, net	(854)	(249)	(585)
Long-term tax liabilities	204	(482)	(146)
Other liabilities	356	983	396
Net cash provided by operating activities	9,261	10,497	9,150
Cash flows from investing activities:			
Purchases of marketable securities	(8,900)	(8,477)	(9,394)
Proceeds from sales of marketable securities	4,403	2,597	8,842
Proceeds from maturities of marketable securities	8,831	4,381	20,548
Purchases of property, plant and equipment	(880)	(608)	(618)
Cash paid for acquisitions, net of cash acquired	(2,529)	—	(13,617)
Purchases of equity method investments	(157)	(3,219)	(24)
Other	(35)	(75)	(28)
Net cash provided by (used in) investing activities	733	(5,401)	5,709
Cash flows from financing activities:			
Net proceeds from issuance of debt	4,945	8,914	—
Repayment of debt	(4,150)	(6,450)	(4,514)
Repurchases of common stock	(4,975)	(3,486)	(7,702)
Dividends paid	(4,013)	(3,755)	(3,509)
Other	(78)	(90)	(42)
Net cash used in financing activities	(8,271)	(4,867)	(15,767)
Increase (decrease) in cash and cash equivalents	1,723	229	(908)
Cash and cash equivalents at beginning of year	6,266	6,037	6,945
Cash and cash equivalents at end of year	$ 7,989	$ 6,266	$ 6,037

See accompanying notes.

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.

Principles of consolidation

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

Use of estimates

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

Revenues

Product sales and sales deductions

Revenue from product sales is recognized upon transfer of control of a product to a customer, generally upon delivery, based on an amount that reflects the consideration to which we expect to be entitled, net of accruals for estimated rebates, wholesaler chargebacks, discounts and other deductions (collectively, sales deductions) and returns established at the time of sale.

We analyze the adequacy of our accruals for sales deductions quarterly. Amounts accrued for sales deductions are adjusted when trends or significant events indicate that an adjustment is appropriate. Accruals are also adjusted to reflect actual results. Accruals for sales deductions are based primarily on estimates of the amounts earned or to be claimed on the related sales. These estimates take into consideration current contractual and statutory requirements, specific known market events and trends, internal and external historical data and forecasted customer buying patterns. Sales deductions are substantially product specific and therefore, for any given period, can be affected by the mix of products sold. Included in sales deductions are immaterial net adjustments related to prior-period sales due to changes in estimates.

Returns are estimated through comparison of historical return data with their related sales on a production lot basis. Historical rates of return are determined for each product and are adjusted for known or expected changes in the marketplace specific to each product, when appropriate. Historically, sales return provisions have amounted to less than 1% of gross product sales. Changes in estimates for prior-period sales return provisions have historically been immaterial.

Our payment terms vary by types and locations of customers and by products or services offered. Payment terms differ by jurisdiction and customer, but payment is generally required in a term ranging from 30 to 120 days from date of shipment or satisfaction of the performance obligation. For certain products or services and certain customer types, we may require payment before products are delivered or services are rendered to customers.

Indirect taxes collected from customers and remitted to government authorities that are related to sales of the Company's products, primarily in Europe, are excluded from revenues.

As a practical expedient, sales commissions are expensed when incurred because the amortization period would have been one year or less. These costs are recorded in SG&A expense in the Consolidated Statements of Income.

Other revenues

Other revenues consist primarily of royalty income and corporate partner revenues. Royalties from licensees are based on third-party sales of licensed products and are recorded when the related third-party product sale occurs. Royalty income is estimated based on historical and forecasted sales trends. Corporate partner revenues are composed mainly of license fees and milestones earned and our share of commercial profits generated from collaborations. See Arrangements with multiple-performance obligations, discussed below.

Arrangements with multiple-performance obligations

From time to time, we enter into arrangements for the R&D, manufacture and/or commercialization of products and product candidates. Such arrangements may require us to deliver various rights, services and/or goods, including intellectual property rights/licenses, R&D services, manufacturing services and/or commercialization services. The underlying terms of these arrangements generally provide for consideration to Amgen in the form of nonrefundable, upfront license fees; development and commercial-performance milestone payments; royalty payments; and/or profit sharing.

In arrangements involving more than one performance obligation, each required performance obligation is evaluated to determine whether it qualifies as a distinct performance obligation based on whether (i) the customer can benefit from the good or service either on its own or together with other resources that are readily available and (ii) the good or service is separately identifiable from other promises in the contract. The consideration under the arrangement is then allocated to each separate distinct performance obligation based on its respective relative stand-alone selling price. The estimated selling price of each deliverable reflects our best estimate of what the selling price would be if the deliverable was regularly sold by us on a stand-alone basis or by using an adjusted market assessment approach if selling price on a stand-alone basis is not available.

The consideration allocated to each distinct performance obligation is recognized as revenue when control of the related goods or services is transferred. Consideration associated with at-risk substantive performance milestones is recognized as revenue when it is probable that a significant reversal of the cumulative revenue recognized will not occur. We utilize the sales- and usage-based royalty exception in arrangements that resulted from the license of intellectual property, recognizing revenues generated from royalties or profit sharing as the underlying sales occur.

Research and development costs

R&D costs are expensed as incurred and primarily include salaries, benefits and other staff-related costs; facilities and overhead costs; clinical trial and related clinical manufacturing costs; contract services and other outside costs; information systems' costs; and amortization of acquired technology used in R&D with alternative future uses. R&D expenses also include costs and cost recoveries associated with third-party R&D arrangements, including upfront fees and milestones paid to third parties in connection with technologies that had not reached technological feasibility and did not have an alternative future use. Net payment or reimbursement of R&D costs is recognized when the obligations are incurred or as we become entitled to the cost recovery. See Note 8, Collaborations.

Selling, general and administrative costs

SG&A costs are primarily composed of salaries, benefits and other staff-related costs associated with sales and marketing, finance, legal and other administrative personnel; facilities and overhead costs; outside marketing, advertising and legal expenses; the U.S. healthcare reform federal excise fee on Branded Prescription Pharmaceutical Manufacturers and Importers; and other general and administrative costs. Advertising costs are expensed as incurred and were $843 million, $962 million and $789 million during the years ended December 31, 2021, 2020 and 2019, respectively. SG&A expenses also include costs and cost recoveries associated with marketing and promotion efforts under certain collaborative arrangements. Net payment or reimbursement of SG&A costs is recognized when the obligations are incurred or we become entitled to the cost recovery. See Note 8, Collaborations.

Leases

At inception of a contract, we determine whether an arrangement is or contains a lease. For all leases, we determine the classification as either operating or financing. Operating leases are included in Other noncurrent assets, Accrued liabilities and Other noncurrent liabilities in our Consolidated Balance Sheets.

ROU assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments under the lease. Lease recognition occurs at the commencement date, and lease liability amounts are based on the present value of lease payments made during the lease term. Our lease terms may include options to extend or terminate a lease when it is reasonably certain that we will exercise that option. Because most of our leases do not provide information to determine an implicit interest rate, we use our incremental borrowing rate in determining the present value of lease payments. ROU assets also include any lease payments made prior to the commencement date less lease incentives received. Operating lease expense is recognized on a straight-line basis over the lease term.

We have lease agreements with both lease and nonlease components, which are generally accounted for together as a single lease component. In addition, for certain vehicle and equipment leases, we apply a portfolio approach to determine the lease term and discount rate.

Stock-based compensation

We have stock-based compensation plans under which various types of equity-based awards are granted, including RSUs, performance units and stock options. The fair values of RSUs and stock option awards, which are subject only to service conditions with graded vesting, are recognized as compensation expense, generally on a straight-line basis over the service period, net of estimated forfeitures. The fair values of performance unit awards are recognized as compensation expense, generally on a straight-line basis from the grant date to the end of the performance period. See Note 4, Stock-based compensation.

Income taxes

We provide for income taxes based on pretax income and applicable tax rates in the various jurisdictions in which we operate. Significant judgment is required in determining our provision for income taxes and income tax assets and liabilities, including evaluating uncertainties in the application of accounting principles and complex tax laws. Deferred income taxes are recorded for the expected tax consequences of temporary differences between the bases of assets and liabilities, as well as for loss and tax credit carryforwards for financial reporting purposes and amounts recognized for income tax purposes. We record a valuation allowance to reduce our deferred tax assets to the amount of future tax benefit that is more likely than not to be realized.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by tax authorities based on the technical merits of the position. The tax benefit recognized in the consolidated financial statements for a particular tax position is based on the largest benefit that is more likely than not to be realized. The amount of UTBs is adjusted as appropriate for changes in facts and circumstances, such as significant amendments to existing tax law, new regulations or interpretations by tax authorities, new information obtained during a tax examination or resolution of an examination. We recognize both accrued interest and penalties, when appropriate, related to UTBs in income tax expense. See Note 6, Income taxes.

Acquisitions

We first determine whether a set of assets acquired constitute a business and should be accounted for as a business combination. If the assets acquired do not constitute a business, we account for the transaction as an asset acquisition. Business combinations are accounted for by means of the acquisition method of accounting. Under the acquisition method, assets acquired, including IPR&D projects, and liabilities assumed are recorded at their respective fair values as of the acquisition date in our consolidated financial statements. The excess of the fair value of consideration transferred over the fair value of the net assets acquired is recorded as goodwill. Contingent consideration obligations incurred in connection with a business combination (including the assumption of an acquiree’s liability arising from an acquisition it consummated prior to our acquisition) are recorded at their fair values on the acquisition date and remeasured at their fair values each subsequent reporting period until the related contingencies have been resolved. The resulting changes in fair values are recorded in earnings. In contrast, asset acquisitions are accounted for by using a cost accumulation and allocation model. Under this model, the cost of the acquisition is allocated to the assets acquired and liabilities assumed. IPR&D projects with no alternative future use are recorded in R&D expense upon acquisition, and contingent consideration obligations incurred in connection with an asset acquisition are recorded when it is probable that they will occur and they can be reasonably estimated. See Note 2, Acquisitions, and Note 17, Fair value measurement.

Cash equivalents

We consider cash equivalents to be only those investments that are highly liquid, that are readily convertible to cash and that mature within three months from the date of purchase.

Interest-bearing securities

We consider our interest-bearing securities investment portfolio as available-for-sale, and accordingly, these investments are recorded at fair value, with unrealized gains and losses recorded in AOCI. Investments with maturities beyond one year may be classified as short-term marketable securities in the Consolidated Balance Sheets due to their highly liquid nature and because they represent the Company's investments that are available for current operations. See Note 9, Investments, and Note 17, Fair value measurement.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost, which includes amounts related to materials, labor and overhead, is determined in a manner that approximates the first-in, first-out method. Net realizable value is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion, disposal and transportation. See Note 10, Inventories.

Derivatives

We recognize all of our derivative instruments as either assets or liabilities at fair value in the Consolidated Balance Sheets. The accounting for changes in the fair value of a derivative instrument depends on whether the derivative has been formally designated and qualifies as part of a hedging relationship under the applicable accounting standards and, further, on the type of hedging relationship. For derivatives formally designated as hedges, we assess both at inception and quarterly thereafter whether the hedging derivatives are highly effective in offsetting changes in either the fair value or cash flows of the hedged item. Our derivatives that are not designated and do not qualify as hedges are adjusted to fair value through current earnings. See Note 17, Fair value measurement, and Note 18, Derivative instruments.

Property, plant and equipment, net

Property, plant and equipment is recorded at historical cost, net of accumulated depreciation, amortization and, if applicable, impairment charges. We review our property, plant and equipment assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Depreciation is recorded over the assets' useful lives on a straight-line basis. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or lease terms. See Note 11, Property, plant and equipment.

Goodwill and other intangible assets

Finite-lived intangible assets are recorded at cost, net of accumulated amortization, and, if applicable, impairment charges. Amortization of finite-lived intangible assets is recorded over the assets' estimated useful lives on a straight-line basis or based on the pattern in which economic benefits are consumed, if reliably determinable. We review our finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. See Note 12, Goodwill and other intangible assets.

The fair values of IPR&D projects acquired in a business combination that are not complete are capitalized and accounted for as indefinite-lived intangible assets until completion or abandonment of the related R&D efforts. Upon successful completion of the project, the capitalized amount is amortized over its estimated useful life. If a project is abandoned, all remaining capitalized amounts are written off immediately. Major risks and uncertainties are often associated with IPR&D projects because we are required to obtain regulatory approvals before marketing the resulting products. Such approvals require completing clinical trials that demonstrate a product candidate is safe and effective. Consequently, the eventual realized value of the acquired IPR&D project may vary from its fair value at the date of acquisition, and IPR&D impairment charges may occur in future periods.

Capitalized IPR&D projects are tested for impairment annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We consider various factors for potential impairment, including the current legal and regulatory environment and the competitive landscape. Adverse clinical trial results, significant delays in obtaining marketing approval, the inability to bring a product to market and the introduction or advancement of competitors' products could result in partial or full impairment of the related intangible assets.

We perform an impairment test of goodwill annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. To date, an impairment of goodwill has not been recorded. See Note 12, Goodwill and other intangible assets.

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. Certain of these proceedings are discussed in Note 19, Contingencies and commitments. 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.

Foreign currency translation

The net assets of international subsidiaries whose functional currencies are not in U.S. dollars are translated into U.S. dollars using current exchange rates. The U.S. dollar effects that arise from translation of the net assets of these subsidiaries at changing rates are recognized in AOCI. The subsidiaries' earnings are translated into U.S. dollars by using average exchange rates.

Equity investments

Marketable and nonmarketable equity securities

Investments in publicly traded equity securities with readily determinable fair values are recorded at quoted market prices for identical securities, with changes in fair value recorded in Other Income, net, in the Consolidated Statements of Income. Investments in equity securities without readily determinable fair values are recorded at cost minus impairment, if any, adjusted for changes resulting from observable price changes in orderly transactions for identical or similar securities. Such adjustments are recorded in Other Income, net, in the Consolidated Statements of Income.

Equity method investments

Equity investments that give us the ability to exert significant influence, but not control, over an investee for which we have not elected the fair value option are accounted for under the equity method of accounting. In concluding whether we have the ability to exercise significant influence over an investee, we consider factors such as our ownership percentage, voting and other shareholder rights, board of directors representation and the existence of other collaborative or business relationships. The equity method of accounting requires us to allocate the difference between the fair value of securities acquired and our proportionate share of the carrying value of the underlying assets (the basis difference) to various items and amortize such differences over their useful lives. Our share of investees' earnings or losses and amortization of basis differences, if any, are recorded one quarter in arrears in Other income, net, in the Consolidated Statements of Income. We record impairment losses on our equity method investments if we deem the impairment to be other-than-temporary. We deem an impairment to be other-than-temporary based on various factors, including but not limited to, the length of time the fair value is below the carrying value, volatility of the security price and our intent and ability to retain the investment to allow for a recovery in fair value.

For equity method investments for which we have elected the fair value option, changes in fair value are recorded in Other income, net, in the Consolidated Statements of Income.

Additionally, we hold investments in limited partnerships, which primarily invest in early-stage biotechnology companies. As a practical expedient, such limited partnership investments are measured by using our proportionate share of the net asset values of the underlying investments held by the limited partnerships, with such changes included in Other income, net, in the Consolidated Statements of Income.

Recent accounting pronouncements

In March 2020, the FASB issued a new accounting standard to ease the financial reporting burdens caused by the expected market transition from the LIBOR and other interbank offered rates to alternative reference rates, commonly referred to as reference rate reform. The new standard provides temporary optional expedients and exceptions to current GAAP guidance on contract modifications and hedge accounting. Specifically, a modification to transition to an alternative reference rate is treated as an event that does not require contract remeasurement or reassessment of a previous accounting treatment. Moreover, for all types of hedging relationships, an entity is permitted to change the reference rate without having to dedesignate the hedging relationship. The standard is generally effective for all contract modifications made and hedging relationships evaluated through December 31, 2022. In January 2021, the FASB issued a new accounting standard to expand the scope of the original March 2020 standard to include derivative instruments on discounting transactions. We do not expect the two standards to have a material impact on our consolidated financial statements.

In November 2021, the FASB issued a new accounting standard around the recognition and measurement of contract assets and contract liabilities from revenue contracts with customers acquired in a business combination. The new standard clarifies that contract assets and contract liabilities acquired in a business combination from an acquiree should initially be recognized by applying revenue recognition principles and not at fair value. The standard is effective for interim and annual periods beginning on January 1, 2023, and early adoption is permitted. The impact of this standard will depend on the facts and circumstances of future transactions.

2. Acquisitions

Teneobio, Inc.

On October 19, 2021, we acquired all of the outstanding stock of Teneobio, a privately held, clinical-stage biotechnology company developing a new class of biologics called human heavy-chain antibodies, which are single-chain antibodies composed of the human heavy-chain domain. The transaction, which was accounted for as a business combination, includes Teneobio's proprietary bispecific and multispecific antibody technologies, which complement Amgen's existing antibody capabilities and BiTE® platform and will enable significant acceleration and efficiency in the discovery and development of new molecules to treat diseases across Amgen's core therapeutic areas. Upon its acquisition, Teneobio became a wholly owned subsidiary of Amgen, and its operations have been included in our consolidated financial statements commencing on the acquisition date.

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

	Amounts
Cash purchase price	$ 994
Contingent consideration	309
Total consideration	$ 1,303
Cash and cash equivalents	$ 100
IPR&D	1,054
Finite-lived intangible asset – R&D technology rights	94
Finite-lived intangible assets – licensing rights	41
Goodwill	251
Other assets, net	16
Deferred tax liability	(253)
Total assets acquired, net	$ 1,303

The consideration for this transaction were (i) an upfront cash payment of $994 million, which included a working-capital adjustment and (ii) future contingent milestone payments to Teneobio's former equity holders of up to $1.6 billion in cash, based on the achievement of various development and regulatory milestones with regard to the leading asset (AMG 340, formerly TNB-585) and to various development milestones for other drug candidates. The estimated fair value of the contingent consideration obligations aggregated $309 million as of the acquisition date and were determined using a probability-weighted expected return methodology. The assumptions in this method include the probability of achieving the milestones and the expected payment dates, with such amounts discounted to present value based on our pre-tax cost of debt. See Note 17, Fair value measurement, for information regarding the estimated fair value of these obligations as of December 31, 2021.

The estimated fair values of acquired IPR&D assets totaled $1.1 billion, of which $784 million relates to AMG 340, that is in a phase 1 clinical trial for the treatment of mCRPC, and the balance relates to four separate preclinical oncology programs. The R&D technology rights of $94 million relate to Teneobio's proprietary bispecific and multispecific antibody technologies and will be amortized over ten years using the straight-line method. Teneobio has also licensed its technology and certain identified targets to various third parties, representing contractual agreements valued at $41 million. The estimated fair values for these 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.

A deferred tax liability of $253 million was recognized on the temporary differences related to the book bases and tax bases of the acquired identifiable assets and assumed liabilities, primarily driven by the intangible assets acquired.

The excess of the acquisition date consideration over the fair values assigned to the assets acquired and the liabilities assumed of $251 million was recorded as goodwill, which is not deductible for tax purposes. The goodwill value represents expected synergies from both AMG 340 and the technologies acquired.

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

Five Prime Therapeutics, Inc.

On April 16, 2021, Amgen acquired the outstanding stock of Five Prime for total consideration of $1.6 billion, net of cash acquired. The purchase price was funded with cash on hand. This transaction was accounted for as an asset acquisition because substantially all the value of the assets acquired was concentrated in the intellectual property rights of bemarituzumab, a phase 3 trial-ready, first-in-class program for gastric cancer. The operations of Five Prime have been included in our consolidated financial statements commencing after the acquisition date.

We allocated the consideration to acquire Five Prime to the bemarituzumab IPR&D program of $1.5 billion, which was expensed immediately in Acquired IPR&D expense in the Consolidated Statements of Income; deferred tax assets of $177 million; and other net liabilities of $47 million. The acquired IPR&D expense was not tax deductible.

Otezla

On November 21, 2019, we acquired worldwide rights to Otezla, the only oral, non-biologic treatment for psoriasis and psoriatic arthritis, along with certain related assets and liabilities, from Celgene. Otezla is primarily used for the treatment of patients with moderate-to-severe plaque psoriasis for whom phototherapy or systemic therapy is appropriate and is approved in more than 50 markets outside the United States, including the European Union and Japan. The acquisition was accounted for as an asset acquisition under GAAP because substantially all of the value of the assets acquired was concentrated in the global intellectual property rights of Otezla. The operations of Otezla have been included in our consolidated financial statements commencing on the acquisition date.

The following table summarizes the consideration transferred and the allocation of the estimated accumulated cost, including tax adjustments, to the assets acquired and liabilities assumed (in millions):

	Amounts
Cash purchase price	$ 13,400
Transaction costs	40
Accumulated cost (consideration transferred)	$ 13,440
Intangible assets:	
Developed-product-technology rights	$ 13,007
Marketing-related rights	195
Inventory	367
Deferred tax liability, net	(24)
Deferred credit	(96)
Other liabilities, net	(9)
Total assets acquired, net	$ 13,440

Amgen allocated the accumulated cost of the acquisition to the assets acquired based on their relative fair values. The accumulated cost of the acquisition includes direct acquisition-related costs and applicable taxes. Goodwill is not recognized in the accounting for an asset acquisition. Rather, the excess of the accumulated cost over the fair value of the net assets acquired is reallocated to the nonfinancial assets acquired.

The developed-product-technology rights acquired relate to Otezla. The estimated fair value was determined by using a multi-period excess earnings income approach, which is based on the present value of the incremental after-tax cash flows attributable only to the intangible asset. The developed-product-technology rights is being amortized over a weighted-average period of 8.5 years by using the straight-line method.

The estimated fair value of marketing-related rights, which relate to assembled workforce, was determined using a replacement cost approach, which consists of developing an estimate of the current cost of a similar new asset having the nearest equivalent utility to the asset being valued. The assembled workforce is being amortized over a period of 5 years by using the straight-line method.

The estimated fair value of the acquired inventory 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. Inventory fair value adjustments is being amortized as inventory turns over, which we estimate to approximate 2.5 years.

Upon closing, we had a difference between the book basis and tax basis of the assets acquired. The Company used the simultaneous equations method to determine the assigned value of the net assets acquired and the related deferred tax assets or liabilities. Use of this methodology resulted in an increase to the carrying value of the intangible assets of $119 million, a net deferred tax liability of $24 million and a deferred credit of $96 million. The tax effects of the acquisition are based on Amgen's estimated blended statutory tax rate of 20%.

Nuevolution AB

On July 15, 2019, we acquired all of the outstanding stock of Nuevolution, a publicly traded, Denmark-based biotechnology company with a leading small molecule drug discovery platform, for total consideration of $183 million in cash. The transaction, which was accounted for as a business combination, expands our ability to discover novel small molecules against difficult-to-drug targets and with greater speed and efficiency. Nuevolution's operations, which are not material, have been included in our consolidated financial statements commencing on the acquisition date.

We allocated the consideration to acquire Nuevolution to finite-lived intangible assets of $150 million, primarily comprised of technology rights for a drug discovery platform with an estimated useful life of 10 years; goodwill of $26 million, which is not tax deductible; deferred tax liabilities of $22 million; and other net assets of $29 million.

The estimated fair values of intangible assets were determined primarily by using a probability-weighted-income approach, which discounts expected future cash flows to present value by using a discount rate that represents the estimated rate that market participants would use to value the intangible assets.

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):

	Year ended December 31, 2021			Year ended December 31, 2020			Year ended December 31, 2019		
	U.S.	ROW	Total	U.S.	ROW	Total	U.S.	ROW	Total
Enbrel	$ 4,352	$ 113	$ 4,465	$ 4,855	$ 141	$ 4,996	$ 5,050	$ 176	$ 5,226
Prolia	2,150	1,098	3,248	1,830	933	2,763	1,772	900	2,672
Otezla[1]	1,804	445	2,249	1,790	405	2,195	139	39	178
XGEVA	1,434	584	2,018	1,405	494	1,899	1,457	478	1,935
Neulasta	1,514	220	1,734	2,001	292	2,293	2,814	407	3,221
Aranesp	537	943	1,480	629	939	1,568	758	971	1,729
Repatha	557	560	1,117	459	428	887	376	285	661
KYPROLIS	736	372	1,108	710	355	1,065	654	390	1,044
Nplate	566	461	1,027	485	365	850	480	315	795
Other products	3,636	2,215	5,851	3,821	1,903	5,724	3,031	1,712	4,743
Total product sales[2]	17,286	7,011	24,297	17,985	6,255	24,240	16,531	5,673	22,204
Other revenues	908	774	1,682	511	673	1,184	693	465	1,158
Total revenues	$ 18,194	$ 7,785	$ 25,979	$ 18,496	$ 6,928	$ 25,424	$ 17,224	$ 6,138	$ 23,362

[1] Otezla was acquired on November 21, 2019.

[2] Hedging gains and losses, which are included in product sales, were not material for the years ended December 31, 2021, 2020 and 2019.

In the United States, we sell primarily to pharmaceutical wholesale distributors that we use as the principal means of distributing our products to healthcare providers. Outside the United States, we sell principally to healthcare providers and/or pharmaceutical wholesale distributors depending on the distribution practice in each country. We monitor the financial condition of our larger customers and limit our credit exposure by setting credit limits and, in certain circumstances, by requiring letters of credit or obtaining credit insurance.

We had product sales to three customers, each of them accounting for more than 10% of total revenues for each of the years ended December 31, 2021, 2020 and 2019. For the year ended December 31, 2021, on a combined basis, these customers accounted for 82% of total gross revenues as shown in the following table. Certain information with respect to these customers was as follows (dollar amounts in millions):

	Years ended December 31,		
	2021	2020	2019
McKesson Corporation:			
Gross product sales	$ 15,187	$ 13,779	$ 11,795
% of total gross revenues	33 %	32 %	31 %
AmerisourceBergen Corporation:			
Gross product sales	$ 14,783	$ 14,743	$ 12,301
% of total gross revenues	32 %	34 %	33 %
Cardinal Health, Inc.:			
Gross product sales	$ 7,681	$ 7,332	$ 6,538
% of total gross revenues	17 %	17 %	17 %

As of December 31, 2021 and 2020, amounts due from these three customers each exceeded 10% of gross trade receivables and accounted for 73% and 74%, respectively, of net trade receivables on a combined basis. As of December 31, 2021 and 2020, 27% and 28%, respectively, of net trade receivables were due from customers located outside the United States, the majority of which were from Europe. Our total allowance for doubtful accounts as of December 31, 2021 and 2020, was not material.

4. Stock-based compensation

Our Amended 2009 Plan authorizes for issuance to employees of Amgen and nonemployee members of our Board of Directors shares of our common stock pursuant to grants of equity-based awards, including RSUs, stock options and performance units. The pool of shares available under the Amended 2009 Plan is reduced by one share for each stock option granted and by 1.9 shares for other types of awards granted, including full-value awards. In general, if any shares subject to an award granted under the Amended 2009 Plan expire or become forfeited, terminated or canceled without the issuance of shares, the shares subject to such awards are added back into the authorized pool on the same basis that they were removed. In addition, under the Amended 2009 Plan, shares withheld to pay for minimum statutory tax obligations with respect to full-value awards are added back into the authorized pool on the basis of 1.9 shares. As of December 31, 2021, the Amended 2009 Plan provides for future grants and/or issuances of up to approximately 19 million shares of our common stock. Stock-based awards under our employee compensation plans are made with newly issued shares reserved for this purpose.

The following table reflects the components of stock-based compensation expense recognized in our Consolidated Statements of Income (in millions):

	Years ended December 31,		
	2021	2020	2019
RSUs	$ 183	$ 178	$ 168
Performance units	121	118	105
Stock options	37	34	35
Total stock-based compensation expense, pretax	341	330	308
Tax benefit from stock-based compensation expense	(74)	(72)	(67)
Total stock-based compensation expense, net of tax	$ 267	$ 258	$ 241

Restricted stock units and stock options

Eligible employees generally receive an annual grant of RSUs and, for certain executive-level employees, stock options, with the size and type of award generally determined by the employee's salary grade and performance level. Certain management and professional-level employees typically receive RSU grants upon commencement of employment. Nonemployee members of our Board of Directors also receive an annual grant of RSUs.

Our RSU and stock option grants provide for accelerated or continued vesting in certain circumstances as defined in the plans and related grant agreements, including upon death, disability, termination in connection with a change in control and the retirement of employees who meet certain service and/or age requirements. RSUs and stock options generally vest in equal amounts on the second, third and fourth anniversaries of the grant date. RSUs accrue dividend equivalents, which are typically payable in shares only when and to the extent the underlying RSUs vest and are issued to the recipient.

Restricted stock units

The grant date fair value of an RSU equals the closing price of our common stock on the grant date, as RSUs accrue dividend equivalents during their vesting period. The weighted-average grant date fair values per unit of RSUs granted during the years ended December 31, 2021, 2020 and 2019, were $233.10, $235.63 and $182.12, respectively.

The following table summarizes information regarding our RSUs:

	Year ended December 31, 2021	
	Units (in millions)	Weighted-average grant date fair value
Balance nonvested as of December 31, 2020	3.0	$ 198.11
Granted	1.3	$ 233.10
Vested	(0.9)	$ 177.27
Forfeited	(0.4)	$ 213.32
Balance nonvested as of December 31, 2021	3.0	$ 217.95

The total grant date fair values of RSUs that vested during the years ended December 31, 2021, 2020 and 2019, were $166 million, $161 million and $160 million, respectively.

Stock options

The exercise price of stock options is set as the closing price of our common stock on the grant date, and the related number of shares granted is fixed at that point in time. Awards expire 10 years from the date of grant. We use the Black–Scholes option valuation model to estimate the grant date fair value of stock options.

The weighted-average assumptions used in the option valuation model and the resulting weighted-average grant date fair values of stock options granted were as follows:

	Years ended December 31,		
	2021	2020	2019
Closing price of our common stock on grant date	$ 237.17	$ 236.36	$ 177.31
Expected volatility (average of implied and historical volatility)	25.6 %	28.1 %	23.5 %
Expected life (in years)	5.7	5.8	5.8
Risk-free interest rate	1.0 %	0.4 %	2.4 %
Expected dividend yield	2.9 %	3.0 %	3.1 %
Fair value of stock options granted	$ 40.43	$ 42.34	$ 30.47

The following table summarizes information regarding our stock options:

	Year ended December 31, 2021			
	Options (in millions)	Weighted-average exercise price	Weighted-average remaining contractual life (in years)	Aggregate intrinsic value (in millions)
Balance unexercised as of December 31, 2020	4.7	$ 179.90		
Granted	1.3	$ 237.17		
Exercised	(0.5)	$ 137.95		
Expired/forfeited	(0.4)	$ 208.56		
Balance unexercised as of December 31, 2021	5.1	$ 197.27	7.3	$ 168
Vested or expected to vest as of December 31, 2021	4.9	$ 195.64	7.2	$ 167
Exercisable as of December 31, 2021	2.0	$ 165.46	5.6	$ 120

The total intrinsic values of options exercised during the years ended December 31, 2021, 2020 and 2019, were $56 million, $98 million and $68 million, respectively. The actual tax benefits realized from tax deductions from option exercises during the years ended December 31, 2021, 2020 and 2019, were $12 million, $21 million and $15 million, respectively.

As of December 31, 2021, $346 million of unrecognized compensation cost was related to nonvested RSUs and unvested stock options, which is expected to be recognized over a weighted-average period of 1.8 years.

Performance units

Certain management-level employees also receive annual grants of performance units, which give the recipient the right to receive common stock that is contingent upon achievement of specified preestablished goals over the performance period, which is generally three years. The performance goals for the units granted during the years ended December 31, 2021, 2020 and 2019, which are accounted for as equity awards, are based on (i) Amgen's stockholder return compared with a comparator group of companies, which are considered market conditions and are therefore reflected in the grant date fair values of the units, and (ii) Amgen's stand-alone financial performance measures, which are considered performance conditions. The expense recognized for awards is based on the grant date fair value of a unit multiplied by the number of units expected to be earned with respect to the related performance conditions, net of estimated forfeitures. Depending on the outcome of these performance goals, a recipient may ultimately earn a number of units greater or less than the number of units granted. Shares of our common stock are issued on a one-for-one basis for each performance unit earned. In general, performance unit awards vest at the end of the performance period. The performance award program provides for accelerated or continued vesting in certain circumstances as defined in the plan, including upon death, disability, a change in control and retirement of employees who meet certain service and/or age requirements. Performance units accrue dividend equivalents that are typically payable in shares only when and to the extent the underlying performance units vest and are issued to the recipient, including with respect to market and performance conditions that affect the number of performance units earned.

We use a payout simulation model to estimate the grant date fair value of performance units. The weighted-average assumptions used in the payout simulation model and the resulting weighted-average grant date fair values of performance units granted were as follows:

	Years ended December 31,		
	2021	2020	2019
Closing price of our common stock on grant date	$ 239.64	$ 236.36	$ 177.31
Volatility	29.3 %	27.5 %	22.1 %
Risk-free interest rate	0.3 %	0.2 %	2.3 %
Fair value of units granted	$ 254.68	$ 249.07	$ 188.40

The payout simulation model assumes correlations of returns of the stock prices of our common stock and the common stocks of the comparator groups of companies and stock price volatilities of the comparator groups of companies to simulate stockholder returns over the performance periods and their resulting impact on the payout percentages based on the contractual terms of the performance units.

As of December 31, 2021 and 2020, 1.6 million and 1.8 million performance units were outstanding, with weighted-average grant date fair values per unit of $229.39 and $207.52 per unit, respectively. During the year ended December 31, 2021, 0.6 million performance units with a weighted-average grant date fair value per unit of $254.68 were granted, and 0.2 million performance units with a weighted-average grant date fair value per unit of $226.32 were forfeited.

The total fair values of performance units paid during the years ended December 31, 2021, 2020 and 2019, were $149 million, $230 million and $176 million, respectively, based on the number of performance units earned multiplied by the closing stock price of our common stock on the last day of the performance period.

As of December 31, 2021, $130 million of unrecognized compensation cost was related to nonvested performance units, which is expected to be recognized over a weighted-average period of one year.

5. Defined contribution plan

The Company has defined contribution plans to which certain employees of the Company and participating subsidiaries may defer compensation for income tax purposes. Participants are eligible to receive matching contributions based on their contributions, in addition to other Company contributions. Defined contribution plan expenses were $279 million, $231 million and $220 million for the years ended December 31, 2021, 2020 and 2019, respectively.

6. Income taxes

Income before income taxes included the following (in millions):

	Years ended December 31,		
	2021	2020	2019
Domestic	$ 1,850	$ 4,087	$ 4,371
Foreign	4,851	4,046	4,767
Total income before income taxes	$ 6,701	$ 8,133	$ 9,138

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

	Years ended December 31,		
	2021	2020	2019
Current provision:			
Federal	$ 865	$ 921	$ 1,284
State	18	34	39
Foreign	359	277	277
Total current provision	1,242	1,232	1,600
Deferred benefit:			
Federal	(308)	(321)	(276)
State	(9)	9	(22)
Foreign	(117)	(51)	(6)
Total deferred benefit	(434)	(363)	(304)
Total provision for income taxes	$ 808	$ 869	$ 1,296

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

	December 31,	
	2021	2020
Deferred income tax assets:		
NOL and credit carryforwards	$ 1,065	$ 794
Accrued expenses	600	561
Expenses capitalized for tax	244	144
Stock-based compensation	96	92
Other	326	301
Total deferred income tax assets	2,331	1,892
Valuation allowance	(663)	(571)
Net deferred income tax assets	1,668	1,321
Deferred income tax liabilities:		
Acquired intangible assets	(824)	(903)
Debt	(275)	(282)
Fixed assets	(129)	(148)
Other	(221)	(189)
Total deferred income tax liabilities	(1,449)	(1,522)
Total deferred income taxes, net	$ 219	$ (201)

Valuation allowances are provided to reduce the amounts of our deferred tax assets to an amount that is more likely than not to be realized based on an assessment of positive and negative evidence, including estimates of future taxable income necessary to realize future deductible amounts.

The valuation allowance increased in 2021, primarily driven by the Company's expectation that some state R&D credits will not be utilized and certain foreign and acquired net operating losses will expire unused.

As of December 31, 2021, we had $75 million of federal tax credit carryforwards available to reduce future federal income taxes and have provided no valuation allowance for those federal tax credit carryforwards. The federal tax credit carryforwards expire between 2023 and 2040. We had $798 million of state tax credit carryforwards available to reduce future state income taxes and have provided a valuation allowance for $709 million of those state tax credit carryforwards.

As of December 31, 2021, we had $606 million of federal NOL carryforwards available to reduce future federal income taxes and have provided a valuation allowance for $6 million of those federal NOL carryforwards. For the federal NOL carryforwards for which no valuation allowance has been provided, $426 million have no expiration; the remainder begin to expire between 2022 and 2037. We had $391 million of state NOL carryforwards available to reduce future state income taxes and have provided a valuation allowance for $330 million of those state NOL carryforwards. We had $2.0 billion of foreign NOL carryforwards available to reduce future foreign income taxes and have provided a valuation allowance for $561 million of those foreign NOL carryforwards. For the foreign NOLs with no valuation allowance provided, $800 million has no expiry; and the remainder will expire between 2022 and 2031.

The reconciliations of the total gross amounts of UTBs were as follows (in millions):

	Years ended December 31,		
	2021	2020	2019
Beginning balance	$ 3,352	$ 3,287	$ 3,061
Additions based on tax positions related to the current year	171	165	215
Additions based on tax positions related to prior years	35	3	22
Reductions for tax positions of prior years	(4)	(35)	(11)
Settlements	(8)	(68)	—
Ending balance	$ 3,546	$ 3,352	$ 3,287

Substantially all of the UTBs as of December 31, 2021, if recognized, would affect our effective tax rate. During the year ended December 31, 2020, we effectively settled certain issues with the IRS. As a result, we remeasured our UTBs accordingly.

Interest and penalties related to UTBs are included in our provision for income taxes. During the years ended December 31, 2021, 2020 and 2019, we recognized $98 million, $116 million and $198 million, respectively, of interest and penalties through the income tax provision in the Consolidated Statements of Income. The decrease in interest expense for the year ended December 31, 2021, was primarily due to lower interest rates during 2021 and settlement of a prior year audit. As of December 31, 2021 and 2020, accrued interest and penalties associated with UTBs were $881 million and $783 million, respectively.

The reconciliations between the federal statutory tax rate applied to income before income taxes and our effective tax rate were as follows:

	Years ended December 31,		
	2021	2020	2019
Federal statutory tax rate	21.0 %	21.0 %	21.0 %
Foreign earnings	(7.8)%	(4.7)%	(4.5)%
Foreign-derived intangible income	(1.0)%	(0.7)%	(0.7)%
Credits, Puerto Rico excise tax	(3.4)%	(2.9)%	(2.6)%
Interest on uncertain tax positions	1.1 %	1.1 %	1.6 %
Credits, primarily federal R&D	(2.1)%	(1.4)%	(1.0)%
Acquisition IPR&D	4.9 %	— %	— %
Audit settlements	— %	(1.0)%	— %
Other, net	(0.6)%	(0.7)%	0.4 %
Effective tax rate	12.1 %	10.7 %	14.2 %

The effective tax rates for the years ended December 31, 2021, 2020 and 2019, 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 the Company's operations in 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 tax incentive grants through 2035. Additionally, the Company's operations conducted in Singapore are subject to a tax incentive grant through 2034. Our foreign earnings are also subject to U.S. tax at a reduced rate of 10.5%.

The U.S. territory of Puerto Rico imposes an excise tax on the gross intercompany purchase price of goods and services from our manufacturing site in Puerto Rico. The rate of 4% is effective through December 31, 2027. We account for the excise tax as a manufacturing cost that is capitalized in inventory and expensed in Cost of sales when the related products are sold. For U.S. income tax purposes in 2021, the excise tax results in foreign tax credits that are generally recognized in our provision for income taxes when the excise tax is incurred.

Income taxes paid during the years ended December 31, 2021, 2020 and 2019, were $1.9 billion, $1.4 billion and $1.9 billion, respectively.

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 may arise 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, 2011 and 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 Notices for 2010, 2011 and 2012 that we received in May and July 2021, which seek to increase our U.S. taxable income. The Notices seek to increase our U.S. taxable income by an amount that would result in additional federal tax of approximately $3.6 billion plus interest. Any additional tax that could be imposed would be reduced by up to approximately $900 million of repatriation tax previously accrued on our foreign earnings. We firmly believe that the IRS's positions set forth in the Notices are without merit, and we are contesting the Notices through the judicial process.

In 2020, we received an RAR and a modified RAR from the IRS for the years 2013, 2014 and 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, 2011 and 2012. We disagreed with the proposed adjustments and calculations and pursued resolution with the IRS appeals office. We were unable to reach resolution at the administrative appeals level, and we anticipate that we will receive a statutory notice of deficiency for these years as well. We expect to contest any such notice related to 2013–15 through the judicial process. We are also currently under examination by the IRS for the years 2016, 2017 and 2018 and by a number of state and foreign tax jurisdictions.

Final resolution of these complex matters is not likely within the next 12 months. We 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 consolidated financial statements.

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

7. 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):

	Years ended December 31,		
	2021	2020	2019
Income (Numerator):			
Net income for basic and diluted EPS	$ 5,893	$ 7,264	$ 7,842
Shares (Denominator):			
Weighted-average shares for basic EPS	570	586	605
Effect of dilutive securities	3	4	4
Weighted-average shares for diluted EPS	573	590	609
Basic EPS	$ 10.34	$ 12.40	$ 12.96
Diluted EPS	$ 10.28	$ 12.31	$ 12.88

For each of the three years ended December 31, 2021, the number of antidilutive employee stock-based awards excluded from the computation of diluted EPS was not significant.

8. Collaborations

A collaborative arrangement is a contractual arrangement that involves a joint operating activity. Such arrangements involve two or more parties that are both (i) active participants in the activity and (ii) exposed to significant risks and rewards dependent on the commercial success of the activity.

From time to time, we enter into collaborative arrangements for the R&D, manufacture and/or commercialization of products and/or product candidates. These collaborations generally provide for nonrefundable upfront license fees, development and commercial-performance milestone payments, cost sharing, royalty payments and/or profit sharing. Our collaboration arrangements are performed with no guarantee of either technological or commercial success, and each arrangement is unique in nature. See Note 1, Summary of significant accounting policies, for additional discussion of revenues recognized under these types of arrangements. Operating expenses for costs incurred pursuant to these arrangements are reported in their respective expense line items in the Consolidated Statements of Income, net of any payments due to or reimbursements due from our collaboration partners, with such reimbursements being recognized at the time the party becomes obligated to pay. Our significant arrangements are discussed below.

BeiGene, Ltd.

On January 2, 2020, we acquired a 20.5% stake in BeiGene for approximately $2.8 billion in cash as part of a collaboration to expand our oncology presence in China. For additional information regarding our equity investment in BeiGene, see Note 9, Investments. Under the collaboration, BeiGene began selling XGEVA in 2020, BLINCYTO in 2021 and KYPROLIS in early 2022 in China, and Amgen shares profits and losses equally during the initial product-specific commercialization periods; thereafter, product rights may revert to Amgen, and Amgen will pay royalties to BeiGene on sales in China of such products for a specified period.

In addition, we jointly develop a portion of our oncology portfolio with BeiGene, which shares in global R&D costs by providing cash and development services of up to $1.25 billion. Upon regulatory approval, BeiGene will assume commercialization rights in China for a specified period, and Amgen and BeiGene will share profits equally until certain of these product rights revert to Amgen. Upon return of the product rights, Amgen will pay royalties to BeiGene on sales in China for a specified period. For product sales outside China, Amgen will also pay royalties to BeiGene.

During the years ended December 31, 2021 and 2020, net costs recovered from BeiGene for oncology product candidates were $220 million and $225 million, respectively, and were recorded as an offset to R&D expense in the Consolidated Statements of Income. During the year ended December 31, 2021, product sales from Amgen to BeiGene under the collaboration were $72 million and were recorded in Product sales in the Consolidated Statements of Income. During the year ended December 31, 2021, profit and loss share expenses related to the initial product-specific commercialization period were $64 million and were recorded primarily in SG&A expense in the Consolidated Statements of Income. Product sales from Amgen to BeiGene and profit and loss share expenses were not material during the year ended December 31, 2020. Amounts owed from BeiGene for product sales were $21 million and $22 million as of December 31, 2021 and 2020, respectively, which are included in Trade receivables, net, in the Consolidated Balance Sheets. Net amounts owed from BeiGene for cost recoveries and profit and loss share payments were $61 million and $99 million as of December 31, 2021 and 2020, respectively, which are included in Other current assets in the Consolidated Balance Sheets.

Novartis Pharma AG

We are in a collaboration with Novartis to jointly develop and commercialize Aimovig. On January 31, 2022, concurrent with the settlement of the previously disclosed litigation between Amgen and Novartis we modified the terms of the collaboration. See Note 19, Contingencies and commitments.

Arrangement through December 31, 2021

In the United States, Amgen and Novartis jointly developed and collaborated on the commercialization of Aimovig. Amgen, as the principal, recognized product sales of Aimovig in the United States, shared U.S. commercialization costs with Novartis and paid Novartis a significant royalty on net sales in the United States. Novartis holds global co-development rights and exclusive commercial rights outside the United States and Japan for Aimovig (the ex-U.S. Novartis Rights). Novartis paid Amgen double-digit royalties on net sales of the product in the ex-U.S. Novartis Rights territories and funded a portion of global R&D expenses. In addition, Novartis was required to make a payment to Amgen of up to $100 million if certain commercial and expenditure thresholds were achieved with respect to Aimovig in the United States.

Arrangement after January 1, 2022

Pursuant to the amendment effective January 1, 2022, Novartis retains the ex-U.S. Novartis Rights and will continue to pay double-digit royalties on net sales in the ex-U.S. Novartis Rights territories. In the United States, Novartis will no longer collaborate with Amgen, share Aimovig commercialization costs or pay milestones and Amgen will no longer pay royalties to Novartis on sales of Aimovig. Amgen and Novartis will continue to share development expenses worldwide. In the United States, Novartis will no longer collaborate with Amgen or share Aimovig commercialization costs and Amgen will no longer pay royalties to Novartis on sales of Aimovig. Amgen and Novartis will continue to share development expenses worldwide.

Amgen manufactures and supplies Aimovig worldwide.

During the years ended December 31, 2021, 2020 and 2019, net costs recovered from Novartis for migraine products were $160 million, $192 million and $187 million, respectively, and were recorded primarily in SG&A expense in the Consolidated Statements of Income. During the years ended December 31, 2021, 2020 and 2019, royalties due to Novartis for Aimovig were $116 million, $139 million and $115 million, respectively, and were recorded in Cost of sales in the Consolidated Statements of Income. During the years ended December 31, 2021, 2020 and 2019, royalties due from Novartis for Aimovig were not material.

Kyowa Kirin Co., Ltd.

On July 30, 2021, we closed our collaboration and licensing agreement with KKC to jointly develop and commercialize an anti-OX40 fully human monoclonal antibody (AMG 451) worldwide, except in Japan. AMG 451 is for the treatment of atopic dermatitis, with potential for treatment of other autoimmune diseases.

Under the terms of the agreement, we will lead the global development, manufacture and commercialization of AMG 451, except in Japan. KKC will co-promote AMG 451 with Amgen in the United States and have opt-in rights to co-promote AMG 451 in various other markets outside the United States, including in Europe and Asia.

We made an upfront payment of $400 million to KKC that was recognized in R&D expense in the third quarter of 2021. Amgen and KKC will share equally the global development costs, except in Japan, and the U.S. commercialization costs. Outside the United States and Japan, any commercialization costs incurred by KKC will be reimbursed by Amgen. We may also be required to make milestone payments of up to $850 million contingent upon the achievement of certain regulatory events and commercial thresholds. We will also pay KKC significant double-digit royalties on global sales, except in Japan. Net costs due to KKC were not material during the year ended December 31, 2021.

Other

In addition to the collaborations discussed above, we have various other collaborations that are not individually significant to our business at this time. Pursuant to the terms of those agreements, we may be required to pay additional amounts or we may receive additional amounts upon the achievement of various development and commercial milestones that in the aggregate could be significant. We may also incur or have reimbursed to us significant R&D costs if a related product candidate were to advance to late-stage clinical trials. In addition, if any products related to these collaborations are approved for sale, we may be required to pay significant royalties or we may receive significant royalties on future sales. The payments of these amounts, however, are contingent upon the occurrence of various future events that have high degrees of uncertainty of occurrence.

9. Investments

Available-for-sale investments

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

Types of securities as of December 31, 2021	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair values
U.S. Treasury notes	$ 47	$ —	$ —	$ 47
U.S. Treasury bills	1,400	—	—	1,400
Money market mutual funds	5,856	—	—	5,856
Other short-term interest-bearing securities	1	—	—	1
Total available-for-sale investments	$ 7,304	$ —	$ —	$ 7,304

Types of securities as of December 31, 2020	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair values
U.S. Treasury notes	$ 129	$ 1	$ —	$ 130
U.S. Treasury bills	4,948	—	—	4,948
Money market mutual funds	4,765	—	—	4,765
Other short-term interest-bearing securities	2	—	—	2
Total available-for-sale investments	$ 9,844	$ 1	$ —	$ 9,845

The fair values of available-for-sale investments by location in the Consolidated Balance Sheets were as follows (in millions):

	December 31,	
Consolidated Balance Sheets locations	2021	2020
Cash and cash equivalents	$ 7,256	$ 5,464
Marketable securities	48	4,381
Total available-for-sale investments	$ 7,304	$ 9,845

Cash and cash equivalents in the above table excludes bank account cash of $733 million and $802 million as of December 31, 2021 and 2020, respectively.

The fair values of available-for-sale investments by contractual maturity were as follows (in millions):

Contractual maturities	December 31, 2021	December 31, 2020
Maturing in one year or less	$ 7,304	$ 9,795
Maturing after one year through three years	—	50
Total available-for-sale investments	$ 7,304	$ 9,845

For the years ended December 31, 2021 and 2020, realized gains and losses on interest-bearing securities were not material. For the year ended December 31, 2019, realized gains on interest-bearing securities were $92 million and realized losses were not material. Realized gains and losses on interest-bearing securities are recorded in Other income, net, in the 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

We held investments in equity securities with readily determinable fair values of $611 million and $477 million as of December 31, 2021 and 2020, respectively, which are included in Other noncurrent assets in the Consolidated Balance Sheets. For the years ended December 31, 2021, 2020 and 2019, net unrealized gains on publicly traded securities were $161 million, $174 million and $112 million, respectively. Realized gains and losses on publicly traded securities for the years ended December 31, 2021, 2020 and 2019, were not material.

We held investments of $262 million and $203 million in equity securities without readily determinable fair values as of December 31, 2021 and 2020, respectively, which are included in Other noncurrent assets in the Consolidated Balance Sheets. For the year ended December 31, 2021, gains due to upward adjustments on these securities were $152 million, and gains realized on the dispositions of these securities were $41 million; for the years ended December 31, 2020 and 2019, gains due to upward adjustments and gains realized upon dispositions of these securities were not material. For the years ended December 31, 2021, 2020 and 2019, downward adjustments to the carrying values of these securities were not material. Adjustments were based on observable price transactions.

Equity Method Investments

BeiGene, Ltd.

On January 2, 2020, we acquired a 20.5% ownership interest in BeiGene for $2.8 billion, of which $2.6 billion was attributed to the fair value of equity securities upon closing, with the remainder attributed to prepaid R&D. Our equity investment in BeiGene is included in Other noncurrent assets in the Consolidated Balance Sheets. Our equity investment is accounted for under the equity method of accounting due to our ability to exert significant influence over BeiGene. See Note 1, Summary of significant accounting policies, for factors in concluding our ability to exert significant influence over BeiGene. The fair value of equity securities acquired exceeded our proportionate share of the carrying value of the underlying net assets of BeiGene by approximately $2.4 billion. The equity method of accounting requires us to identify and allocate amounts to items that give rise to the basis difference and to amortize these items over their useful lives. This amortization, along with our share of the results of operations of BeiGene, is included in Other income, net, in our Consolidated Statements of Income. Recognition occurs one quarter in arrears, which began in the second quarter of 2020. The basis difference was allocated to finite-lived intangible assets, indefinite-lived intangible assets, equity-method goodwill and related deferred taxes. The finite-lived intangible assets are being amortized over a period ranging from 8 to 15 years.

During the years ended December 31, 2021 and 2020, the carrying value of the investment was reduced by our share of BeiGene's net losses of $265 million and $229 million, respectively, and amortization of the basis difference of $172 million and $109 million, respectively. During the years ended December 31, 2021 and 2020, we increased the carrying value by $50 million and $569 million, respectively, as a result of our purchase of additional shares of BeiGene. In addition, during the years ended December 31, 2021 and 2020, the carrying value increased by $265 million and $34 million, respectively, from the impact of other BeiGene ownership transactions.

As of December 31, 2021 and 2020, our ownership interest in BeiGene was approximately 18.4% and 20.5%, respectively. As of December 31, 2021 and 2020, the carrying value of our investment in BeiGene was $2.8 billion and $2.9 billion, respectively. As of December 31, 2021 and 2020, the fair value of our investment in BeiGene was $5.1 billion and $4.9 billion, respectively. We believe that as of December 31, 2021, the carrying value of our equity investment in BeiGene is fully recoverable. For information on a collaboration agreement we entered into with BeiGene in connection with this investment, see Note 8, Collaborations.

Neumora Therapeutics, Inc.

On September 30, 2021, we acquired an approximately 25.9% ownership interest in Neumora, a privately held company, for $257 million, which is included in Other noncurrent assets in the Consolidated Balance Sheets, in exchange for a $100 million cash payment and $157 million in noncash consideration primarily related to future services. Although our equity investment provides us with the ability to exercise significant influence over Neumora, we have elected the fair value option to account for our equity investment. Under the fair value option, changes in the fair value of the investment are recognized through earnings each reporting period. We believe the fair value option best reflects the economics of the underlying transaction. As of December 31, 2021, our ownership interest in Neumora remained at approximately 25.9%, and the fair value of our investment was $220 million. Accordingly, during the fourth quarter of 2021, we recognized a loss of $37 million for the reduction in the fair value in Other income, net, in the Consolidated Statements of Income. For information on determination of fair values, see Note 17, Fair value measurement.

Limited partnerships

We held limited partnership investments of $573 million and $496 million as of December 31, 2021 and 2020, respectively, which are included in Other noncurrent assets in the Consolidated Balance Sheets. These investments, which are 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 December 31, 2021, unfunded additional commitments to be made for these investments during the next several years were $185 million. For the years ended December 31, 2021, 2020 and 2019, net gains recognized from our limited partnership investments were $143 million, $241 million and $27 million, respectively.

10. Inventories

Inventories consisted of the following (in millions):

	December 31,	
	2021	2020
Raw materials	$ 647	$ 486
Work in process	2,367	2,437
Finished goods	1,072	970
Total inventories	$ 4,086	$ 3,893

11. Property, plant and equipment

Property, plant and equipment consisted of the following (dollar amounts in millions):

	Useful life (in years)	December 31, 2021	December 31, 2020
Land	—	$ 279	$ 259
Buildings and improvements	10-40	4,028	3,857
Manufacturing equipment	8-12	3,080	2,865
Laboratory equipment	8-12	1,193	1,257
Fixed equipment	12	2,402	2,406
Capitalized software	3-5	1,151	1,216
Other	5-10	862	1,091
Construction in progress	—	987	915
Property, plant and equipment, gross		13,982	13,866
Less accumulated depreciation and amortization		(8,798)	(8,977)
Property, plant and equipment, net		$ 5,184	$ 4,889

During the years ended December 31, 2021, 2020 and 2019, we recognized depreciation and amortization expense associated with our property, plant and equipment of $644 million, $640 million and $635 million, respectively.

Geographic information

Certain geographic information with respect to property, plant and equipment, net (long-lived assets), was as follows (in millions):

	December 31, 2021	December 31, 2020
United States	$ 2,801	$ 2,473
Puerto Rico	1,311	1,331
ROW	1,072	1,085
Total property, plant and equipment, net	$ 5,184	$ 4,889

12. Goodwill and other intangible assets

Goodwill

The changes in the carrying amounts of goodwill were as follows (in millions):

	December 31, 2021	December 31, 2020
Beginning balance	$ 14,689	$ 14,703
Addition from acquisitions	251	—
Currency translation adjustments	(50)	(14)
Ending balance	$ 14,890	$ 14,689

Other intangible assets

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

	December 31,					
	2021			2020		
	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	$ 25,561	$ (12,769)	$ 12,792	$ 25,591	$ (10,564)	$ 15,027
Licensing rights	3,807	(2,973)	834	3,743	(2,791)	952
Marketing-related rights	1,354	(1,112)	242	1,367	(1,041)	326
R&D technology rights	1,377	(1,133)	244	1,317	(1,065)	252
Total finite-lived intangible assets	32,099	(17,987)	14,112	32,018	(15,461)	16,557
Indefinite-lived intangible assets:						
IPR&D	1,070	—	1,070	30	—	30
Total other intangible assets	$ 33,169	$ (17,987)	$ 15,182	$ 32,048	$ (15,461)	$ 16,587

Developed-product-technology rights consists of rights related to marketed products acquired in acquisitions. Licensing rights consists primarily of contractual rights acquired in acquisitions to receive future milestone, royalty and profit-sharing payments; capitalized payments to third parties for milestones related to regulatory approvals to commercialize products; and up-front payments associated with royalty obligations for marketed products. Marketing-related rights consists primarily 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. All IPR&D projects have major risks and uncertainties associated with the timely and successful completion of the development and commercialization of product candidates, including our ability to confirm safety and efficacy based on data from clinical trials, our ability to obtain necessary regulatory approvals and our ability to successfully complete these tasks within budgeted costs. We are not permitted to market a human therapeutic without obtaining regulatory approvals, and such approvals require the completion of clinical trials that demonstrate that a product candidate is safe and effective. In addition, the availability and extent of coverage and reimbursement from third-party payers, including government healthcare programs and private insurance plans as well as competitive product launches, affect the revenues a product can generate. Consequently, the eventual realized values, if any, of acquired IPR&D projects may vary from their estimated fair values. 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 year ended December 31, 2021, we acquired certain finite-lived and indefinite-lived intangible assets as a result of the Teneobio acquisition, including IPR&D of $1.1 billion, R&D technology rights of $94 million and licensing rights of $41 million. See Note 2, Acquisitions.

During the years ended December 31, 2021, 2020 and 2019, we recognized amortization associated with our finite-lived intangible assets of $2.6 billion, $2.8 billion and $1.4 billion, respectively. Amortization of intangible assets is included primarily in Cost of sales in the Consolidated Statements of Income. The total estimated amortization for our finite-lived intangible assets for the years ending December 31, 2022, 2023, 2024, 2025 and 2026, are $2.5 billion, $2.5 billion, $2.4 billion, $2.2 billion and $1.8 billion, respectively.

13. Leases

We lease certain facilities and equipment related primarily to administrative, R&D and sales and marketing activities. Leases with terms of 12 months or less are expensed on a straight-line basis over the term and are not recorded in the Consolidated Balance Sheets.

Most leases include one or more options to renew, with renewal terms that may extend the lease term up to seven years. The exercise of lease renewal options is at our sole discretion. In addition, some of our lease agreements include rental payments adjusted periodically for inflation. Our lease agreements neither contain residual value guarantees nor impose significant restrictions or covenants. We sublease certain real estate to third parties. Our sublease portfolio consists of operating leases from former R&D and administrative space.

The following table summarizes information related to our leases, all of which are classified as operating, included in our Consolidated Balance Sheets (in millions):

	December 31,	
Consolidated Balance Sheets locations	**2021**	**2020**
Assets:		
Other noncurrent assets	$ 566	$ 408
Liabilities:		
Accrued liabilities	$ 145	$ 153
Other noncurrent liabilities	525	306
Total lease liabilities	$ 670	$ 459

The components of net lease costs were as follows (in millions):

	Years ended December 31,		
Lease costs	**2021**	**2020**	**2019**
Operating[1]	$ 237	$ 223	$ 204
Sublease income	(38)	(34)	(33)
Total net lease costs	$ 199	$ 189	$ 171

[1] Includes short-term leases and variable lease costs, which were not material for the years ended December 31, 2021, 2020 and 2019.

Maturities of lease liabilities as of December 31, 2021, were as follows (in millions):

Maturity dates	**Amounts**
2022	$ 148
2023	148
2024	75
2025	49
2026	44
Thereafter	289
Total lease payments[1]	753
Less imputed interest	(83)
Present value of lease liabilities	$ 670

[1] Includes future rental commitments for abandoned leases of $138 million. We expect to receive total future rental income of $108 million related to noncancelable subleases for abandoned facilities.

The weighted-average remaining lease terms and weighted-average discount rates were as follows:

	December 31,	
	2021	2020
Weighted-average remaining lease term (in years)	8.3	3.7
Weighted-average discount rate	2.5 %	3.1 %

Cash and noncash information related to our leases was as follows (in millions):

	Years ended December 31,		
	2021	2020	2019
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows for operating leases	$ 190	$ 177	$ 148
ROU assets obtained in exchange for lease obligations:			
Operating leases	$ 340	$ 101	$ 163

As of December 31, 2021, we have entered into leases that have not yet commenced, with total undiscounted future lease payments of $35 million. These leases will commence in 2022 with lease terms from 4 to 6 years.

14. Other current assets and accrued liabilities

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

	December 31,	
	2021	2020
Prepaid expenses	$ 1,223	$ 1,156
Corporate partner receivables	780	583
Tax receivables	164	216
Other	200	124
Total other current assets	$ 2,367	$ 2,079

Accrued liabilities consisted of the following (in millions):

	December 31,	
	2021	2020
Sales deductions	$ 5,174	$ 4,801
Dividends payable	1,083	1,018
Employee compensation and benefits	1,081	1,098
Income taxes payable	701	828
Sales returns reserve	542	474
Other	2,150	1,922
Total accrued liabilities	$ 10,731	$ 10,141

15. Financing arrangements

Our borrowings consisted of the following (in millions):

	December 31,	
	2021	2020
1.25% €1,250 million notes due 2022 (1.25% 2022 euro Notes)	—	1,527
2.70% notes due 2022 (2.70% 2022 Notes)	—	500
2.65% notes due 2022 (2.65% 2022 Notes)	—	1,500
3.625% notes due 2022 (3.625% 2022 Notes)	—	750
0.41% CHF700 million bonds due 2023 (0.41% 2023 Swiss franc Bonds)	767	791
2.25% notes due 2023 (2.25% 2023 Notes)	750	750
3.625% notes due 2024 (3.625% 2024 Notes)	1,400	1,400
1.90% notes due 2025 (1.90% 2025 Notes)	500	500
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)	853	916
2.60% notes due 2026 (2.60% 2026 Notes)	1,250	1,250
5.50% £475 million notes due 2026 (5.50% 2026 pound sterling Notes)	643	649
2.20% notes due 2027 (2.20% 2027 Notes)	1,750	1,750
3.20% notes due 2027 (3.20% 2027 Notes)	1,000	1,000
1.65% notes due in 2028 (1.65% 2028 Notes)	1,250	—
4.00% £700 million notes due 2029 (4.00% 2029 pound sterling Notes)	947	957
2.45% notes due 2030 (2.45% 2030 Notes)	1,250	1,250
2.30% notes due 2031 (2.30% 2031 Notes)	1,250	1,250
2.00% notes due 2032 (2.00% 2032 Notes)	1,250	—
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)	2,000	2,000
5.75% notes due 2040 (5.75% 2040 Notes)	373	373
2.80% notes due 2041 (2.80% 2041 Notes)	1,150	—
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
5.375% notes due 2043 (5.375% 2043 Notes)	185	185
4.40% notes due 2045 (4.40% 2045 Notes)	2,250	2,250
4.563% notes due 2048 (4.563% 2048 Notes)	1,415	1,415
3.375% notes due 2050 (3.375% 2050 Notes)	2,250	2,250
4.663% notes due 2051 (4.663% 2051 Notes)	3,541	3,541
3.00% notes due 2052 (3.00% 2052 Notes)	1,350	—
2.77% notes due 2053 (2.77% 2053 Notes)	940	940
Other notes due 2097	100	100
Unamortized bond discounts, premiums and issuance costs, net	(1,213)	(1,188)
Fair value adjustments	284	566
Other	15	5
Total carrying value of debt	33,309	32,986
Less current portion	(87)	(91)
Total long-term debt	$ 33,222	$ 32,895

There are no material differences between the effective interest rates and the 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.

Under the terms of all of our outstanding notes, except our Other notes due 2097, in the event of a change-in-control triggering event we may be required to purchase all or a portion of these debt securities at prices equal to 101% of the principal amounts of the notes plus accrued and unpaid interest. In addition, all of our outstanding notes—except our 0.41% 2023 Swiss franc Bonds and Other notes due 2097—may be redeemed at any time at our option—in whole or in part—at the principal amounts of the notes being redeemed plus accrued and unpaid interest and make-whole amounts, which are defined by the terms of the notes. Certain of the redeemable notes do not require the payment of make-whole amounts if redeemed during a specified period of time immediately prior to the maturity of the notes. Such time periods range from one month to six months prior to maturity.

Debt issuances

During the years ended December 31, 2021 and 2020, we issued debt securities in the following offerings:

- In 2021, we issued $5.0 billion of debt consisting of $1.25 billion of the 1.65% 2028 Notes, $1.25 billion of the 2.00% 2032 Notes, $1.15 billion of the 2.80% 2041 Notes and $1.35 billion of the 3.00% 2052 Notes.
- In 2020, we issued $9.0 billion of debt consisting of $500 million of the 1.90% 2025 Notes, $1.75 billion of the 2.20% 2027 Notes, $1.25 billion of the 2.45% 2030 Notes, $1.25 billion of the 2.30% 2031 Notes, $2.0 billion of the 3.15% 2040 Notes and $2.25 billion of the 3.375% 2050 Notes.

We did not issue any debt or debt securities during the year ended December 31, 2019.

Debt repayments/redemptions

We made debt repayments/redemptions during the years ended December 31, 2021, 2020 and 2019, as follows:

- In 2021, we redeemed $4.2 billion of debt, including the €1.25 billion aggregate principal amount ($1.4 billion upon settlement of the related cross-currency swap) of the 1.25% 2022 euro Notes, the $500 million aggregate principal amount of the 2.70% 2022 Notes, the $1.5 billion aggregate principal amount of the 2.65% 2022 Notes and the $750 million aggregate principal amount of the 3.625% 2022 Notes. In connection with the redemption of these notes, we paid a total of $24 million in make-whole amounts plus associated accrued and unpaid interest, all of which was recognized in Interest expense, net, in the Consolidated Statements of Income.
- In 2020, we repaid/redeemed $6.5 billion of debt, including the repayment at maturity of the $300 million aggregate principal amount of the 4.50% 2020 Notes, the $750 million aggregate principal amount of the 2.125% 2020 Notes, the $300 million Floating Rate Notes due 2020 and the $700 million aggregate principal amount of the 2.20% 2020 Notes. In connection with the redemption of the $900 million aggregate principal amount of the 3.45% 2020 Notes, the $1.0 billion aggregate principal balance of the 4.10% 2021 Notes, the $750 million aggregate principal balance of the 1.85% 2021 Notes and the $1.75 billion aggregate principal balance of the 3.875% 2021 Notes, we paid a total of $96 million in make-whole amounts plus associated accrued and unpaid interest, all of which was recognized in Interest expense, net, in the Consolidated Statements of Income.
- In 2019, we repaid $4.5 billion of debt, including the $1.4 billion aggregate principal amount of the 2.20% 2019 Notes, the $1.0 billion aggregate principal amount of the 5.70% 2019 Notes, the €675 million aggregate principal amount ($864 million upon settlement of the related cross-currency swap) of the 2.125% 2019 euro Notes, the $700 million aggregate principal amount of the 1.90% 2019 Notes and the $550 million Floating Rate Notes due 2019.

Interest rate swaps

To achieve a desired mix of fixed-rate and floating-rate debt, we entered into interest rate swap contracts that effectively converted fixed-rate interest coupons for certain of our debt issuances to floating LIBOR-based coupons over the lives of the respective notes. These interest rate swap contracts qualified and are designated as fair value hedges.

During the year ended December 31, 2021, we entered into interest rate swap contracts with an aggregate notional amount of $1.0 billion with respect to the 2.45% 2030 Notes and an aggregate notional amount of $500 million with respect to the 2.30% 2031 Notes. In connection with the redemption of the 3.625% 2022 Notes, discussed above, associated interest rate swap contracts with an aggregate notional amount of $750 million were terminated.

In connection with the redemption of certain of the notes during the year ended December 31, 2020, discussed above, associated interest rate swap contracts with an aggregate notional value of $3.65 billion were terminated. In addition, because of historically low interest rates, during the year ended December 31, 2020, we terminated interest rate swaps with an aggregate notional amount of $5.2 billion that hedged the 3.625% 2024 Notes, the 2.60% 2026 Notes, the 4.663% 2051 Notes and portions of the 3.625% 2022 Notes and the 3.125% 2025 Notes, which resulted in the receipt of $576 million of cash and reduced counterparty credit risk. Immediately following the terminations of these contracts, we entered into new interest rate swap agreements at then-current interest rates on the same $5.2 billion principal amount of notes. See Note 18, Derivative instruments.

The effective interest rates on notes for which we have entered into interest rate swap contracts and the related notional amounts of these contracts were as follows (dollar amounts in millions):

	December 31, 2021		December 31, 2020	
Notes	**Notional amounts**	**Effective interest rates**	**Notional amounts**	**Effective interest rates**
3.625% 2022 Notes	$ —	N/A	$ 750	LIBOR + 2.7%
3.625% 2024 Notes	1,400	LIBOR + 3.2%	1,400	LIBOR + 3.2%
3.125% 2025 Notes	1,000	LIBOR + 1.8%	1,000	LIBOR + 1.8%
2.60% 2026 Notes	1,250	LIBOR + 1.8%	1,250	LIBOR + 1.8%
2.45% 2030 Notes	1,000	LIBOR + 1.0%	—	N/A
2.30% 2031 Notes	500	LIBOR + 0.8%	—	N/A
4.663% 2051 Notes	1,500	LIBOR +4.1%	1,500	LIBOR + 4.1%
Total notional amounts	$ 6,650		$ 5,900	

N/A = not applicable

Debt exchange

In 2020, we completed a private offering to exchange portions of certain outstanding senior notes due 2037 through 2043 (collectively, Old Notes), listed below, for the $940 million principal amount of the newly issued 2.77% 2053 Notes (the Exchange Offer).

The following principal amounts of each series of Old Notes were validly tendered and subsequently canceled in connection with the Exchange Offer (in millions):

	Principal amount exchanged
6.375% 2037 Notes	$ 74
6.90% 2038 Notes	$ 37
6.40% 2039 Notes	$ 133
5.75% 2040 Notes	$ 39
5.15% 2041 Notes	$ 245
5.65% 2042 Notes	$ 72
5.375% 2043 Notes	$ 76

The 2.77% 2053 Notes bear interest at a lower fixed coupon rate while requiring higher principal repayment at a later maturity date as compared to those of the Old Notes that were exchanged. There were no other significant changes to the terms between the Old Notes and the 2.77% 2053 Notes. In connection with the Exchange Offer, $85 million was paid to holders of the Old Notes (the cash consideration).

The Exchange Offer was accounted for as a debt modification, and accordingly, deferred financing costs and discounts associated with the Old Notes, the cash consideration and the $264 million discount associated with the 2.77% 2053 Notes are being accreted over the term of these newly issued notes and recorded as Interest expense, net, in the Consolidated Statements of Income.

Cross-currency swaps

To hedge our exposure to foreign currency exchange rate risk associated with certain of our long-term notes denominated in foreign currencies, we entered into cross-currency swap contracts. The terms of these contracts effectively convert the interest payments and principal repayments on our 0.41% 2023 Swiss franc Bonds, 2.00% 2026 euro Notes, 5.50% 2026 pound sterling Notes and 4.00% 2029 pound sterling Notes from euros, pounds sterling and Swiss francs to U.S. dollars. These cross-currency swap contracts have been designated as cash flow hedges. For information regarding the terms of these contracts, see Note 18, Derivative instruments.

In connection with the redemption of the 1.25% 2022 euro Notes, discussed above, associated cross-currency swap contracts with an aggregate notional amount of €1.25 billion were terminated.

Shelf registration statement and other facilities

As of December 31, 2021, we have a commercial paper program that allows us to issue up to $2.5 billion of unsecured commercial paper to fund our working-capital needs. As of December 31, 2021 and 2020, we had no amounts outstanding under our commercial paper program.

In 2019, we amended and restated our $2.5 billion syndicated, unsecured, revolving credit agreement, which is available for general corporate purposes or as a liquidity backstop to our commercial paper program. The commitments under the revolving credit agreement may be increased by up to $750 million with the agreement of the banks. Each bank that is a party to the agreement has an initial commitment term of five years. This term may be extended for up to two additional one-year periods with the agreement of the banks. Annual commitment fees for this agreement are 0.09% of the unused portion of the facility based on our current credit rating. Generally, we would be charged interest for any amounts borrowed under this facility, based on our current credit rating, at (i) LIBOR plus 1% or (ii) the highest of (A) the syndication agent bank base commercial lending rate, (B) the overnight federal funds rate plus 0.50% or (C) one-month LIBOR plus 1%. The agreement contains provisions relating to the determination of successor rates to address the possible phase-out or unavailability of designated reference rates. As of December 31, 2021 and 2020, no amounts were outstanding under this facility.

In February 2020, we filed a shelf registration statement with the SEC that allows us to issue unspecified amounts of debt securities; common stock; preferred stock; warrants to purchase debt securities, common stock, preferred stock or depository shares; rights to purchase common stock or preferred stock; securities purchase contracts; securities purchase units; and depository shares. Under this shelf registration statement, all of the securities available for issuance may be offered from time to time with terms to be determined at the time of issuance. This shelf registration statement expires in February 2023.

Certain of our financing arrangements contain nonfinancial covenants. In addition, our revolving credit agreement includes a financial covenant, which 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 EBITDA) to (ii) Consolidated Interest Expense, each as defined and described in the credit agreement. We were in compliance with all applicable covenants under these arrangements as of December 31, 2021.

Contractual maturities of debt obligations

The aggregate contractual maturities of all borrowings due subsequent to December 31, 2021, are as follows (in millions):

Maturity dates	Amounts
2022	$ —
2023	1,517
2024	1,400
2025	1,500
2026	2,746
Thereafter	27,075
Total	$ 34,238

Interest costs

Interest costs are expensed as incurred except to the extent such interest is related to construction in progress, in which case interest is capitalized. Interest costs capitalized for the years ended December 31, 2021, 2020 and 2019, were not material. Interest paid, including the ongoing impact of interest rate and cross-currency swap contracts, during the years ended December 31, 2021, 2020 and 2019, were $1.2 billion, $1.2 billion and $1.3 billion, respectively.

16. Stockholders' equity

Stock repurchase program

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

	Years ended December 31,					
	2021		2020		2019	
	Shares	Dollars	Shares	Dollars	Shares*	Dollars
First quarter	3.7	$ 865	4.3	$ 933	15.9	$ 3,031
Second quarter	6.5	1,592	2.6	591	13.1	2,349
Third quarter	4.6	1,069	3.0	752	6.2	1,170
Fourth quarter	6.9	1,461	5.3	1,221	5.1	1,090
Total stock repurchases	21.7	$ 4,987	15.2	$ 3,497	40.2	$ 7,640

* Total shares do not add due to rounding.

In March 2021, October 2021 and December 2021, our Board of Directors increased the amount authorized under our stock repurchase program by an additional $3.4 billion, $4.5 billion and $5.0 billion, respectively. As of December 31, 2021, $10.9 billion remained available under our stock repurchase program.

Dividends

Our Board of Directors declared quarterly dividends per share of $1.76, $1.60 and $1.45, which were paid in each of the four quarters of 2021, 2020 and 2019, respectively.

Historically, we have declared dividends in December of each year, which were paid in the first quarter of the following fiscal year and in March, July and October, which were paid in the second, third and fourth quarters, respectively, of the same fiscal year. Additionally, on December 3, 2021, the Board of Directors declared a quarterly cash dividend of $1.94 per share of common stock, which will be paid on March 8, 2022, to all stockholders of record as of the close of business on February 15, 2022.

Accumulated other comprehensive loss

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

	Foreign currency translation	Cash flow hedges	Available-for-sale securities	Other	AOCI
Balance as of December 31, 2018	$ (670)	$ 241	$ (338)	$ (2)	$ (769)
Foreign currency translation adjustments	(48)	—	—	—	(48)
Unrealized gains	—	127	424	—	551
Reclassification adjustments to income	—	(211)	(56)	—	(267)
Other losses	—	—	—	(5)	(5)
Income taxes	—	18	(8)	—	10
Balance as of December 31, 2019	(718)	175	22	(7)	(528)
Foreign currency translation adjustments	9	—	—	—	9
Unrealized (losses) gains	—	(61)	6	—	(55)
Reclassification adjustments to income	—	(501)	(33)	—	(534)
Other losses	—	—	—	(7)	(7)
Income taxes	—	124	6	—	130
Balance as of December 31, 2020	(709)	(263)	1	(14)	(985)
Foreign currency translation adjustments	(135)	—	—	—	(135)
Unrealized gains (losses)	—	159	(1)	—	158
Reclassification adjustments to income	—	253	—	—	253
Other gains	—	—	—	1	1
Income taxes	—	(88)	—	—	(88)
Balance as of December 31, 2021	$ (844)	$ 61	$ —	$ (13)	$ (796)

With respect to the table above, income tax expenses or benefits for unrealized gains and losses and the related reclassification adjustments to income for cash flow hedges were a $33 million expense and a $55 million expense in 2021, a $14 million benefit and a $110 million benefit in 2020 and a $28 million expense and a $46 million benefit in 2019, respectively. Income tax expenses or benefits for unrealized gains and losses and the related reclassification adjustments to income for available-for-sale securities were a $1 million expense and a $7 million benefit in 2020 and a $22 million expense and a $14 million benefit in 2019, respectively.

Reclassifications out of AOCI and into earnings were as follows (in millions):

	Years ended December 31,			
Components of AOCI	2021	2020	2019	Consolidated Statements of Income locations
Cash flow hedges:				
Foreign currency contract (losses) gains	$ (8)	$ 178	$ 101	Product sales
Cross-currency swap contract (losses) gains	(245)	323	110	Other income, net
	(253)	501	211	Income before income taxes
	55	(110)	(46)	Provision for income taxes
	$ (198)	$ 391	$ 165	Net income
Available-for-sale securities:				
Net realized gains	$ —	$ 33	$ 56	Other income, net
	—	(7)	(14)	Provision for income taxes
	$ —	$ 26	$ 42	Net income

Other

In addition to common stock, our authorized capital includes 5 million shares of preferred stock, $0.0001 par value. As of December 31, 2021 and 2020, no shares of preferred stock were issued or outstanding.

17. Fair value measurement

To estimate the fair value of our financial assets and liabilities, we use valuation approaches within a hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing an asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing an asset or liability and are developed based on the best information available in the circumstances. The fair value hierarchy is divided into three levels based on the source 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 the various 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, the 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 December 31, 2021, 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 notes	$ 47	$ —	$ —	$ 47
U.S. Treasury bills	1,400	—	—	1,400
Money market mutual funds	5,856	—	—	5,856
Other short-term interest-bearing securities	—	1	—	1
Equity securities	611	—	220	831
Derivatives:				
Foreign currency contracts	—	183	—	183
Cross-currency swap contracts	—	66	—	66
Interest rate swap contracts	—	16	—	16
Total assets	$ 7,914	$ 266	$ 220	$ 8,400
Liabilities:				
Derivatives:				
Foreign currency contracts	$ —	$ 39	$ —	$ 39
Cross-currency swap contracts	—	339	—	339
Interest rate swap contracts	—	156	—	156
Contingent consideration obligations	—	—	342	342
Total liabilities	$ —	$ 534	$ 342	$ 876

Fair value measurement as of December 31, 2020, 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 notes	$ 130	$ —	$ —	$ 130
U.S. Treasury bills	4,948	—	—	4,948
Money market mutual funds	4,765	—	—	4,765
Other short-term interest-bearing securities	—	2	—	2
Equity securities	477	—	—	477
Derivatives:				
Foreign currency contracts	—	28	—	28
Cross-currency swap contracts	—	255	—	255
Interest rate swap contracts	—	66	—	66
Total assets	$ 10,320	$ 351	$ —	$ 10,671
Liabilities:				
Derivatives:				
Foreign currency contracts	$ —	$ 237	$ —	$ 237
Cross-currency swap contracts	—	318	—	318
Interest rate swap contracts	—	15	—	15
Contingent consideration obligations	—	—	33	33
Total liabilities	$ —	$ 570	$ 33	$ 603

Interest-bearing and equity securities

The fair values of our U.S. Treasury securities, money market mutual funds and equity investments in publicly traded securities are based on quoted market prices in active markets, with no valuation adjustment. The fair values of equity securities without readily determinable fair values are initially valued at the transaction price and subsequently valued based on a combination of market performance and publicly available information for similar companies that have actively traded equity securities.

Derivatives

All of our foreign currency forward and option derivative contracts have maturities of three years or less, and all 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 include foreign currency exchange rates, LIBOR, swap rates and obligor credit default swap rates. In addition, inputs for our foreign currency option contracts include implied volatility measures. These inputs, when applicable, are at commonly quoted intervals. See Note 18, Derivative instruments.

Our cross-currency 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 include foreign currency exchange rates, LIBOR, swap rates, obligor credit default swap rates and cross-currency basis swap spreads. See Note 18, Derivative instruments.

Our 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 using an income-based industry-standard valuation model for which all significant inputs are observable either directly or indirectly. These inputs include LIBOR, swap rates and obligor credit default swap rates. See Note 18, 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 Consolidated Statements of Income.

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

	Years ended December 31,		
	2021	2020	2019
Beginning balance	$ 33	$ 61	$ 72
Additions	309	—	—
Payments	(7)	(6)	—
Net changes in valuations	7	(22)	(11)
Ending balance	$ 342	$ 33	$ 61

As a result of our acquisition of Teneobio in 2021, we are obligated to pay its former shareholders up to $1.6 billion upon achieving separate development and regulatory milestones with regard to various R&D programs. See Note 2, Acquisitions.

As a result of our acquisition of K-A in 2018, we are obligated to make single-digit royalty payments to Kirin contingent upon sales of brodalumab.

As a result of our acquisition of BioVex Group Inc. in 2011, we were obligated to pay its former shareholders upon achieving separate sales-related milestones with regard to IMLYGIC if certain sales thresholds were met. During the year ended December 31, 2020, we determined that the likelihood of achieving these milestones was no longer probable, and accordingly, the obligations were written off.

Summary of the fair values of other financial instruments

Cash equivalents

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

Borrowings

We estimated the fair values of our borrowings by using Level 2 inputs. As of December 31, 2021 and 2020, the aggregate fair values of our borrowings were $37.9 billion and $39.4 billion, respectively, and the carrying values were $33.3 billion and $33.0 billion, respectively.

Investment in BeiGene

We estimated the fair value of our investment in BeiGene by using Level 1 inputs. As of December 31, 2021 and 2020, the fair values were $5.1 billion and $4.9 billion, and the carrying values were $2.8 billion and $2.9 billion, respectively.

During the years ended December 31, 2021 and 2020, 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.

18. 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 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. Increases and decreases in the cash flows associated with our international product sales due to movements in foreign currency exchange rates are partially offset by corresponding increases and decreases in the cash flows from our international operating expenses resulting from these foreign currency exchange rate movements. To further reduce our exposure to foreign currency exchange rate fluctuations with regard to our international product sales, 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 December 31, 2021, 2020 and 2019, we had outstanding foreign currency forward contracts with aggregate notional amounts of $5.7 billion, $5.1 billion and $5.0 billion, respectively. We have designated these foreign currency forward contracts, which are primarily euro based, as cash flow hedges. Accordingly, we report unrealized gains and losses on these contracts in AOCI in the Consolidated Balance Sheets, and we reclassify them to Product sales in the Consolidated Statements of Income in the same periods during which the hedged transactions affect earnings.

To hedge our exposure to foreign currency exchange rate risk associated with certain of our long-term debt denominated in foreign currencies, we enter into cross-currency swap contracts. Under the terms of such contracts, we paid euros, pounds sterling and Swiss francs and received U.S. dollars for the notional amounts at inception of the contracts; and based on these notional amounts, we exchange interest payments at fixed rates over the lives of the contracts by paying U.S. dollars and receiving euros, pounds sterling and Swiss francs. In addition, we will pay U.S. dollars to and receive euros, pounds sterling and Swiss francs from the counterparties at the maturities of the contracts for these same notional amounts. The terms of these contracts correspond to the related hedged debt, thereby effectively converting the interest payments and principal repayment on the debt from euros, pounds sterling and Swiss francs to U.S. dollars. We have designated these cross-currency swap contracts as cash flow hedges. Accordingly, the unrealized gains and losses on these contracts are reported in AOCI in the Consolidated Balance Sheets and reclassified to Other income, net, in the 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 December 31, 2021, were as follows (notional amounts in millions):

	Foreign currency			U.S. dollars		
Hedged notes	**Notional amounts**		**Interest rates**	**Notional amounts**		**Interest rates**
0.41% 2023 Swiss franc Bonds	CHF	700	0.4 %	$	704	3.4 %
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	4.5 %

During the year ended December 31, 2021, our 1.25% euro Notes were redeemed, and the related cross-currency swaps were settled, resulting in an immaterial loss. During the year ended December 31, 2019, our 2.125% 2019 euro Notes matured, and the related cross-currency swaps were settled.

In connection with the anticipated issuance of long-term fixed-rate debt, we occasionally enter into forward interest rate contracts to hedge 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 Consolidated Balance Sheets and are amortized into Interest expense, net, in the Consolidated Statements of Income over the lives of the associated debt issuances. Amounts recognized in connection with forward interest rate swaps during the year ended December 31, 2021, and amounts expected to be recognized during the subsequent 12 months are not material.

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

Derivatives in cash flow hedging relationships	Years ended December 31, 2021	2020	2019
Foreign currency contracts	$ 373	$ (251)	$ 148
Cross-currency swap contracts	(214)	190	(21)
Total unrealized gains (losses)	$ 159	$ (61)	$ 127

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 LIBOR-based coupons over the terms of the related hedge contracts. As of December 31, 2021 and 2020, we had interest rate swap contracts with aggregate notional amounts of $6.7 billion and $5.9 billion, respectively, that hedge certain portions of our long-term debt issuances. See Note 15, Financing arrangements, for information on our interest rate swaps.

During the year ended December 31, 2021, we entered into interest rate swap contracts with an aggregate notional amount of $1.5 billion. Interest rate swaps with an aggregate notional value of $750 million were terminated in connection with the redemption of certain of our notes. The resulting gain on these terminations was immaterial.

During the year ended December 31, 2020, interest rate swaps with an aggregate notional value of $3.7 billion were terminated in connection with the redemption of certain of our notes. The terminations of these interest rate swaps resulted in a gain of $40 million, recognized in Interest expense, net, in the Consolidated Statements of Income. Additionally, we terminated $5.2 billion aggregate notional amount of interest rate swaps, which resulted in receipt of $576 million from the counterparties and which was included in Net cash provided by operating activities in the Consolidated Statements of Cash Flows for the year ended December 31, 2020. This amount is being recognized as a reduction in Interest expense, net, in the Consolidated Statements of Income over the remaining life of the underlying notes. Immediately following the terminations of these interest rate swap contracts, we entered into new interest rate swap agreements at then-current interest rates on the same $5.2 billion principal amount of notes.

For interest rate swap contracts that qualify for and are designated as fair value hedges, we recognize in Interest expense, net, in the 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 Consolidated Balance Sheets as follows (in millions):

Consolidated Balance Sheets locations	Carrying amounts of hedged liabilities[1] December 31, 2021	Carrying amounts of hedged liabilities[1] December 31, 2020	Cumulative amounts of fair value hedging adjustments related to the carrying amounts of the hedged liabilities[2] December 31, 2021	Cumulative amounts of fair value hedging adjustments related to the carrying amounts of the hedged liabilities[2] December 31, 2020
Current portion of long-term debt	$ 85	$ 89	$ 85	$ 89
Long-term debt	$ 6,729	$ 6,258	$ 199	$ 477

(1) Current portion of long-term debt includes $85 million and $89 million of carrying value with discontinued hedging relationships as of December 31, 2021 and 2020, respectively. Long-term debt includes $440 million and $525 million of carrying value with discontinued hedging relationships as of December 31, 2021 and 2020, respectively.

(2) Current portion of long-term debt includes $85 million and $89 million of hedging adjustments on discontinued hedging relationships as of December 31, 2021 and 2020, respectively. Long-term debt includes $340 million and $425 million of hedging adjustments on discontinued hedging relationships as of December 31, 2021 and 2020, 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):

	Year ended December 31, 2021		
	Product sales	Other income, net	Interest expense, net
Total amounts recorded in income and (expense) line items presented in the Consolidated Statements of Income	$ 24,297	$ 259	$ (1,197)
The effects of cash flow and fair value hedging:			
Losses on cash flow hedging relationships reclassified out of AOCI:			
Foreign currency contracts	$ (8)	$ —	$ —
Cross-currency swap contracts	$ —	$ (245)	$ —
Gains (losses) on fair value hedging relationships—interest rate swap agreements:			
Hedged items[1]	$ —	$ —	$ 281
Derivatives designated as hedging instruments	$ —	$ —	$ (192)

	Year ended December 31, 2020		
	Product sales	Other income, net	Interest expense, net
Total amounts recorded in income and (expense) line items presented in the Consolidated Statements of Income	$ 24,240	$ 256	$ (1,262)
The effects of cash flow and fair value hedging:			
Gains on cash flow hedging relationships reclassified out of AOCI:			
Foreign currency contracts	$ 178	$ —	$ —
Cross-currency swap contracts	$ —	$ 323	$ —
Gains (losses) on fair value hedging relationships—interest rate swap agreements:			
Hedged items[1]	$ —	$ —	$ 315
Derivatives designated as hedging instruments	$ —	$ —	$ (204)

	Year ended December 31, 2019		
	Product sales	Other income, net	Interest expense, net
Total amounts recorded in income and (expense) line items presented in the Consolidated Statements of Income	$ 22,204	$ 753	$ (1,289)
The effects of cash flow and fair value hedging:			
Gains on cash flow hedging relationships reclassified out of AOCI:			
Foreign currency contracts	$ 101	$ —	$ —
Cross-currency swap contracts	$ —	$ 110	$ —
(Losses) gains on fair value hedging relationships—interest rate swap agreements:			
Hedged items[1]	$ —	$ —	$ (349)
Derivatives designated as hedging instruments	$ —	$ —	$ 352

[1] Gains on hedged items do not completely 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 December 31, 2021, we expected to reclassify $19 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 December 31, 2021, 2020 and 2019, the total notional amounts of these foreign currency forward contracts were $680 million, $1.0 billion and $1.2 billion, respectively. Gains and losses recognized in earnings for our derivative instruments not designated as hedging instruments were not material for the years ended December 31, 2021, 2020 and 2019.

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

	Derivative assets		Derivative liabilities	
December 31, 2021	**Consolidated Balance Sheets locations**	**Fair values**	**Consolidated Balance Sheets locations**	**Fair values**
Derivatives designated as hedging instruments:				
Foreign currency contracts	Other current assets/ Other noncurrent assets	$ 183	Accrued liabilities/ Other noncurrent liabilities	$ 39
Cross-currency swap contracts	Other current assets/ Other noncurrent assets	66	Accrued liabilities/ Other noncurrent liabilities	339
Interest rate swap contracts	Other current assets/ Other noncurrent assets	16	Accrued liabilities/ Other noncurrent liabilities	156
Total derivatives designated as hedging instruments		265		534
Total derivatives		$ 265		$ 534

	Derivative assets		Derivative liabilities	
December 31, 2020	**Consolidated Balance Sheets locations**	**Fair values**	**Consolidated Balance Sheets locations**	**Fair values**
Derivatives designated as hedging instruments:				
Foreign currency contracts	Other current assets/ Other noncurrent assets	$ 28	Accrued liabilities/ Other noncurrent liabilities	$ 237
Cross-currency swap contracts	Other current assets/ Other noncurrent assets	255	Accrued liabilities/ Other noncurrent liabilities	318
Interest rate swap contracts	Other current assets/ Other noncurrent assets	66	Accrued liabilities/ Other noncurrent liabilities	15
Total derivatives designated as hedging instruments		349		570
Total derivatives		$ 349		$ 570

Our derivative contracts that were in liability positions as of December 31, 2021, 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 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 financing activities.

19. 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 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.

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 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 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:

ANDA Patent Litigation

Otezla ANDA Patent Litigation

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

Beginning in June 2018, Celgene filed 19 separate lawsuits in the U.S. District Court for the District of New Jersey (the New Jersey District Court) against Alkem Laboratories Ltd. (Alkem); Amneal Pharmaceuticals LLC (Amneal); Annora Pharma Private Ltd. and Hetero USA Inc. (collectively, Hetero); Aurobindo Pharma Ltd. and Aurobindo Pharma USA Inc. (collectively, Aurobindo); Cipla Limited (Cipla Ltd); DRL; Emcure Pharmaceuticals Ltd. and Heritage Pharmaceuticals Inc. (collectively, Emcure); Glenmark Pharmaceuticals Ltd. (Glenmark); Macleods Pharmaceuticals Ltd. (Macleods); Mankind Pharma Ltd. (Mankind); MSN Laboratories Private Limited (MSN); Pharmascience Inc. (Pharmascience); Prinston Pharmaceutical Inc. (Prinston); Sandoz Inc. (Sandoz); Shilpa Medicare Ltd. (Shilpa); Teva Pharmaceuticals USA, Inc. and Actavis LLC (collectively, Actavis); Torrent Pharmaceuticals Ltd. (Torrent); Unichem Laboratories, Ltd. (Unichem); and Zydus Pharmaceuticals (USA) Inc. (Zydus), each for infringement of one or more of the following patents: U.S. Patent Nos. 6,962,940 (the ’940 Patent), 7,208,516 (the ’516 Patent), 7,427,638 (the ’638 Patent), 7,659,302 (the ’302 Patent), 7,893,101 (the ’101 Patent), 8,455,536 (the ’536 Patent), 8,802,717 (the ’717 Patent), 9,018,243 (the ’243 Patent) and 9,872,854 (the ’854 Patent), which are listed in the Orange Book for Otezla. Each of these lawsuits was based on each defendant’s submission of an ANDA seeking FDA approval to market a generic version of Otezla. The New Jersey District Court consolidated these 19 lawsuits for discovery and case management purposes into a single case, *Celgene Corp. v. Sandoz Inc., et al.* Each lawsuit seeks an order of the New Jersey District Court making any FDA approval of the respective defendant’s ANDA effective no earlier than the expiration of the applicable patents.

In August 2018, Celgene filed amended complaints against Alkem, Amneal, Aurobindo, Cipla Ltd, DRL, Glenmark, Pharmascience, Sandoz, Actavis, Unichem and Zydus additionally asserting U.S. Patent No. 9,724,330 (the ’330 Patent), which is listed in the Orange Book for Otezla. Between October 15 and November 27, 2018, Celgene filed amended complaints against Alkem, Amneal, Hetero, Aurobindo, Cipla Ltd, DRL, Emcure, Glenmark, Macleods, Mankind, MSN, Pharmascience, Prinston, Sandoz, Actavis, Torrent, Unichem and Zydus additionally asserting U.S. Patent No. 10,092,541 (the ’541 Patent), which is listed in the Orange Book for Otezla. Between March 1 and April 4, 2019, Celgene filed amended complaints against Hetero, MSN and Emcure for infringement of one or more of the above-listed patents. On October 1, 2019, Celgene filed an amended complaint against Mankind for infringement of the ’940, ’302, ’536, ’243 and ’330 Patents. On October 8, 2019, Celgene filed a separate lawsuit against Zydus in the New Jersey District Court for infringement of U.S. Patent Nos. 8,093,283 (the ’283 Patent) and 8,629,173, which are not listed in the Orange Book for Otezla. On December 19, 2019, the New Jersey District Court consolidated this lawsuit for discovery and case management purposes into the existing consolidated case, *Celgene Corp. v. Sandoz Inc., et al*. Each defendant has filed an answer to the above-listed complaints and amended complaints disputing infringement and/or validity of the patents asserted against it. Along with their answers, each of Alkem, Hetero, Cipla

Ltd, DRL, Emcure, Glenmark, Macleods, Mankind, Pharmascience, Sandoz, Shilpa, Actavis, Torrent, Unichem and Zydus filed declaratory judgment counterclaims asserting that some or all of the patents are not infringed and/or are invalid. In August 2019, based on a joint request by Celgene and Glenmark, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, having made, using, selling, offering to sell, importing, or distributing of Glenmark's apremilast product during the term of the '940, '638, '302, '101, '536, '243, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement.

Following Amgen's acquisition of the patents-in-suit and the new drug application for Otezla, on February 14, 2020, the New Jersey District Court issued an order substituting Amgen for Celgene as plaintiff in the consolidated action and all related actions, terminating Celgene as plaintiff in the consolidated action and all related actions, and amending the case caption in the consolidated action and all related actions to reflect Amgen as the sole plaintiff.

On March 25, 2020, based on a joint request by Amgen and Unichem, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Unichem's apremilast product during the term of the '940, '638, '302, '101, '536, '243, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On April 3, 2020, based on a joint request by Amgen and Hetero, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Hetero's apremilast product during the term of the '940, '516, '638, '302, '101, '536, '717, '243, '330, '854 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On May 28, 2020, based on a joint request by Amgen and Emcure, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Emcure's apremilast product during the term of the '638, '101, '854 and '541 Patents unless authorized pursuant to a confidential settlement agreement. On July 7, 2020, the New Jersey District Court ordered a stipulated dismissal without prejudice of all claims, counterclaims, and affirmative defenses between Amgen and Sandoz with respect to the '717, '516 and '854 Patents, leaving the '940, '302, '536, '243, '330, '638, '101 and '541 Patents asserted by Amgen against Sandoz in the litigation. On August 6, 2020, based on a joint request by Amgen and Mankind, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Mankind's apremilast product during the term of the '940, '302, '536, '243, '330, '638, '101 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On August 14, 2020, based on a joint request by Amgen and Macleods, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Macleods' apremilast product during the term of the '638 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On October 7, 2020, based on a joint request by Amgen and Amneal, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Amneal's apremilast product during the term of the '101, '940, '638, '302, '536, '243, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On December 30, 2020, based on a joint request by Amgen and Shilpa, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Shilpa's apremilast product during the term of the '638, '101 and '854 Patents, unless authorized pursuant to a confidential settlement agreement. On January 26, 2021, based on a joint request by Amgen and Actavis, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Actavis' apremilast product during the term of the '940, '516, '638, '302, '536, '717, '330, '854 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On March 24, 2021, based on a joint request by Amgen and Prinston, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Prinston's apremilast product during the term of the '638 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On April 6, 2021, based on a joint request by Amgen and Aurobindo, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Aurobindo's apremilast product during the term of the '940, '516, '638, '302, '101, '536, '717, '243, '330, '854 and '541 Patents, unless authorized pursuant to a confidential settlement agreement.

On May 5, 2021, based on a joint request by Amgen and Cipla, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Cipla's apremilast product during the term of the '940, '638, '302, '536, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On May 14, 2021, based on a joint request by Amgen and Torrent, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Torrent's apremilast product during the term of the '101, '638, '854 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On May 19, 2021, based on a joint request by Amgen and Alkem, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of Alkem's apremilast product during the term of the '940, '638, '302, '536, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On May 25, 2021, based on a joint request by Amgen and MSN, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of MSN's apremilast product during the term of the '940, '638, '302, '536, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On June 11, 2021, based on a joint request by Amgen and Pharmascience, the New Jersey District Court entered a consent judgment and

injunction prohibiting the making, using, selling, offering to sell, or importing of Pharmascience's apremilast product during the term of the '243, '940, '638, '302, '101, '536, '330 and '541 Patents, unless authorized pursuant to a confidential settlement agreement. On June 17, 2021, based on a joint request by Amgen and DRL, the New Jersey District Court entered a consent judgment and injunction prohibiting the making, using, selling, offering to sell, or importing of DRL's apremilast product during the term of the '638, '101, '536 and '541 Patents, unless authorized pursuant to a confidential settlement agreement.

Trial on the consolidated patent infringement action against Sandoz and Zydus was held at the New Jersey District Court from June 14 to 25, 2021, with closing arguments on July 28, 2021.

On September 28, 2021, consistent with its September 20, 2021 opinion and order, the New Jersey District Court entered final judgment in favor of Amgen and against Zydus with respect to claims 3 and 6 of the '638 Patent, claim 6 of the '536 Patent and claims 2 and 27 of the '283 Patent; and final judgment in favor of Zydus and against Amgen with respect to claims 1 and 15 of the '101 Patent and claims 2, 19 and 21 of the '541 Patent. The final judgment ordered that the effective date of any final approval by the FDA of Zydus's ANDA must be after expiration of the three infringed patents (the '638, '536 and '283 Patents) and any regulatory exclusivity to which Amgen may become entitled. The final judgment also includes an injunction prohibiting Zydus from making, using, offering to sell, or selling in the United States, or importing into the United States, Zydus's generic apremilast products during the term of the three infringed patents. On October 27, 2021, Zydus filed a notice of appeal to the Federal Circuit Court with respect to the '638 Patent. On October 28, 2021, Amgen filed a notice of appeal to the Federal Circuit Court.

On October 12, 2021, the New Jersey District Court also entered final judgment in favor of Amgen and against Sandoz with respect to claims 3 and 6 of the '638 Patent, claim 6 of the '536 Patent and claims 1 and 15 of the '101 Patent; and final judgment in favor of Sandoz and against Amgen with respect to claims 2, 19 and 21 of the '541 Patent. The final judgment ordered that the effective date of any final approval by the FDA of Sandoz's ANDA must be after expiration of the three infringed patents (the '638, '536 and '101 Patents) and any regulatory exclusivity to which Amgen may become entitled. The final judgment also includes an injunction prohibiting Sandoz from making, using, offering to sell, or selling in the United States, or importing into the United States, Sandoz's generic apremilast products during the term of the three infringed patents. On November 9, 2021, Sandoz filed a notice of appeal to the Federal Circuit Court with respect to the '638 and '101 Patents. On November 10, 2021, Amgen filed a notice of appeal to the Federal Circuit Court.

ENBREL Patent Litigation

Immunex Corporation, et al. v. Samsung Bioepis Co., Ltd.

On April 30, 2019, two affiliates of Amgen Inc., Immunex Corporation and Amgen Manufacturing, Limited (collectively, Amgen), along with Hoffmann-La Roche Inc. (Roche), filed a lawsuit in the New Jersey District Court against Samsung Bioepis Co., Ltd. (Bioepis). This lawsuit stems from Bioepis' submission of an application for FDA licensure of an etanercept product as biosimilar to Amgen's ENBREL. Amgen and Roche have asserted infringement of five patents: U.S. Patent Nos. 8,063,182, 8,163,522 (the '522 Patent), 7,915,225, 8,119,605 and 8,722,631. By their complaint, Amgen and Roche seek an injunction to prohibit Bioepis from commercializing its biosimilar etanercept product in the United States prior to the expiry of such patents. On August 5, 2019, Bioepis responded to the complaint, denying infringement and seeking judgment that the patents-in-suit are invalid, unenforceable and/or not infringed. On January 9, 2020 and subject to the terms of a confidential stipulation and court order of January 6, 2020, the New Jersey District Court entered a consent injunction that prohibits Bioepis from making, using, offering to sell, selling or importing into the United States Bioepis' etanercept product. Amgen and Bioepis entered into an agreement with respect to an injunction regarding etanercept as set out in the New Jersey District Court's order of January 6, 2020. On January 15, 2020, the New Jersey District Court entered an order administratively staying the case pursuant to a joint request of Amgen and Bioepis.

On November 2, 2021, Amgen and Bioepis, with the consent of Roche, jointly submitted to the New Jersey District Court a confidential stipulation and a form of final judgment and order of permanent injunction resolving the dispute between the parties and enjoining Bioepis from making, using, offering to sell, or selling within the United States, or importing into the United States, any product containing etanercept until the April 24, 2029 expiry of Roche's '522 Patent. On November 3, 2021, the New Jersey District Court entered final judgment and ordered a permanent injunction against Bioepis in conformity with the parties' submission.

Repatha Patent Litigation

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

In October 2014, Amgen initiated a series of lawsuits that were consolidated by the U.S. District Court for the District of Delaware (Delaware District Court) in December 2014 into a single case against Sanofi, Sanofi-Aventis U.S. LLC and Aventisub LLC, formerly doing business as Aventis Pharmaceuticals Inc. (collectively, Sanofi) and Regeneron Pharmaceuticals, Inc. (Regeneron), addressing seven of our patents: U.S. Patent Nos. 8,563,698; 8,829,165 (the ’165 Patent); 8,859,741 (the ’741 Patent); 8,871,913; 8,871,914; 8,883,983; and 8,889,834. These patents describe and claim monoclonal antibodies to PCSK9. By its complaints, Amgen seeks an injunction to prevent the infringing manufacture, use and sale of Sanofi and Regeneron’s alirocumab, a monoclonal antibody targeting PCSK9. In January 2016, the Delaware District Court granted Amgen’s motion to amend the complaint to add its affiliates, Amgen Manufacturing, Limited and Amgen USA Inc., as plaintiffs and to add the allegation that Sanofi and Regeneron’s infringement of Amgen’s patents is willful.

In February 2016, the Delaware District Court entered a stipulated order finding alirocumab and the drug product containing it, PRALUENT infringe certain of Amgen’s patents, including claims 2, 7, 9, 15, 19 and 29 of the ’165 Patent and claim 7 of the ’741 Patent. In March 2016, the Delaware District Court entered judgment in favor of Amgen following a five-day jury trial and a unanimous jury verdict that these patent claims are all valid. In January 2017, the Delaware District Court denied Sanofi and Regeneron’s post-trial motions seeking a new trial and for judgment as a matter of law, and granted Amgen’s motion for a permanent injunction prohibiting the infringing manufacture, use, sale, offer for sale or import of alirocumab in the United States. Sanofi and Regeneron filed an appeal of the judgment and the permanent injunction to the Federal Circuit Court. In February 2017, following a motion by Sanofi and Regeneron, the Federal Circuit Court entered a stay of the permanent injunction during the pendency of the appeal. In October 2017, the Federal Circuit Court reversed in part the judgment of the Delaware District Court and remanded for a new trial two of the patent validity defenses (lack of written description and enablement of the claimed inventions), and affirmed the Delaware District Court’s judgment of infringement of claims 2, 7, 9, 15, 19 and 29 of the ’165 Patent and claim 7 of the ’741 Patent and the third patent validity defense (finding that the claimed inventions were not obvious to a person of ordinary skill in the field of the patents).

In March 2018, the Federal Circuit Court issued a mandate returning the case to the Delaware District Court for a new trial on two of Sanofi and Regeneron’s challenges to the validity of our patents (lack of written description and enablement of the claimed inventions) and for further consideration of a permanent injunction. In July 2018, Amgen filed a petition for certiorari with the U.S. Supreme Court seeking review of the Federal Circuit Court’s conclusion that the judgment affirming the validity of Amgen’s patents was based, in part, on an erroneous application of the law of written description. On January 7, 2019, the U.S. Supreme Court denied Amgen’s petition for certiorari. On remand, the Delaware District Court scheduled a new trial on Sanofi and Regeneron’s challenges to the validity of our patents based on lack of written description and enablement of the claimed inventions. The Delaware District Court also entered judgment on the pleadings for Sanofi and Regeneron on Amgen’s claim of willful infringement.

On February 25, 2019, a jury of the Delaware District Court again unanimously upheld the validity of claims 19 and 29 of the ’165 Patent and claim 7 of the ’741 Patent. The jury also found that claims 7 and 15 of the ’165 Patent meet the enablement requirement, but are invalid for failure to meet the written description requirement. On March 18, 2019, Sanofi and Regeneron filed post-trial motions seeking to reverse the jury verdict against them or for a new trial, and Amgen filed a motion for a permanent injunction. On August 28, 2019, the Delaware District Court ruled on the post-trial motions, denying Sanofi and Regeneron’s request for a new trial and their request to reverse the jury verdict that the ’165 Patent and the ’741 Patent provide written description support for the claimed inventions. The Delaware District Court also ruled as a matter of law that claims 19 and 29 of the ’165 Patent and claim 7 of the ’741 Patent are invalid for failing to meet the enablement requirement, overturning the jury verdict.

On October 23, 2019, Amgen filed a notice of appeal to the Federal Circuit Court and based on the subsequent hearing, on February 11, 2021 the Federal Circuit Court issued a decision affirming the Delaware District Court’s ruling. Amgen filed a petition for rehearing en banc which was denied on June 21, 2021. On November 18, 2021, Amgen filed a petition for writ of certiorari with the U.S. Supreme Court seeking review of the invalidation of claims 19 and 29 of the ’165 Patent and claim 7 of the ’741 Patent as lacking an enabling disclosure of the invention. On January 11, 2022, the U.S. Supreme Court requested that Sanofi and Regeneron file a response to Amgen’s petition, which is due March 14, 2022.

Patent Disputes in the International Region

We are involved in and expect future involvement in additional disputes regarding our PCSK9 patents in other jurisdictions and regions. This includes matters filed against us and that we have filed in Germany, Spain and Japan.

In February 2016, the European Patent Office (EPO) granted European Patent No. 2,215,124 (EP 2,215,124) to Amgen. This patent describes and claims monoclonal antibodies to PCSK9 and methods of treatment and Sanofi filed an opposition to the patent in the EPO seeking to invalidate it. In November 2016, Sanofi-Aventis Deutschland GmbH, Sanofi-Aventis Groupe S.A. and Sanofi Winthrop Industrie S.A. filed a joint opposition against Amgen's patent, and each of Lilly, Regeneron and Strawman Ltd. also filed oppositions to Amgen's patent. In November 2018, the EPO confirmed the validity of Amgen's EP 2,215,124, which was appealed to the Technical Board of Appeal (TBA). On October 29, 2020, the TBA upheld the validity of certain claims, including claims that protect Repatha, but ruled that broader claims encompassing PRALUENT were invalid. As a result of the TBA's decision, national litigations regarding PRALUENT in Europe are in the process of being resolved. In Germany, Sanofi-Aventis Deutschland GmbH and Regeneron have filed actions seeking damages arising from the provisional enforcement of an injunction against PRALUENT that was lifted after the TBA's October 29, 2020 ruling.

On April 24, 2020, the Supreme Court of Japan declined to hear Sanofi K.K.'s appeals making final the Japanese High Court's decisions that PRALUENT infringes Amgen's valid patent rights in Japan. On June 24, 2020, Amgen filed written answers to the invalidity trials initiated by Regeneron on February 12, 2020 before the Japan Patent Office seeking to invalidate Amgen's Japanese patents that were previously held infringed by PRALUENT and valid over challenges filed by Sanofi K.K. The Japanese Patent Office dismissed Regeneron's invalidity trials and Regeneron has appealed the decisions to the Japanese High Court. Damages proceedings against Sanofi K.K. are ongoing before the Tokyo District Court, where Sanofi K.K. has initiated new validity challenges to Amgen patents in Japan.

NEUPOGEN (filgrastim)/Neulasta Patent Litigation

Amgen Inc., et al. v. Hospira Inc. et al.

On February 11, 2020, Amgen Inc. and its wholly owned subsidiary, Amgen Manufacturing, Limited (collectively, Amgen), filed a lawsuit in the Delaware District Court against Hospira Inc. and Pfizer Inc. (collectively, Pfizer). This lawsuit stems from Pfizer's submission of an application for FDA licensure of a pegfilgrastim product as biosimilar to Amgen's Neulasta. Amgen has asserted infringement of U.S. Patent No. 8,273,707 (the '707 Patent) and seeks, among other remedies, injunctive relief to prohibit Pfizer from infringing the '707 Patent. On March 4, 2020, Pfizer filed a motion requesting the Delaware District Court to dismiss the complaint by Amgen alleging noninfringement of the '707 Patent. In June 2020, the FDA approved Pfizer's NYVEPRIA, a biosimilar to Amgen's Neulasta.

On April 6, 2021, the Delaware District Court stayed further proceedings in the matter pending claim construction of the patent claims and, based on a subsequent hearing, determined on June 11, 2021 that the term at issue required no construction. Currently pending before the Delaware District Court is Pfizer's motion for summary judgment of noninfringement, which has been fully briefed. No date has been set for argument on the motion.

Patent Trial and Appeal Board (PTAB) Challenge

Apotex PTAB Challenge

In February 2017, the PTAB of the USPTO granted Apotex's petition to institute inter partes review (IPR) proceeding of U.S. Patent No. 8,952,138 (the '138 Patent), challenging claims of the '138 Patent as unpatentable. In May 2017, Amgen filed its response. In February 2018, the PTAB issued a final decision holding all but one claim of the '138 Patent as unpatentable and Apotex filed a request for rehearing in March 2018.

On May 20, 2019, the PTAB issued a decision denying Apotex's request for rehearing on the PTAB's finding and sua sponte amending the final decision with a finding that the one remaining claim in Amgen's '138 Patent is unpatentable. On July 22, 2019, Amgen filed a notice of appeal to the Federal Circuit Court with respect to all claims held to be unpatentable. On August 5, 2019, Apotex provided notice that it would not participate in the appeal. On September 16, 2019, the USPTO filed a notice of intervention on the appeal. On March 24, 2020, the Federal Circuit Court vacated the decision by the PTAB and remanded the case to the PTAB for proceeding consistent with the Federal Circuit Court's decision in *Arthrex Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320 (Fed. Cir. 2019).

On July 14, 2020, Amgen and Apotex filed a joint motion to terminate the IPR proceedings stating that there is no current dispute between the parties with respect to the '138 Patent. On July 29, 2020, the U.S. government filed a petition for writ of certiorari with respect to the cases that the Federal Circuit Court remanded to the PTAB, including the case regarding the '138 Patent, for proceedings consistent with its decision in *Arthrex Inc. v. Smith & Nephew, Inc.*, requesting that such remanded cases be held pending the U.S. Supreme Court's disposition of the petition for writ of certiorari in *United States v. Arthrex, Inc.*, No. 19-1434. On August 25, 2020, Amgen filed its response to the U.S. government's petition for writ of certiorari indicating that Amgen did not intend to respond unless requested by the U.S. Supreme Court.

On June 21, 2021, the U.S. Supreme Court decided *United States v. Arthrex, Inc.* On June 28, 2021, the U.S. Supreme Court granted the government's pending certiorari petition and vacated and remanded the Federal Circuit Court's judgment for further consideration under *Arthrex.*

On September 2, 2021, the Federal Circuit Court issued a remand to permit Amgen to request rehearing of the PTAB's final written decision holding that all claims of the '138 Patent as unpatentable.

On October 4, 2021, Amgen filed a request for the USPTO Director for a rehearing and review of the Final Written Decision pursuant to *Arthrex*. On November 22, 2021, the Director denied this request. On December 6, 2021, Amgen filed the Notice of Director review with the patent office.

Pfizer PTAB Challenge

On February 10, 2021, Pfizer filed a petition to institute IPR proceeding at the USPTO of U.S. Patent No. 8,273,707 (the '707 Patent), challenging claims of the '707 Patent as unpatentable. Amgen's preliminary response was filed on May 18, 2021.

On August 17, 2021, the PTAB of the USPTO granted Pfizer's petition to institute IPR of the '707 Patent. On August 23, 2021, the PTAB issued the schedule for the proceeding, including oral argument (if requested) on May 18, 2022. On November 17, 2021, Amgen filed its Patent Owner's Response.

Breach of Contract Action

Novartis Pharma AG v. Amgen Inc.

On April 4, 2019, Amgen filed a lawsuit in the U.S. District Court for the Southern District of New York (the New York Southern District Court) against Novartis seeking a declaratory judgment that Novartis materially breached two collaboration agreements Amgen and Novartis entered into in 2015 and 2017 (the 2015 Agreement and the 2017 Agreement, respectively) related to the development and commercialization of Aimovig due to Novartis' affiliate Sandoz GmbH entering into a contract manufacturing agreement with Alder BioPharmaceuticals, Inc. (Alder) related to eptinezumab, an expected direct competitor to Aimovig and entrant in the CGRP-related migraine therapy market. Amgen seeks to terminate its collaboration agreements with Novartis and also seeks damages from Novartis for breach of contract and negligent misrepresentation. Also on April 4, 2019, Novartis initiated a separate lawsuit against Amgen in the same court seeking declaratory judgment that Novartis, alternatively, did not materially breach the collaboration agreements or, even if it did breach the collaboration agreements, such breach was not material and has been cured, and that Amgen may not terminate the collaboration agreements. On April 8, 2019, Amgen answered Novartis' complaint and filed counterclaims seeking a declaratory judgment that Novartis materially breached the collaboration agreements due to its affiliate Sandoz GmbH entering into the contract manufacturing agreement with Alder. In its counterclaim, Amgen seeks to terminate its collaboration agreements with Novartis and also seeks damages from Novartis for breach of contract and negligent misrepresentation. On July 16, 2019, Novartis filed an amended complaint adding a claim for breach of contract alleging Novartis is owed amounts associated with 2018 budget overruns, and Amgen responded with a counterclaim alleging additional breaches by Novartis of the collaboration agreements. On September 17, 2019 and October 8, 2019, Novartis and Amgen, respectively, each filed its motion for judgment on the pleadings. On February 3, 2020, Amgen was granted leave to file its amended counterclaims. On February 4, 2020, Amgen filed its amended answer to Novartis' first amended complaint and second amended counterclaims for affirmative relief to add a fraudulent inducement claim. On February 18, 2020, Novartis filed its answer and affirmative defenses to Amgen's second amended counterclaims.

On June 9, 2020, the New York Southern District Court entered an order granting Novartis' motion for judgment on the pleadings that Novartis did not breach the 2017 Agreement, and denying Amgen's motions for judgment on the pleadings seeking dismissal of Novartis' amended complaint that Novartis did not breach the 2015 Agreement or the 2017 Agreement, and Novartis timely cured any breach. On June 23, 2020, Amgen filed a motion for clarification and/or reconsideration of the June 9, 2020 order, which was denied on September 14, 2020.

On June 2, 2021, the parties executed agreements to settle two claims in the litigation, relating to the 2018 budget overrun dispute and certain counterclaims alleging breaches by Novartis of the 2015 and 2017 Agreements related to the development and commercialization of Aimovig, and to amend and restate the 2017 collaboration agreement. As part of the agreement, Amgen paid $48 million to Novartis to resolve the 2018 budget dispute.

On October 26, 2021, the New York Southern District Court held a status conference with the parties and set the dates for Novartis' opening brief for its motion for partial summary judgment on two claims, fraudulent inducement and negligent misrepresentation.

On January 31, 2022, the parties resolved all claims in the litigation.

Antitrust Class Action

Sensipar Antitrust Class Actions

From February to April 2019, four plaintiffs filed putative class action lawsuits against Amgen and various entities affiliated with Teva Pharmaceuticals USA, Inc. (Teva) alleging anticompetitive conduct in connection with settlements between Amgen and manufacturers of generic cinacalcet product. Two of those actions were brought in the Delaware District Court, captioned *UFCW Local 1500 Welfare Fund v. Amgen Inc., et al.* (February 21, 2019) (Local 1500) and *Cesar Castillo, Inc. v. Amgen Inc., et al.* (February 26, 2019) (Castillo). The third action was brought in the New Jersey District Court, captioned *Teamsters Local 237 Welfare Fund, et al. v. Amgen Inc., et al.* (March 14, 2019) (Local 237) and the fourth action was brought in the U.S. District Court for the Eastern District of Pennsylvania (the Eastern Pennsylvania District Court), captioned *KPH Healthcare Services, Inc. a/k/a Kinney Drugs, Inc. v. Amgen Inc., et al* (April 10, 2019) (KPH). Each of the lawsuits is brought on behalf of a putative class of direct or indirect purchasers of Sensipar and alleges that the plaintiffs have overpaid for Sensipar as a result of Amgen's conduct that allegedly improperly delayed market entry by manufacturers of generic cinacalcet products. The lawsuits focus predominantly on the settlement among Amgen, Watson Laboratories, Inc. (Watson) and Teva of the parties' patent infringement litigation. Each of the lawsuits seeks, among other things, treble damages, equitable relief and attorneys' fees and costs. On April 10, 2019, the plaintiff in the KPH lawsuit filed a motion seeking to have the four lawsuits consolidated and designated as a multidistrict litigation (MDL) in the Eastern Pennsylvania District Court, and the plaintiff in the Local 1500 lawsuit filed a motion seeking to have the four lawsuits, along with *Cipla Ltd. v. Amgen Inc.*, consolidated and designated as an MDL in the Delaware District Court.

On July 31, 2019, the MDL panel entered an order consolidating in the Delaware District Court the four class action lawsuits. On September 13, 2019, the plaintiffs filed amended complaints, and on October 15, 2019, Amgen filed its motion to dismiss both the direct purchaser plaintiffs' consolidated class action complaint and the indirect purchaser end payor plaintiffs' complaint. On December 6, 2019, the plaintiffs responded to Amgen's motion to dismiss and, on January 10, 2020, Amgen filed its response. On February 6, 2020, the motions in the class action lawsuits were transferred to the U.S. Magistrate Judge for the District of Delaware (Magistrate Judge) for a recommendation. The MDL panel certified its conditional transfer order on February 6, 2020 transferring the additional class action lawsuit brought in the U.S. District Court for the Southern District of Florida, captioned *MSP Recovery Claims v. Amgen Inc., et al.*, to the Delaware District Court.

On July 22, 2020, the Magistrate Judge issued a recommendation to the Delaware District Court that the claims against Amgen be dismissed but leave be given to plaintiffs to amend their complaints. On August 5, 2020, the plaintiffs filed objections to the Magistrate Judge's report and recommendation. On August 19, 2020, Amgen filed a response to the plaintiffs' objections. On November 30, 2020, the District Court adopted the Magistrate Judge's recommendation in part and denied it in part, denying Amgen's motion to dismiss on the grounds that plaintiffs adequately alleged reverse payment claims but granted Amgen's motion to dismiss with respect to the other Federal antitrust claims. On December 23, 2020, Teva, Watson and Actavis filed a motion for interlocutory appeal and for a stay pending appeal and Amgen filed its joinder (the 1292 Motion). On January 5, 2021, a joint status report was filed advising the Delaware District Court that the defendants are still considering whether to withdraw the 1292 Motion and plaintiffs' offer to stay discovery, pending further rulings on motions to dismiss the amended complaints. On January 19, 2021, a joint status report was filed pursuant to the Delaware District Court's January 6, 2021 order along with a stipulation to defer the 1292 Motion until after rulings on the amended complaints.

On February 16, 2021, the plaintiffs in the antitrust class action lawsuit brought on behalf of putative classes of direct or indirect purchasers of Sensipar filed their amended complaints. On March 4, 2021, a stipulation and order regarding the filing of a second amended complaint were filed to add another plaintiff: Teamsters Western Region & Local 177 Health Care Fund. On March 17, 2021, a defendant, MSP Recovery Claims, Series LLC, filed its notice of voluntary dismissal. On March 30, 2021, the remaining defendants, including Amgen, filed their motions to dismiss the second amended complaint.

On April 27, 2021, plaintiffs filed their oppositions to defendants' (including Amgen's) motion to dismiss, and defendants' reply was filed on May 25, 2021. A hearing on defendants' motion to dismiss was held in the Delaware District Court on July 13, 2021.

Humira Biosimilar Antitrust Class Actions

From March to May 2019, twelve purported class actions against Amgen, along with AbbVie Inc. and AbbVie Biotechnology Ltd. (collectively, AbbVie), were filed in the U.S. District Court for the Northern District of Illinois (the Illinois Northern District Court). The cases are captioned: *UFCW Local 1500 Welfare Fund v. AbbVie Inc., et al.* (March 18, 2019) (Local 1500); *Fraternal Order of Police, Miami Lodge 20, Insurance Trust Fund v. AbbVie Inc., et al.* (March 20, 2019); *Mayor and City Council of Baltimore v. AbbVie Inc., et al.* (March 22, 2019); *Pipe Trades Services MN Welfare Fund v. AbbVie Inc., et al.* (March 29, 2019); *St. Paul Electrical Workers' Health Plan v. AbbVie Inc., et al.* (March 29, 2019); *Welfare Plan of the International Union of Operating Engineers Locals 137, 137A, 137B, 137C and 137R v. AbbVie Inc., et al.* (April 1,

2019); *Law Enforcement Health Benefits, Inc. v. AbbVie, Inc., et al.* (April 9, 2019) (Law Enforcement); *Kentucky Laborers District Council Health and Welfare Fund v. AbbVie, Inc., et al.* (April 16, 2019); *Sheet Metal Workers' Local Union No. 28 Welfare Fund v. AbbVie, Inc., et al.* (April 19, 2019) (Sheet Metal Workers'); *Locals 302 & 612 of The International Union of Operating Engineers-Employers Construction Industry Health And Security Trust Fund v. AbbVie Inc., et al.* (April 25, 2019) (Construction Industry); *Louisiana Health Service & Indemnity Co., d/b/a Blue Cross and Blue Shield of Louisiana and HMO Louisiana, Inc. v. AbbVie Inc., et al.* (April 30, 2019) (Louisiana Health); and *Cleveland Bakers and Teamsters Health and Welfare Fund v. AbbVie Inc., et al.* (May 10, 2019) (Cleveland Bakers) (collectively, Humira Antitrust Class Actions).

In each of the Humira Antitrust Class Actions, the plaintiffs bring federal antitrust claims along with various state law claims under common law and antitrust, consumer protection and unfair competition statutes. In each case, the plaintiffs specifically allege that AbbVie has unlawfully monopolized the alleged market for Humira and biosimilars of Humira, including by creating an allegedly unlawful so-called patent thicket around Humira. In the Local 1500, Sheet Metal Workers' and Construction Industry cases, the plaintiffs further allege that AbbVie entered into allegedly unlawful market division agreements with Amgen and other companies that had developed Humira biosimilars, including Bioepis, Mylan, Sandoz, Fresenius Kabi USA, LLC (Fresenius), Pfizer Inc. and Momenta Pharmaceuticals, Inc., in connection with the settlement of patent litigation relating to Humira, whereby Amgen and the other defendants that have developed Humira biosimilars were permitted to market those products in Europe as early as October 2018, while remaining off the market in the United States until 2023. In each of the Humira Antitrust Class Actions other than the Local 1500 and Construction Industry cases, the plaintiffs allege that AbbVie and Amgen entered into an allegedly unlawful settlement agreement under which Amgen allegedly agreed to delay its entry into the U.S. market with AMGEVITA, its Humira biosimilar, in exchange for an alleged promise of exclusivity as the sole Humira biosimilar in that market for five months, beginning in January 2023. In each of the Humira Antitrust Class Actions, plaintiffs seek injunctive relief, treble damages and attorney's fees on behalf of a putative class of third-party payers and/or consumers that have indirectly purchased, paid for or provided reimbursement for Humira in the United States. Defendants' responses to the first six complaints were stayed by the court. On June 4, 2019, the Illinois Northern District Court entered an order consolidating the twelve purported class action cases for pre-trial purposes.

On August 9, 2019, the plaintiffs filed their consolidated complaint, naming as defendants Amgen, along with AbbVie, Bioepis, Sandoz and Fresenius. On October 11, 2019, the defendants filed a joint motion to dismiss the consolidated complaint (as well as brief individual motions), challenging the legal sufficiency of the plaintiffs' allegations to state any claim for relief under the law. On November 19, 2019, plaintiffs filed their opposition to the motion to dismiss. On December 20, 2019, defendants filed their reply in support of the motion to dismiss. On June 8, 2020, the Illinois Northern District Court issued an order granting the motion by the defendants to dismiss the consolidated class action complaint. On June 29, 2020, the plaintiffs filed a status report asking the Illinois Northern District Court to convert the dismissal to one with prejudice. On June 30, 2020, the Illinois Northern District Court granted the motion. On July 28, 2020, the plaintiffs filed a notice of appeal. On October 5, 2020, the plaintiffs-appellants filed their opening brief to the U.S. Court of Appeals for the Seventh Circuit. Plaintiffs-appellants amicus briefs were filed in October 2020, including one by the FTC and one on behalf of 20 states, each filed on October 13, 2020. On December 21, 2020, the defendants-appellees filed their opposition brief. Defendants-appellees amicus briefs, including one by the DoJ, were filed on December 28, 2020. On February 25, 2021, oral argument was held by the U.S. Court of Appeals for the Seventh Circuit on the appeal by plaintiffs-appellants of the lower court's dismissal of the consolidated complaint with prejudice.

U.S. Tax Litigation

Amgen Inc. & Subsidiaries v. Commissioner of Internal Revenue

See Note 6, Income taxes, for discussion of the IRS tax dispute and the Company's petition in the U.S. Tax Court.

Commitments – U.S. repatriation tax

Under the 2017 Tax Act, we elected to pay in eight annual installments the repatriation tax related primarily to prior indefinitely invested earnings of our foreign operations. The following table summarizes the remaining scheduled repatriation tax payments as of December 31, 2021 (in millions):

	Amounts
2022	$ 587
2023	1,100
2024	1,467
2025	1,834
Total remaining U.S. repatriation tax commitments	$ 4,988

SCHEDULE II

AMGEN INC.

VALUATION AND QUALIFYING ACCOUNTS

Years ended December 31, 2021, 2020 and 2019

(In millions)

Allowance for doubtful accounts	Balance at beginning of period	Additions charged to costs and expenses	Other additions	Deductions	Balance at end of period
Year ended December 31, 2021	$ 32	$ —	$ —	$ (6)	$ 26
Year ended December 31, 2020	$ 26	$ 8	$ —	$ (2)	$ 32
Year ended December 31, 2019	$ 48	$ —	$ —	$ (22)	$ 26

DESCRIPTION OF AMGEN INC.'S SECURITIES
REGISTERED PURSUANT TO SECTION 12 OF THE
SECURITIES EXCHANGE ACT OF 1934

As of February 14, 2022, Amgen Inc. has two classes of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"): (1) our common stock, par value $0.0001 per share (the "Common Stock"); and (2) our 2.000% Senior Notes due 2026 (the "Notes").

DESCRIPTION OF COMMON STOCK

The following description of our capital stock is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our restated certificate of incorporation, as amended ("certificate of incorporation") and our amended and restated bylaws, each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K ("Annual Report"). The terms "Amgen" "we," "our," and "us" refer solely to Amgen Inc. and not its subsidiaries.

Our authorized capital stock includes 2,750,000,000 shares of Common Stock. Each holder of our Common Stock is entitled to one vote per share on all matters to be voted upon by our stockholders. Upon any liquidation, dissolution or winding up of our business, the holders of our Common Stock are entitled to share equally in all assets available for distribution after payment of all liabilities, subject to the liquidation preference of shares of preferred stock, if any, then outstanding. Our Common Stock has no preemptive or conversion rights. All outstanding shares of common stock are fully paid and non-assessable. Our outstanding shares of common stock are quoted on the Nasdaq Global Select Market under the symbol "AMGN."

Dividends

Subject to preferences that may be applicable to any preferred stock (if any such stock be issued and outstanding), the holders of Common Stock are entitled ratably to receive dividends, if any, declared by our board of directors out of funds legally available for the payment of dividends.

Anti-Takeover Effects of Delaware Law

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. Under Section 203, we would generally be prohibited from engaging in any business combination with any interested stockholder for a period of three years following the time that this stockholder became an interested stockholder unless:

- prior to such time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Under Section 203, a "business combination" includes:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, lease, exchange, mortgage, pledge, transfer or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;

- any transaction which results in the issuance or transfer by the corporation or by any direct or indirect majority-owned subsidiary of the corporation of any stock of the corporation or of such subsidiary to the interested stockholder, subject to limited exceptions;

- any transaction involving the corporation or any direct or indirect majority-owned subsidiary of the corporation which has the effect, directly or indirectly, of increasing the proportionate share of the stock of any class or series, or securities convertible into the stock of any class or series, of the corporation or of any such subsidiary which is owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation or any direct or indirect majority-owned subsidiary of the corporation.

In general, Section 203 defines an interested stockholder as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

Transfer Agent

The transfer agent and registrar for our Common Stock is the American Stock Transfer & Trust Company.

DESCRIPTION OF THE NOTES

The following description of our Notes is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to the indenture, dated as of May 22, 2014 (the "Indenture"), between us and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"), which are incorporated by reference as exhibits to the Annual Report of which this Exhibit 4.32 is a part. The Notes are traded on The Nasdaq Stock Market LLC under the trading symbol of "AMGN26." We encourage you to read the above referenced Indenture for additional information.

General

We issued €750,000,000 in aggregate principal amount of 2.000% Senior Notes, maturing February 25, 2026 and bearing interest at a rate of 2.000% per annum, payable annually on February 25 of each year. As of February 14, 2022, €750,000,000 aggregate principal amount of the Notes was outstanding.

We may, without notice to or the consent of the holders or beneficial owners of the Notes of any series, create and issue additional Notes and/or notes having the same ranking, interest rate, maturity and other terms as the Notes of that series. Any additional debt securities having such similar terms, together with that series of Notes, could be considered part of the same series of Notes under the Indenture; *provided* that, in the case of any notes represented by global notes, for so long as may be required by the United States Securities Act of 1933, as amended (the "Securities Act"), or the procedures of the common depositary, the Euroclear System ("Euroclear") or Clearstream Banking, S.A. ("Clearstream") (or a successor or clearing system), such additional Notes will be represented by one or more separate global notes in accordance with the terms of the Indenture and subject to applicable transfer or other restrictions.

The Notes are redeemable prior to maturity as described below under the headings "—Optional Redemption" and "—Redemption Upon Changes in Withholding Taxes." The Notes do not have the benefit of any sinking funds. The Notes of each series are issued only in registered form without coupons attached in minimum denominations of €100,000 and any integral multiple of €1,000 in excess thereof. Each series of Notes are represented by one or more global securities deposited with, or on behalf of, a common depositary for Euroclear and Clearstream (the "global notes").

Certain Definitions

As used herein, the following terms have the meanings set forth below.

"*Attributable Liens*" means in connection with a sale and lease-back transaction the lesser of:

(1) the fair market value of the assets subject to such transaction; and

(2) the present value (discounted at a rate per annum equal to the average interest borne by all outstanding debt securities issued under the Indenture (which may include debt securities in addition to the Notes) determined on a weighted average basis and compounded semi-annually) of the obligations of the lessee for rental payments during the term of the related lease.

"*Business Day*" means any day on which commercial banks and foreign exchange markets are open for business in New York and London and which is a day on which the Trans-European Automated Real-Time Gross Settlement Express Transfer System (TARGET2) is operating.

"*Calculation Agent*" means an independent financial institution appointed by Amgen, which may include the paying agent, any of the managers or their respective affiliates who agree to serve in such capacity.

"*Capital Lease*" means any Indebtedness represented by a lease obligation of a Person incurred with respect to real property or equipment acquired or leased by such Person and used in its business that is required to be recorded as a capital lease in accordance with GAAP.

"*Consolidated Net Worth*" means, as of any date of determination, the Stockholders' Equity of us and our Consolidated Subsidiaries on that date.

"*Consolidated Subsidiary*" means, as of any date of determination and with respect to any Person, any Subsidiary of that Person whose financial data is, in accordance with GAAP, reflected in that Person's consolidated financial statements.

"*Credit Facilities*" means, one or more debt facilities (including, without limitation, the revolving credit agreement and the term loan credit agreement, as applicable) or commercial paper facilities, in each case, with banks or other institutional lenders providing for revolving credit loans, term loans, receivables financing (including through the sale of receivables to such lenders or to special purpose entities formed to borrow from such lenders against such receivables) or letters of credit, in each case, as amended, restated, modified, renewed, refunded, replaced (whether upon or after termination or otherwise) or refinanced (including by means of sales of debt securities to institutional investors) in whole or in part from time to time.

"*Exempted Debt*" means the sum of the following as of the date of determination:

(1) our Indebtedness incurred after the first issue date of the Notes and secured by Liens not permitted by the first sentence under "—Limitation on Liens" below; and

(2) our and our Subsidiaries' Attributable Liens in respect of sale and lease-back transactions entered into after the first issue date of the Notes pursuant to the second paragraph of "—Limitation on Sale and Lease-Back Transactions" below.

"*GAAP*" means accounting principles generally accepted in the United States set forth in the Accounting Standards Codification of the Financial Accounting Standards Board or in such other documents by such other entity as have been approved by a significant segment of the accounting profession, which are in effect as of the date of determination.

"*Governmental Agency*" means:

(1) any foreign, federal, state, county or municipal government, or political subdivision thereof;

(2) any governmental or quasi-governmental agency, authority, board, bureau, commission, department, instrumentality or public body;

(3) any court or administrative tribunal; and

(4) with respect to any Person, any arbitration tribunal or other nongovernmental authority to whose jurisdiction that Person has consented.

"*Hedging Obligations*" means, with respect to any specified Person, the obligations of such Person under:

(1) interest rate swap agreements (whether from fixed to floating or from floating to fixed), interest rate cap agreements and interest rate collar agreements;

(2) other agreements or arrangements designed to manage interest rates or interest rate risk; and

(3) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange rates or commodity prices.

"*Indebtedness*" of any Person means, without duplication, any indebtedness, whether or not contingent, in respect of borrowed money or evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements with respect thereto) or representing the balance deferred and unpaid of the purchase price of any Property (including pursuant to Capital Leases), except any such balance that constitutes an accrued expense or trade payable, if and to the extent any of the foregoing indebtedness would appear as a liability upon a balance sheet of such Person prepared on a consolidated basis in accordance with GAAP (but does not include

contingent liabilities which appear only in a footnote to a balance sheet), and shall also include, to the extent not otherwise included, the guaranty of items which would be included within this definition.

"*Laws*" means, collectively, all foreign, federal, state and local statutes, treaties, rules, regulations, ordinances, codes and administrative or controlling precedents of any Governmental Agency.

"*Lien*" means any lien, security interest, charge or encumbrance of any kind (including any conditional sale or other title retention agreement, any lease in the nature thereof, and any agreement to give any security interest).

"*Make-Whole Amount*" means the excess of (1) the net present value, on the redemption date, of the principal being redeemed or paid and the amount of interest (exclusive of interest accrued to the date of redemption) that would have been payable if such redemption had not been made, over (2) the aggregate principal amount of the Notes being redeemed or paid. Net present value shall be determined by discounting, on a semi-annual basis, such principal and interest at the Reinvestment Rate (as defined below and as determined on the third Business Day preceding the date such notice of redemption is given) from the respective dates on which such principal and interest would have been payable if such redemption had not been made.

"*Permitted Liens*" means:

(1) Liens securing Indebtedness under Credit Facilities;

(2) Liens on accounts receivable, merchandise inventory, equipment, and patents, trademarks, trade names and other intangibles, securing our Indebtedness;

(3) Liens on any of our assets, any of our Subsidiaries' assets, or the assets of any joint venture to which we or any of our Subsidiaries is a party, created solely to secure obligations incurred to finance the refurbishment, improvement or construction of such asset, which obligations are incurred no later than 24 months after completion of such refurbishment, improvement or construction, and all renewals, extensions, refinancings, replacements or refundings of such obligations;

(4) (a) Liens given to secure the payment of the purchase price incurred in connection with the acquisition (including acquisition through merger or consolidation) of Property (including shares of stock), including Capital Lease transactions in connection with any such acquisition, and (b) Liens existing on Property at the time of acquisition thereof or at the time of acquisition by us or one of our Subsidiaries of any Person then owning such Property whether or not such existing Liens were given to secure the payment of the purchase price of the Property to which they attach; provided that, with respect to clause (a), the Liens shall be given within 24 months after such acquisition and shall attach solely to the Property acquired or purchased and any improvements then or thereafter placed thereon;

(5) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods;

(6) Liens upon specific items of inventory or other goods and proceeds of any Person securing such Person's obligations in respect of bankers' acceptances issued or created for the account of such Person to facilitate the purchase, shipment or storage of such inventory or other goods;

(7) Liens securing reimbursement obligations with respect to letters of credit that encumber documents and other Property relating to such letters of credit and the products and proceeds thereof;

(8) Liens on key-man life insurance policies granted to secure our Indebtedness against the cash surrender value thereof;

(9) Liens encumbering customary initial deposits and margin deposits and other Liens in the ordinary course of business, in each case securing Hedging Obligations and forward contract, option, futures contracts, futures options or similar agreements or arrangements designed to protect us or any of our Subsidiaries from fluctuations in interest rates, currencies or the price of commodities;

(10) Liens arising out of conditional sale, title retention, consignment or similar arrangements for the sale of goods entered into by us or any of our Subsidiaries in the ordinary course of business;

(11) pre-existing Liens on assets acquired by us or any of our Subsidiaries after the first issue date of the Notes;

(12) Liens in our favor or the favor of any of our Subsidiaries;

(13) inchoate Liens incident to construction or maintenance of real property, or Liens incident to construction or maintenance of real property, now or hereafter filed of record for sums not yet delinquent or being contested in good faith, if reserves or other appropriate provisions, if any, as shall be required by GAAP shall have been made therefor;

(14) statutory Liens arising in the ordinary course of business with respect to obligations which are not delinquent or are being contested in good faith, if reserves or other appropriate provisions, if any, as shall be required by GAAP shall have been made therefor;

(15) Liens consisting of pledges or deposits to secure obligations under workers' compensation laws or similar legislation, including Liens of judgments thereunder which are not currently dischargeable;

(16) Liens consisting of pledges or deposits of Property to secure performance in connection with operating leases made in the ordinary course of business to which we or any of our Subsidiaries is a party as lessee, provided the aggregate value of all such pledges and deposits in connection with any such lease does not at any time exceed 16 2⁄3% of the annual fixed rentals payable under such lease;

(17) Liens consisting of deposits of Property to secure our statutory obligations or statutory obligations of any of our Subsidiaries in the ordinary course of its business;

(18) Liens consisting of deposits of Property to secure (or in lieu of) surety, appeal or customs bonds in proceedings to which we or any of our Subsidiaries is a party in the ordinary course of its business, but not in excess of $75,000,000;

(19) purchase money Liens or purchase money security interests upon or in any Property acquired or held by us or any of our Subsidiaries in the ordinary course of business to secure the purchase price of such Property or to secure indebtedness incurred solely for the purpose of financing the acquisition of such Property;

(20) Liens on an asset created in connection with the acquisition, construction or development of additions, extensions or improvements to such asset which shall be financed by obligations described in Sections 142, 144(a) or 144(c) of the Code, or by obligations entitled to substantially similar tax benefits under other legislation or regulations in effect from time to time; and

(21) Liens on Property subject to escrow or similar arrangements established in connection with litigation settlements.

"*Person*" means any individual, corporation, partnership, joint venture, association, limited liability company, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof.

"*Property*" means any property or asset, whether real, personal or mixed, or tangible or intangible.

"*Reference Bund*" means the Federal Government Bond of Bundesrepublik Deutschland due February 15, 2026, with ISIN 0001102390.

"*Reference Dealers*" means each of the four banks selected by a Calculation Agent which are primary European government security dealers, and their respective successors, or market makers in pricing corporate bond issues.

"*Reinvestment Rate*" means 0.300% plus the average of the four quotations given by the Reference Dealers of the mid-market annual yield to maturity of the Reference Bund at 11: 00 a.m. (Central European time ("CET")) on the fourth Business Day preceding such redemption date and if the Reference Bund is no longer outstanding, a Similar Security will be chosen by the Calculation Agent at 11: 00 a.m. (CET) on the third Business Day in London preceding such redemption date, quoted in writing by the Calculation Agent to us.

"*Similar Security*" means a reference bond or reference bonds issued by the German Federal Government having an actual or interpolated maturity comparable with the remaining term of the Notes that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Notes.

"*Stockholders' Equity*" means, as of any date of determination, stockholders' equity as of that date determined in accordance with GAAP; provided that there shall be excluded from Stockholders' Equity any amount attributable to capital stock that is, directly or indirectly, required to be redeemed or repurchased by the issuer thereof at a specified date or upon the occurrence of specified events or at the election of the holder thereof.

"*Subsidiary*" of any specified person means any corporation, association or other business entity of which more than 50% of the total voting power of shares of capital stock entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers or trustees thereof is at the time owned or controlled, directly or indirectly, by such person or one or more of the other Subsidiaries of that person or a combination thereof.

Paying Agent and Registrar

The Bank of New York Mellon, London Branch, is the principal paying agent for the Notes (the "principal paying agent"). The Bank of New York Mellon Trust Company, N.A., is the security registrar for the Notes. Upon notice to the Trustee, we may change any paying agent or security registrar, and we or any of our subsidiaries may act as paying agent or registrar.

Interest

The Notes accrue interest at a rate of 2.000% per annum. The Notes accrue interest on their stated principal amounts from the most recent interest payment date on which interest has been paid or duly provided for. Accrued and unpaid interest on the Notes are payable annually in arrears on February 25 of each year. In each case, interest is paid to the holder in whose name a note is registered at the close of business on the day that is one Business Day prior to the relevant interest payment date.

Interest on the Notes is computed on the basis of the actual number of days in the period for which interest is being calculated and the actual number of days from and including the last date on which interest was paid on the Notes, to but excluding the next scheduled interest payment date. This payment convention is referred to as Actual/Actual (ICMA) as defined in the rulebook of the International Capital Market Association. If any date on which interest, principal or premium is payable on the Notes is not a Business Day, then payment of such amounts payable on such date will be made on the next succeeding day that is a Business Day (and, except as provided under "—Payment of Additional Amounts," without any interest or other payment in respect of any such delay) with the same force and effect as if made on such interest payment date or maturity date, as the case may be.

Any amounts payable on any Notes that are not punctually paid on any payment date will cease to be payable to the person in whose name such Notes are registered on the relevant record date, and such defaulted payment will instead be payable to the person in whose name such Notes are registered on the special record date or other specified date determined in accordance with the Indenture.

Ranking

The Notes are senior unsecured obligations of Amgen. The Notes rank:

- equal in right of payment to all of our other existing and future senior unsecured indebtedness;
- senior in right of payment to all of our existing and future subordinated indebtedness; and
- effectively subordinated in right of payment to all of our subsidiaries' obligations (including secured and unsecured obligations) and subordinated in right of payment to our secured obligations, to the extent of the assets securing such obligations.

The Notes and the Indenture do not limit our ability to incur additional indebtedness. We may incur substantial additional amounts of indebtedness in the future.

Optional Redemption

The Notes may be redeemed prior to maturity at our option, at any time in whole or from time to time in part. If the Notes are redeemed before November 25, 2025 (three months prior to the maturity date of the Notes), the redemption price will equal the sum of (1) 100% of the principal amount being redeemed, plus accrued and unpaid interest to, but not including, the redemption date, and (2) the Make-Whole Amount, if any. If the Notes are redeemed on or after November 25, 2025 (three months prior to the maturity date of the Notes), the redemption price will equal 100% of the principal amount being redeemed, plus accrued and unpaid interest to, but not including, the redemption date.

If we give notice as provided in the Indenture and funds for the redemption of any Notes called for redemption sufficient to pay the redemption price have been deposited with the principal paying agent on or before 10:00 a.m., London time, on the redemption date, such Notes will cease to bear interest on the date fixed for redemption. Thereafter, the only right of the holders of such Notes will be to receive payment of the redemption price.

Upon surrender of a note that is redeemed in part, we shall execute and the Trustee shall authenticate for the holder a new note of the same series and the same maturity equal in principal amount to the unredeemed portion of the note surrendered.

The Notes are redeemable prior to maturity as described below under the headings "—Optional Redemption" and "—Redemption Upon Changes in Withholding Taxes." The Notes do not have the benefit of any sinking funds. The Notes of each series are issued only in registered form without coupons attached in minimum denominations of €100,000 and any integral multiple of €1,000 in excess thereof. Each series of Notes are represented by one or more global securities deposited with, or on behalf of, a common depositary for Euroclear and Clearstream (the "global notes").

Payments on the global notes are made through the principal paying agent (as defined herein under the heading "—Paying Agent and Registrar"). Payments on the Notes are made at the specified office or agency of the principal paying agent; *provided* that all such payments with respect to Notes represented by one or more global notes registered in the name of or held by a nominee of Euroclear or Clearstream, as applicable, will be by wire transfer of immediately available funds to the account specified by the holder or holders thereof.

In addition, at our option, if certificated notes are issued, we may make payments by check mailed to the holder's registered address or by wire transfer to the account shown on the register for the certificated notes.

If certificated notes are issued, they will be issued only in minimum denominations of €100,000 principal amount and integral multiples of €1,000 in excess thereof upon receipt by the applicable registrar of instructions relating thereto and any certificates and other documentation required under the Indenture. It is expected that such instructions will be based upon directions received by Euroclear or Clearstream, as applicable, from the participant which owns the relevant book-entry interests. Certificated notes issued in exchange for book-entry interests will,

except as provided in the Indenture, be subject to, and will have a legend with respect to the restrictions on transfer summarized below.

Subject to the restrictions on transfer referred to above, Notes issued as certificated notes may be transferred or exchanged, in whole or in part, in minimum denominations of €100,000 principal amount and integral multiples of €1,000 in excess thereof to persons who take delivery thereof in the form of certificated notes. In connection with any such transfer or exchange, the Indenture requires the transferring or exchanging holder to, among other things, furnish appropriate endorsements and transfer documents, to furnish information regarding the account of the transferee at Euroclear or Clearstream, where appropriate, to furnish certain certificates and opinions, and to pay any tax or other governmental charge in connection with such transfer or exchange. Any such transfer or exchange will otherwise be made without charge to the holder.

Notwithstanding the foregoing, we are not required to register the transfer or exchange of any Notes:

- for a period of 15 days prior to any date fixed for the redemption of the Notes;
- for a period of 15 days immediately prior to the date fixed for selection of Notes to be redeemed in part;
- for a period of 15 days prior to the record date with respect to any interest payment date; or
- which the holder has tendered (and not withdrawn) for repurchase in connection with a change of control offer.

Redemption Upon Changes in Withholding Taxes

If (a) as a result of any change in, or amendment to, the laws (or any regulations or rulings promulgated thereunder) of the United States (or any political subdivision or taxing authority thereof or therein having power to tax) (a "Relevant Taxing Jurisdiction"), or any change in, or amendment to, the official position regarding the application or interpretation of such laws, regulations or rulings (including by virtue of a holding, judgment or order by a court of competent jurisdiction or a change in published administrative practice), which change or amendment is announced on or after the date of the applicable prospectus supplement, we become or will become obligated to pay additional amounts as described herein under the heading "—Payment of Additional Amounts" or (b) any act is taken by a Relevant Taxing Jurisdiction on or after the date of the applicable prospectus supplement, whether or not such act is taken with respect to us or any affiliate, that results in a substantial probability that we will or may be required to pay such additional amounts, then we may, at our option, redeem the Notes of any affected series, as a whole but not in part, upon not less than 15 days' nor more than 60 days' published notice in accordance with the applicable notice requirement, at 100% of their principal amount, together with interest accrued thereon to the date fixed for redemption; *provided* that we determine, in our business judgment, that the obligation to pay such additional amounts cannot be avoided by the use of reasonable measures available to us (which does not include substitution of the obligor under the Notes). No redemption pursuant to (a) or (b) above may be made unless we have received an opinion of independent counsel to the effect that as a result of such change or amendment we will, or that an act taken by a Relevant Taxing Jurisdiction has resulted in a substantial probability that we will, or may, be required to pay the additional amounts described herein under the heading "—Payment of Additional Amounts," and we shall have delivered to the Trustee a certificate, signed by a duly authorized officer, stating that based on such opinion we are entitled to redeem the Notes pursuant to their terms.

Notice of Redemption

We will publish a notice of any redemption of any affected series of Notes described above in accordance with the applicable notice provisions. If fewer than all of the Notes are to be redeemed at any time, the principal paying agent will select the Notes to be redeemed in accordance with the rules of the principal securities exchange, if any, on which the Notes are listed at such time or, if the not Notes are not listed on a securities exchange, in accordance with the rules of Euroclear or Clearstream, or absent any such rules, *pro rata*, by lot; *provided, however*, that no such partial redemption shall reduce the portion of the principal amount of a note not redeemed to less than €100,000. The principal paying agent shall not be liable for any selections made by it in accordance with this paragraph.

We will give notice of any optional redemption to the registered holders of Notes at least 15 but not more than 60 days before a redemption date. The notice shall identify the Notes to be redeemed and shall state:

- the redemption date;
- the redemption price;
- the name and address of the paying agent;
- if any Notes are being redeemed in part, the portion of the principal amount of such notes to be redeemed and that, after the redemption date and upon surrender of such Notes, a new note or notes in principal amount equal to the unredeemed portion of the original note shall be issued in the name of the holder of the Notes thereof upon cancellation of the original note;
- that the notes called for redemption must be surrendered to the paying agent to collect the redemption price;
- that interest on the Notes called for redemption ceases to accrue on and after the redemption date unless we default in the deposit of the redemption price; and
- the CUSIP and/or ISIN number of the Notes.

At our request, the Trustee shall give the notice of redemption in our name and at our expense.

Payment of Additional Amounts

All payments of principal and interest on the Notes will be made free and clear of and without withholding or deduction for or on account of any present or future tax, assessment or other governmental charge (collectively, "Taxes") imposed by any Relevant Taxing Jurisdiction, unless the withholding of such Taxes is required by law or the official interpretation or administration thereof. We will, subject to the exceptions and limitations set forth below, pay such additional amounts as are necessary in order that the net payment of the principal of and interest on the applicable series of Notes to a holder who is not a U.S. person for U.S. federal income tax purposes, after deduction for any present or future Taxes of any Relevant Taxing Jurisdiction, imposed by withholding with respect to the payment, will not be less than the amount provided in such Notes to be then due and payable*; provided*, *however*, that the foregoing obligation to pay additional amounts shall not apply:

(1) to any Taxes that are imposed or withheld solely by reason of the holder or beneficial owner, or a fiduciary, settlor, beneficiary, member or shareholder of the holder if the holder is an estate, trust, partnership or corporation, or a person holding a power over an estate or trust administered by a fiduciary holder, being considered as:

(a) being or having been present or engaged in a trade or business in the United States or having or having had a permanent establishment in the United States;

(b) having a current or former relationship with the United States, including a relationship as a citizen or resident thereof;

(c) being or having been a foreign or domestic personal holding company, a passive foreign investment company or a controlled foreign corporation with respect to the United States or a corporation that has accumulated earnings to avoid U.S. federal income tax;

(d) being or having been a "10-percent shareholder" of the obligor under the Notes within the meaning of section 871(h)(3) of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), or any successor provision; or

(e) being or having been a bank receiving interest described in section 881(c)(3)(A) of the Code or any successor provision;

(2) to any holder that is not the sole beneficial owner of the note, or a portion thereof, or that is a fiduciary or partnership, but only to the extent that a beneficiary or settlor with respect to the fiduciary, a beneficial

owner or member of the partnership would not have been entitled to the payment of an additional amount had the beneficiary, settlor, beneficial owner or member received directly its beneficial or distributive share of the payment;

(3) to any Taxes that are imposed or withheld solely by reason of the failure to (a) comply with certification, identification or information reporting requirements concerning the nationality, residence, identity or connection with a Relevant Taxing Jurisdiction of the holder or beneficial owner of such note, if compliance is required by statute or by regulation of the Relevant Taxing Jurisdiction as a precondition to relief or exemption from such Taxes (including the submission of an applicable U.S. Internal Revenue Service ("IRS") Form W-8 (with any required attachments)) or (b) comply with any informational gathering and reporting requirements or to take any similar action (including entering into any agreement with the IRS), in each case, that are required to obtain the maximum available exemption from withholding by a Relevant Taxing Jurisdiction that is available to payments received by or on behalf of the holder;

(4) to any Taxes that are imposed otherwise than by withholding from the payment;

(5) to any Taxes that are imposed or withheld solely by reason of a change in law, regulation, or administrative or judicial interpretation that becomes effective more than 15 days after the payment becomes due or is duly provided for, whichever occurs later;

(6) to any estate, inheritance, gift, sales, excise, transfer, wealth or personal property tax or a similar tax, assessment or governmental charge;

(7) to any Taxes required to be withheld by any paying agent from any payment of principal of or interest on any note, if such payment can be made without such withholding by any other paying agent;

(8) to any Taxes that are imposed or levied by reason of the presentation (where presentation is required in order to receive payment) of such notes for payment on a date more than 30 days after the date on which such payment became due and payable, except to the extent that the holder or beneficial owner thereof would have been entitled to additional amounts had the notes been presented for payment on any date during such 30 day period;

(9) to any Taxes that are imposed or withheld pursuant to Sections 1471 through 1474 of the Code, as of the issue date (or any amended or successor version of such sections), any U.S. Treasury Regulations promulgated thereunder, any official interpretations thereof, any similar law or regulation adopted pursuant to an intergovernmental agreement between a non-U.S. jurisdiction and the United States with respect to the foregoing or any agreements entered into pursuant to Section 1471(b)(1) of the Code; or

(10) in the case of any combination of any items (1) through (9).

The notes are subject in all cases to any tax, fiscal or other law or regulation or administrative or judicial interpretation applicable thereto. Except as specifically provided under this heading "—Payment of Additional Amounts," we are not required to make any payment with respect to any tax, assessment or governmental charge imposed by any government or a political subdivision or taxing authority thereof or therein.

Change of Control Offer

If a change of control triggering event occurs, unless we have exercised our option to redeem the notes as described above, we will be required to make an offer (the "change of control offer") to each holder of the notes to repurchase all or any part (equal to €100,000 or integral multiples of €1,000 in excess thereof) of that holder's notes on the terms set forth in such notes. In the change of control offer, we will be required to offer payment in cash equal to 101 % of the aggregate principal amount of notes repurchased, plus accrued and unpaid interest, if any, on the notes repurchased to the date of repurchase (the "change of control payment"). Within 30 days following any change of control triggering event, a notice will be provided to holders of the notes describing the transaction that constitutes the change of control triggering event and offering to repurchase the notes on the date specified in the notice, which date will be no earlier than 30 days and no later than 60 days from the date such notice is provided (the "change of control payment date"); provided, however, that in no event will the change of control payment date occur prior to the date 90 days following the first issue date of the notes.

On the change of control payment date, we will, to the extent lawful:

- accept for payment all notes or portions of notes properly tendered pursuant to the change of control offer;

- by 10:00 a.m., London time, deposit with the principal paying agent an amount equal to the change of control payment in respect of all notes or portions of notes properly tendered; and

- deliver or cause to be delivered to the Trustee the notes properly accepted together with an officer's certificate stating the aggregate principal amount of notes or portions of notes being repurchased.

We will not repurchase any notes if there has occurred and is continuing on the change of control payment date an event of default under the Indenture, other than a default in the payment of the change of control payment upon a change of control triggering event.

We will comply with the requirements of Rule 14e-1 under the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the notes as a result of a change of control triggering event. To the extent that the provisions of any such securities laws or regulations conflict with the change of control offer provisions of the notes, we will comply with those securities laws and regulations and will not be deemed to have breached our obligations under the change of control offer provisions of the notes by virtue of any such conflict.

For purposes of the change of control offer provisions of the notes, the following terms will be applicable:

"*Beneficial owner*" shall be determined in accordance with Rules 13d-3 and 13d-5 under the Exchange Act or any successor provisions, except that a person will be deemed to have beneficial ownership of all shares that person has the right to acquire irrespective of whether that right is exercisable immediately or only after the passage of time.

"*Change of control*" means the occurrence of any of the following: (1) the consummation of any transaction (including, without limitation, any merger or consolidation) the result of which is that any person or group (other than our company or one of our subsidiaries) becomes the beneficial owner, directly or indirectly, of more than 50% of our voting stock or other voting stock into which our voting stock is reclassified, consolidated, exchanged or changed, measured by voting power rather than number of shares; provided, however, that a person shall not be deemed beneficial owner of, or to own beneficially, (A) any securities tendered pursuant to a tender or exchange offer made by or on behalf of such person or any of such person's affiliates until such tendered securities are accepted for purchase or exchange thereunder, or (B) any securities if such beneficial ownership (i) arises solely as a result of a revocable proxy delivered in response to a proxy or consent solicitation made pursuant to the applicable rules and regulations under the Exchange Act, and (ii) is not also then reportable on Schedule 13D (or any successor schedule) under the Exchange Act; (2) the direct or indirect sale, transfer, conveyance or other disposition (other than by way of merger or consolidation), in one or more series of related transactions, of all or substantially all of our assets and the assets of our subsidiaries, taken as a whole, to one or more persons or groups (other than our company or one of our subsidiaries), provided that none of the circumstances in this clause (2) will be a change of control if the persons that beneficially own our voting stock immediately prior to the transaction own, directly or indirectly, shares with a majority of the total voting power of all outstanding voting securities of the surviving or transferee person that are entitled to vote generally in the election of that person's board of directors, managers or trustees immediately after the transaction; (3) we consolidate with, or merge with or into any person, or any person consolidates with, or merges with or into, us, in any such event pursuant to a transaction in which any of our

outstanding voting stock or the voting stock of such other person is converted into or exchanged for cash, securities or other property, other than such transaction where the shares of our voting stock outstanding immediately prior to such transaction constitute, or are converted into or exchanged for, a majority of the voting stock of the surviving person or any direct or indirect parent company of the surviving person immediately after giving effect to such transaction; or (4) the adoption of a plan relating to our liquidation or dissolution. Notwithstanding the foregoing, a transaction will not be deemed to involve a change of control under clause (1) above if (i) we become a direct or indirect wholly-owned subsidiary of a holding company and (ii) (A) the direct or indirect holders of the voting stock of such holding company immediately following that transaction are substantially the same as the holders of our voting stock immediately prior to that transaction or (B) immediately following that transaction no person (other than a holding company satisfying the requirements of this sentence) is the beneficial owner, directly or indirectly, of more than 50% of the voting stock of such holding company.

"*Change of control triggering event*" means the occurrence of both a change of control and a rating event.

"*Fitch*" means Fitch, Inc., and its successors.

"*Group*" has the meaning given by Section 13(d) and 14(d) of the Exchange Act or any successor provisions and includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(1) under the Exchange Act or any successor provision.

"*Investment grade rating*" means a rating equal to or higher than Baa3 (or the equivalent) by Moody's, BBB—(or the equivalent) by S&P and BBB—(or the equivalent) by Fitch, and the equivalent investment grade credit rating from any additional rating agency or rating agencies selected by us.

"*Moody's*" means Moody's Investors Service, Inc., and its successors.

"*Person*" has the meaning given by Section 13(d) and 14(d) of the Exchange Act or any successor provisions.

"*Rating agencies*" means (1) each of Fitch, Moody's and S&P; and (2) if any of Fitch, Moody's or S&P ceases to rate the notes or fails to make a rating of the notes publicly available for reasons outside of our control, a "nationally recognized statistical rating organization" within the meaning of Section 3(a)(62) of the Exchange Act selected by us (as certified by a resolution of our Board of Directors) as a replacement agency for Fitch, Moody's or S&P, or all of them, as the case may be.

"*Rating event*" means the rating on the applicable series of notes is lowered by at least two of the three rating agencies and the notes are rated below an investment grade rating by at least two of the three rating agencies on any day during the period commencing 60 days prior to the first public notice of the occurrence of a change of control or our intention to effect a change of control and ending 60 days following consummation of such change of control (which period will be extended so long as the rating of the applicable series of notes is under publicly announced consideration for a possible downgrade by any of the rating agencies).

"*S&P*" means Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc., and its successors.

"*Voting stock*" as applied to stock of any person, means shares, interests, participations or other equivalents in the equity interest (however designated) in such person having ordinary voting power for the election of a majority of the directors (or the equivalent) of such person, other than shares, interests, participations or other equivalents having such power only by reason of the occurrence of a contingency.

Certain Covenants

Limitation on Liens

We will not, nor will we permit any of our Subsidiaries to, create or incur any Lien on any of our or their respective Properties, whether now owned or hereafter acquired, or upon any income or profits therefrom, in order to secure any of our Indebtedness, without effectively providing that each series of notes shall be equally and ratably secured until such time as such Indebtedness is no longer secured by such Lien, except:

(1) Liens existing as of the first issue date of the notes;

(2) Liens granted after the first issue date of the notes on any of our or our Subsidiaries' Properties securing our Indebtedness created in favor of the holders of the notes;

(3) Liens securing our Indebtedness which are incurred to extend, renew or refinance Indebtedness which is secured by Liens permitted to be incurred under the Indenture; provided that those Liens do not extend to or cover any of our or our Subsidiaries' Property other than the Property securing the Indebtedness being refinanced and that the principal amount of such Indebtedness does not exceed the principal amount of the Indebtedness being refinanced;

(4) Liens created in substitution of or as replacements for any Liens permitted by the clauses directly above, provided that, based on a good faith determination of one of our officers, the Property encumbered under any such substitute or replacement Lien is substantially similar in nature to the Property encumbered by the otherwise permitted Lien which is being replaced; and

(5) Permitted Liens.

Notwithstanding the foregoing, we and any of our Subsidiaries may, without securing any series of notes, create or incur Liens which would otherwise be subject to the restrictions set forth in the preceding paragraph, if after giving effect thereto, Exempted Debt does not exceed the greater of (a) 35% of Consolidated Net Worth calculated as of the date of the creation or incurrence of the Lien or (b) 35% of Consolidated Net Worth calculated as of the first issue date of the notes.

Limitation on Sale and Lease-Back Transactions

We will not, nor will we permit any of our Subsidiaries to, enter into any sale and lease-back transaction for the sale and leasing back of any Property, whether now owned or hereafter acquired, of ours or any of our Subsidiaries, unless:

(1) such transaction was entered into prior to the first issue date of the notes;

(2) such transaction was for the sale and leasing back to us of any Property by one of our Subsidiaries;

(3) such transaction involves a lease for less than three years;

(4) we would be entitled to incur Indebtedness secured by a mortgage on the property to be leased in an amount equal to the Attributable Liens with respect to such sale and lease-back transaction without equally and ratably securing the notes pursuant to the first paragraph of "—Limitation on Liens" above; or

(5) we apply an amount equal to the fair value of the Property sold to the purchase of Property or to the retirement of our or any of our Subsidiaries' long-term Indebtedness within 120 days of the effective date of any such sale and lease-back transaction. In lieu of applying such amount to such retirement, we may, or may cause any of our Subsidiaries to, deliver debt securities to the Trustee therefor for cancellation, such debt securities to be credited at the cost thereof to us.

Notwithstanding the foregoing, we and any of our Subsidiaries may enter into any sale lease-back transaction which would otherwise be subject to the foregoing restrictions if after giving effect thereto and at the time of determination, Exempted Debt does not exceed the greater of (a) 35% of Consolidated Net Worth calculated as of the closing date of the sale-leaseback transaction or (b) 35% of Consolidated Net Worth calculated as of the first issue date of the notes.

Events of Default

Event of default means, with respect to each series of notes, any of the following:

- default in the payment of any interest on the notes of that series when it becomes due and payable, and continuance of such default for a period of 30 days (unless the entire amount of the payment is deposited by us with the Trustee or with the principal paying agent prior to the expiration of the 30-day period);

- default in the payment of principal of the notes of that series at their maturity;

- default in the performance or breach of any other covenant or warranty by us in the Indenture (other than defaults pursuant to the previous two bullet points above or pursuant to a covenant or warranty that has been included in the Indenture solely for the benefit of a series of debt securities other than that series of notes), which default continues uncured for a period of 90 days after we receive written notice from the Trustee or we and the Trustee receive written notice from the holders of not less than a majority in principal amount of the outstanding Notes of the affected series as provided in the Indenture; or

- certain voluntary or involuntary events of bankruptcy, insolvency or reorganization of our company.

No event of default with respect to the Notes (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of an event of default may constitute an event of default under our bank credit agreements in existence from time to time. In addition, the occurrence of certain events of default or an acceleration under the Indenture may constitute an event of default under certain of our other indebtedness outstanding from time to time.

We will provide the Trustee written notice of any default or event of default within 30 days of becoming aware of the occurrence of such default or event of default, which notice will describe in reasonable detail the status of such default or event of default and what action we are taking or propose to take in respect thereof.

If an event of default with respect to a series of Notes occurs and is continuing (other than an event of default regarding certain events of bankruptcy, insolvency or reorganization of our company), then the Trustee or the holders of not less than a majority in principal amount of the outstanding Notes of that series may, by a notice in writing to us (and to the Trustee if given by the holders), declare to be due and payable immediately the principal of, and accrued and unpaid interest, if any, on all Notes of that series. In the case of an event of default resulting from certain events of bankruptcy, insolvency or reorganization, the principal of and accrued and unpaid interest, if any, on all outstanding debt securities issued under the Indenture will become and be immediately due and payable without any declaration or other act on the part of the Trustee or any holder of outstanding debt securities, including the Notes. At any time after a declaration of acceleration with respect to a series of Notes has been made, and before a judgment or decree for payment of the money due has been obtained by the Trustee, the holders of a majority in principal amount of the outstanding Notes of that series may, by written notice to us and the Trustee, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal and interest, if any, with respect to the Notes of that series, have been cured or waived as provided in the Indenture.

The Indenture provides that the Trustee will be under no obligation to exercise any of its rights or powers under the Indenture at the request of any holder of notes, unless the Trustee receives indemnity satisfactory to it against any cost, liability or expense which might be incurred by it in exercising such right or power. Subject to certain rights of the Trustee, the holders of a majority in principal amount of the outstanding Notes of the affected series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Notes of that series.

No holder of any Note of any series will have any right to institute any proceeding, judicial or otherwise, with respect to the Indenture, or for the appointment of a receiver or Trustee, or for any remedy under the Indenture unless, among other things:

- that holder has previously given to the Trustee written notice of a continuing event of default with respect to the Notes of that series; and

- the holders of at least a majority in principal amount of the outstanding Notes of that series have made written request, and offered reasonable indemnity or security, to the Trustee to institute the proceeding as Trustee, and the Trustee has not received from the holders of a majority in principal amount of the outstanding Notes of that series a direction inconsistent with that request and has failed to institute the proceeding within 60 days.

Notwithstanding any other provision in the Indenture, the holder of any Note will have an absolute and unconditional right to receive payment of the principal of, premium and any interest on that Note on or after the due dates expressed in that Note and to institute suit for the enforcement of any such payment.

If any securities are outstanding under the Indenture, the Indenture requires us, within 120 days after the end of each fiscal year, to furnish to the Trustee a statement as to our compliance with the indenture. If a default or event of default occurs and is continuing with respect to notes of any series and if it is known to a responsible officer of the Trustee, the Trustee shall deliver to each holder of the Notes of that series notice of a default or event of default within 90 days after it occurs. The Indenture provides that the Trustee may withhold notice to the holders of the Notes of any default or event of default (except in the case of a default or event of default in payment of principal of or interest on any Note of that series) with respect to Notes of that series if it in good faith determines that withholding notice is in the interest of the holders of those Notes.

Modification and Waiver

We and the Trustee may modify and amend the Indenture or Notes of any series without the consent of any holder of Notes:

- to cure any ambiguity, defect or inconsistency;
- to comply with the covenant described below under the heading "—Consolidation, Merger and Sale of Assets;"
- to provide for uncertificated notes in addition to or in place of certificated notes;
- to add guarantees with respect to Notes of any series or secure notes of any series;
- to surrender any of our rights or powers under the Indenture;
- to add covenants or events of default for the benefit of the holders of Notes of any series;
- to comply with the applicable procedures of the applicable depositary;
- to make any change that would not adversely affect the rights of any holder of Notes in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of additional Notes of any series as permitted by the Indenture;
- to effect the appointment of a successor trustee with respect to the Notes and to add to or change any of the provisions of the Indenture to provide for or facilitate administration by more than one trustee; or
- to comply with requirements of the U.S. Securities and Exchange Commission in order to effect or maintain the qualification of the Indenture under the U.S. Trust Indenture Act of 1939.

We may also modify and amend the Indenture with the consent of the holders of at least a majority in principal amount of the outstanding Notes of each series affected by the modifications or amendments. We may not make any modification or amendment without the consent of the holders of each affected Note then outstanding if that amendment will:

- reduce the amount of Notes whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest (including any additional amounts) on the Notes;
- reduce the principal of or premium on or change the fixed maturity of the Notes;
- waive a default in the payment of the principal of, premium or interest on the notes (except a rescission of acceleration of the notes by the holders of at least a majority in aggregate principal amount of the then outstanding Notes of that series and a waiver of the payment default that resulted from such acceleration);
- make the principal of or interest on the Notes payable in currency other than that stated in the Notes;
- make any change to certain provisions of the Indenture relating to, among other things, the right of holders of the Notes to receive payment of the principal of, premium and interest on the Notes and to institute suit for the enforcement of any such payment and to waivers or amendments; or
- waive a redemption payment with respect to the Notes.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding Notes of the affected series may, on behalf of the holders of all the Notes of that series, waive our compliance with provisions of the Indenture. The holders of a majority in principal amount of the outstanding Notes of the affected series may, on behalf of the holders of all the Notes of such series, waive any past default under the Indenture with respect to that series and its consequences, except a default in the payment of the principal of, premium or any interest on any Note of that series; provided, however, that the holders of a majority in principal amount of the outstanding Notes of the affected series may rescind an acceleration and its consequences, including any related payment default that resulted from such acceleration.

No amendment to cure any ambiguity, defect or inconsistency in the Indenture made solely to conform the Indenture to the description of notes contained in the applicable prospectus supplement will be deemed to adversely affect the interests of the holders of the Notes.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge with or into, or convey, transfer or lease all or substantially all of our properties and assets to, any person, which we refer to as a "successor person," unless:

- we are the surviving corporation or the successor person (if other than Amgen) is organized and validly existing under the laws of any U.S. domestic jurisdiction and expressly assumes, pursuant to a supplemental Indenture, our obligations on the notes and under the Indenture; and
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing under the Indenture.

Notwithstanding the foregoing, any of our Subsidiaries may consolidate with, merge into or transfer all or part of its properties and assets to us.

Defeasance and Covenant Defeasance

Legal Defeasance

The Indenture provides that we may be discharged from any and all obligations in respect of the Notes (subject to certain exceptions). We will be so discharged upon the deposit with the Trustee, in trust, of money, U.S. government obligations and/or foreign government obligations that, through the payment of interest and principal in accordance with their terms, will provide money, U.S. government obligations or foreign government obligations in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of, premium and interest on the Notes on the stated maturity of those payments in accordance with the terms of the Indenture and the Notes.

This discharge may occur only if, among other things, we have delivered to the Trustee an opinion of counsel stating that we have received from, or there has been published by, the IRS a ruling or, since the date of execution of the Indenture, there has been a change in the applicable U.S. federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the Notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge had not occurred.

Defeasance of Certain Covenants

The Indenture provides that upon compliance with certain conditions:

- we may omit to comply with the covenant described under the heading "—Consolidation, Merger and Sale of Assets" and certain other covenants set forth in the Indenture, as well as any additional covenants set forth in the applicable prospectus supplement; and

- any omission to comply with those covenants will not constitute a default or an event of default with respect to the Notes, which we refer to as a "covenant defeasance."

The conditions include:

- depositing with the Trustee money, U.S. government obligations and/or foreign government obligations that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of, premium and interest on the notes on the stated maturity of those payments in accordance with the terms of the Indenture and the Notes; and

- delivering to the Trustee an opinion of counsel to the effect that the holders of the Notes will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to U.S. federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred.

Covenant Defeasance and Events of Default

In the event we exercise our option to effect covenant defeasance with respect to any series of the Notes and the Notes of that series are declared due and payable because of the occurrence of any event of default, the amount of money, U.S. government obligations and/or foreign government obligations on deposit with the Trustee will be sufficient to pay amounts due on the Notes of that series at the time of their stated maturity but may not be sufficient to pay amounts due on the notes of that series at the time of the acceleration resulting from the event of default. In such a case, we would remain liable for those payments.

Concerning the Trustee

The Bank of New York Mellon Trust Company, N.A. is Trustee under the Indenture.

Governing Law

The Indenture and the Notes, including any claim or controversy arising out of or relating to the Indenture or the Notes, are governed by the laws of the State of New York.

Form of Award Notice

[*The information set forth in this Award Notice will be contained on the related pages on Merrill Lynch Benefits Website (or the website of any successor company to Merrill Lynch Bank & Trust Co., FSB). This Award Notice shall be replaced by the equivalent pages on such website. References to Award Notice in this Agreement shall then refer to the equivalent pages on such website.*]

This notice of Award (the "Award Notice") sets forth certain details relating to the grant by the Company to you of the Award identified below, pursuant to the Plan. The terms of this Award Notice are incorporated into the Agreement that accompanies this Award Notice and made part of the Agreement. Capitalized terms used in this Award Notice that are not otherwise defined in this Award Notice have the meanings given to such terms in the Agreement.

Employee:
Employee ID:
Address:
Award Type:
Grant ID:
Plan: Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, as amended and/or restated from time to time
Grant Date:
Grant Price: $_____
Number of Shares
Covered by Option:
Expiration Date: The [_____ (__th)] anniversary of the Grant Date
Vesting Date: Means the vesting date indicated in the Vesting Schedule
Vesting Schedule: Means the schedule of vesting set forth under Vesting Details
Vesting Details: Means the presentation (tabular or otherwise) of the Vesting Date and the quantity of Shares vesting.

IMPORTANT NOTICE REGARDING ACCEPTANCE OF THE AWARD AND THE REQUIREMENT TO OPEN A BROKERAGE ACCOUNT[1]:

***RESIDENTS OF THE U.S. AND PUERTO RICO*:** Please read this Award Notice, the Plan and the Agreement (collectively, the "Grant Documents") carefully. If you, as a resident of the U.S. or Puerto Rico, do **not** wish to receive this Award and/or you do **not** consent and agree to the terms and conditions on which this Award is offered, as set forth in the Grant Documents, then you must reject the Award by contacting the Merrill Lynch call center (800) 97AMGEN (800-972-6436) within the U.S., Puerto Rico and Canada or +1 (609) 818-8910 from all other countries (Merrill Lynch will accept the charges for your call) no later than the forty-fifth calendar day following the day on which this Award Notice is made available to you, in which case the Award will be cancelled. For the purpose of determining the forty-five calendar days, Day 1 will be the day **immediately** following the day on which this Award Notice is made available to you. Your failure to notify the Company of your rejection of the Award within this specified period will constitute your acceptance of the Award and your agreement with all terms and conditions of the Award, as set forth in the Grant Documents. If you agree to the terms and conditions of your grant and you desire to accept it, then no further action is needed on your part to accept the grant. However, you must still open a brokerage account as directed by the Company, by 1:00 pm Pacific Time on or before the date that is 11 months after the date of

[1] *This provision is only for use on the form of grant used for the U.S. and Puerto Rico.*

grant. This step is necessary to process transactions related to your equity grant. **If you do not open a brokerage account by this deadline, your grant will be cancelled.**

GRANT OF STOCK OPTION AGREEMENT

THE SPECIFIC TERMS OF YOUR STOCK OPTION ARE FOUND IN THE PAGES RELATING TO THE GRANT OF STOCK OPTIONS FOUND ON MERRILL LYNCH BENEFITS WEBSITE (OR THE WEBSITE OF ANY SUCCESSOR COMPANY TO MERRILL LYNCH BANK & TRUST CO., FSB) (THE "AWARD NOTICE") WHICH ACCOMPANIES THIS DOCUMENT. THE TERMS OF THE AWARD NOTICE ARE INCORPORATED INTO THIS GRANT OF STOCK OPTIONS.

On the Grant Date, specified in the Award Notice, Amgen Inc., a Delaware corporation (the "Company"), has granted to you, the grantee named in the Award Notice, under the plan specified in the Award Notice (the "Plan"), an option (the "Option") to purchase the number of shares of the $0.0001 par value common stock of the Company (the "Shares") specified in the Award Notice, pursuant to the terms set forth in this Stock Option Agreement, any additional terms and conditions for your country set forth in the attached Appendix A and the Award Notice (together, the "Agreement"). This Option is not intended to qualify and will not be treated as an "incentive stock option" within the meaning of Section 422 of the U.S. Internal Revenue Code of 1986, as amended (together with the regulations and other official guidance promulgated thereunder, the "Code"). Capitalized terms not defined herein shall have the meanings assigned to such terms in the Plan.

The terms and conditions of your Option are as follows:

I. Subject to the terms and conditions of the Plan and this Agreement, on each Vesting Date the Option shall vest with respect to the number of Shares indicated on the Vesting Schedule, provided that you have remained continuously and actively employed with the Company or an Affiliate (as defined in the Plan) through each applicable Vesting Date, unless [(i) your employment has terminated due to your Voluntary Termination (as defined in Section IV(A)(5)) or (ii)]*[2] you experience a Qualified Termination (as defined in Section IV(B)(4)), or as otherwise determined by the Company in the exercise of its discretion as provided in Section IV(A)(7). This Option may only be exercised for whole shares of the Common Stock, and the Company shall be under no obligation to issue any fractional Shares to you. Subject to the limitations contained herein, this Option shall be exercisable with respect to each installment on or after the applicable Vesting Date. Notwithstanding anything herein to the contrary, the Vesting Schedule may be accelerated (by notice in writing) by the Company in its sole discretion at any time during the term of this Option. In addition, if not prohibited by local law, vesting may be suspended by the Company in its sole discretion during a leave of absence as provided from time to time according to Company policies and practices; provided, that, in no event shall any such suspension extend the term of this Option beyond the Expiration Date set forth on the Award Notice and in this Agreement.

[2] *Section IV(A)(5) of this Agreement is not applicable to awards identified by the Administrator as new hire, retention or promotion grants and the provisions of such section shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

II. (1) The per share exercise price of this Option is the Grant Price as defined in the Award Notice, being not less than the Fair Market Value of the Common Stock on the date of grant of this Option.

(2) To the extent permitted by applicable statutes and regulations, payment of the exercise price per share is due in full upon exercise of all or any part of each installment which has become exercisable by you by means of (i) cash or a check, (ii) any cashless exercise procedure through the use of a brokerage arrangement approved by the Company, or (iii) any other form of legal consideration that may be acceptable to the Board or the Committee in their discretion.

(3) To the extent permitted by applicable statutes and regulations, if, at the time of exercise, the Company's Common Stock is publicly traded and quoted regularly in the Wall Street Journal, payment of the exercise price may be made by delivery of already-owned Shares with a Fair Market Value equal to the exercise price of the Shares for which this Option is being exercised. The already-owned Shares must have been owned by you for the period required to avoid adverse accounting treatment and owned free and clear of any liens, claims, encumbrances or security interests. Payment may also be made by a combination of cash and already-owned Shares.

Notwithstanding the foregoing, the Company reserves the right to restrict the methods of payment of the exercise price if necessary or advisable to comply with applicable law or regulation, as determined by the Company in its sole discretion.

III. Notwithstanding anything to the contrary contain herein, the Company shall not take any actions that would violate the Securities Act, the Exchange Act, the Code, or any other securities or tax or other applicable law or regulation, or the rules of any Securities Exchange. The Company, in its sole discretion, may impose any timing or other restrictions with respect to the exercise of this Option arising from compliance with any securities or tax laws or other rules or regulations. Notwithstanding anything to the contrary contained herein, this Option may not be exercised and no Shares underlying the Option will be issued unless such Shares are then registered under the Securities Act, or, if such Shares are not then so registered, the Company has determined that such exercise and issuance would be exempt from the registration requirements of the Securities Act, and that the issuance satisfies all other applicable legal requirements. If the Option cannot be exercised and expires during this period, you will forfeit the Option and no Shares or value will be transferred to you.

IV. (A) The term of this Option commences on the Grant Date and, unless sooner terminated as set forth below or in the Plan, terminates on the [_____ (__th)] anniversary of the Grant Date (the "Expiration Date"). This Option shall terminate prior to the Expiration Date as follows: three (3) months after the termination of your employment with the Company or an Affiliate (as defined in the Plan) for any reason or for no reason, including if your employment is terminated by the Company or an Affiliate without Cause (as defined below), or in the event of

any other termination of your employment caused directly or indirectly by the Company or an Affiliate, unless:

(1) such termination of your employment is due to your Permanent and Total Disability (as defined below), in which case the Option shall terminate on the earlier of the Expiration Date or five (5) years after termination of your employment and the vesting of the Option shall be accelerated and the Option shall be fully exercisable, subject to your execution of a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company), as of the day immediately preceding such termination of your employment with respect to the Option, except that if the Option was granted in the calendar year in which such termination occurs, the Option shall be accelerated to vest with respect to a number of Shares equal to the number of Shares subject to the Option multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any portion of the Option (if any) that remains unvested shall automatically expire and terminate on the date of the termination of your active employment due to your Permanent and Total Disability without consideration therefor;

(2) such termination of your employment is due to your death, in which case the Option shall terminate on the earlier of the Expiration Date or five (5) years after your death and the vesting of the Option shall be accelerated and the Option shall be fully exercisable as of the day immediately preceding your death with respect to the Option, except that if the Option was granted in the calendar year in which your death occurs the Option shall be accelerated to vest with respect to a number of Shares equal to the number of Shares subject to the Option multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any portion of the Option (if any) that remains unvested shall automatically expire and terminate on the date of termination of your active employment due to your death without consideration therefor;

(3) during any part of such three (3) month period, this Option is not exercisable solely because of the condition set forth in Section III above, in which event this Option shall not terminate until the earlier of the Expiration Date or until it shall have been exercisable for an aggregate period of three (3) months after the termination of your employment;

(4) exercise of this Option within three (3) months after termination of your employment with the Company or with an Affiliate would result in liability under Section 16(b) of the Exchange Act, in which case this Option will terminate on the earliest of: (a) the tenth (10th) day after the last date upon which exercise would result in such liability; (b) six (6)

months and ten (10) days after the termination of your employment with the Company or an Affiliate; or (c) the Expiration Date;

(5) [such termination of your employment is due to your voluntary termination (and such voluntary termination is not the result of Permanent and Total Disability (as defined below)) after you are at least sixty five (65) years of age, or after you are at least fifty-five (55) years of age and have been an employee of the Company and/or an Affiliate for at least ten (10) years in the aggregate as determined by the Company in its sole discretion according to Company policies and practices as in effect from time to time ("Voluntary Termination"), in which case this Option shall terminate on the earlier of the Expiration Date or five (5) years after termination of your employment and the unvested portions of this Option will become exercisable pursuant to the Vesting Schedule without regard to your Voluntary Termination of your employment prior to the Vesting Date, subject to your execution of a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company), with respect to the Option; if the Option was granted in the calendar year in which your Voluntary Termination occurs, the Option will become exercisable pursuant to the Vesting Schedule only with respect to a number of Shares equal to the number of Shares subject to the Option multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any portion of the Option (if any) that remains unvested shall automatically expire and terminate on the date of the termination of your active employment due to your Voluntary Termination without consideration therefor; notwithstanding the definition of Voluntary Termination set forth above, if the Company receives an opinion of counsel that there has been a legal judgment and/or legal development in your jurisdiction that would likely result in the favorable treatment upon Voluntary Termination described above being deemed unlawful and/or discriminatory, then the Committee will not apply the favorable treatment described above;][Reserved]* [3]

(6) such termination of your employment is due to a Qualified Termination, in which case, the Option shall terminate on the earlier of (a) the date that is three (3) months following the date of such Qualified Termination or (b) the Expiration Date, and, to the extent permitted by applicable law, the vesting of the Option shall be accelerated and the Option shall be fully exercisable as of the day immediately prior to the Qualified Termination; or

(7) the Company determines, in its sole discretion at any time during the term of this Option, in writing, to otherwise extend the period of time during which this Option will vest and may be exercised after termination of your employment; provided, that, in no event shall any such extension extend the term of this Option beyond the Expiration Date set forth on the Award Notice and in this Agreement.

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[3] *Section IV(A)(5) of this Agreement is not applicable to awards identified by the Administrator as new hire, retention or promotion grants and the provisions of such section shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

However, in any and all circumstances and except to the extent the Vesting Schedule has been accelerated by the Company in its sole discretion during the term of this Option or as a result of your Permanent and Total Disability or death as provided in Sections IV(A)(1) or IV(A)(2) above, respectively, [as a result of your Voluntary Termination as provided in Section IV(A)(5) above,]* as a result of a Qualified Termination as provided in Section IV(A)(6) above or as otherwise determined by the Company in the exercise of its discretion as provided in Section IV(A)(7) above, this Option may be exercised following termination of your employment only as to that number of Shares as to which it was exercisable on the date of termination of your employment under the provisions of Section I of this Agreement.

(B) For purposes of this Option:

(1) "termination of your employment" shall mean the last date you are either an active employee of the Company or an Affiliate or actively engaged as a Director to the Company or an Affiliate; in the event of termination of your employment (whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), your right to receive options and vest under the Plan, if any, will terminate effective as of the date that you are no longer actively employed and will not be extended by any notice period (*e.g.*, active employment would not include any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any). Your right, if any, to exercise the Option after termination of employment will be measured by the date of termination of your active employment and will not be extended by any notice period mandated under local law. The Administrator shall have the exclusive discretion to determine when you are no longer actively providing services for purposes of this Agreement (including whether you may still be considered to be providing services while on a leave of absence);

(2) "Cause" shall mean (i) your conviction of a felony (or similar crime under applicable law, as determined by the Company), or (ii) your engaging in conduct that constitutes willful gross neglect or willful gross misconduct in carrying out your duties, resulting, in either case, in material economic harm to the Company or any Affiliate, unless you believed in good faith that such conduct was in, or not contrary to, the best interests of the Company or any Affiliate. For purposes of clause (ii) above, no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith;

(3) "Permanent and Total Disability" shall have the meaning ascribed to such term under Section 22(e)(3) of the Code and with such permanent and total disability being certified prior to termination of your employment by (a) the U.S. Social Security Administration, (b) the comparable governmental authority applicable to an Affiliate, (c) such other body having the relevant decision-making power applicable to an Affiliate, or (d) an independent medical advisor appointed by the Company in its sole discretion, as applicable, in any such case;

(4) "Qualified Termination" shall mean

(a) if you are an employee who participates in the Change of Control Plan (as defined below), your termination of employment within two (2) years following a Change of Control (i) by the Company other than for Cause, Disability (as defined below) or as a result of your death, or (ii) by you for Good Reason (as defined in the Change of Control Plan); or

(b) if you are an employee who does not participate in the Change of Control Plan or the Change of Control Plan is no longer in effect, your termination of employment within two (2) years following a Change of Control by the Company other than for Cause, Disability (as defined below) or as a result of your death;

(5) "Change of Control" shall mean the occurrence of any of the following:

(a) the acquisition (other than from the Company) by any person, entity or "group," within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act (excluding, for this purpose, the Company or any of its Affiliates, or any employee benefit plan of the Company or any of its Affiliates which acquires beneficial ownership of voting securities of the Company), of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of fifty percent (50%) or more of either the then outstanding Shares or the combined voting power of the Company's then outstanding voting securities entitled to vote generally in the election of directors; or

(b) the consummation by the Company of a reorganization, merger, consolidation, (in each case, with respect to which persons who were the stockholders of the Company immediately prior to such reorganization, merger or consolidation do not, immediately thereafter, own more than fifty percent (50%) of the combined voting power entitled to vote generally in the election of directors of the reorganized, merged or consolidated company's then outstanding voting securities) or a liquidation or dissolution of the Company or of the sale of all or substantially all of the assets of the Company.

Notwithstanding anything herein or in any Award Agreement to the contrary, if a Change of Control constitutes a payment event with respect to any Award that is subject to United States income tax and which provides for a deferral of compensation that is subject to Section 409A of the Code, the transaction or event described in subsection (a) or (b), (c) above must also constitute a "change in control event," as defined in U.S. Treasury Regulation §1.409A-3(i)(5), in order to constitute a Change of Control for purposes of payment of such Award.

(6) "Change of Control Plan" shall mean the Company's change of control and severance plan, including the Amgen Inc. Change of Control Severance Plan, as amended and restated, effective as of December 9, 2010 (and any subsequent amendments thereto), or any equivalent plan governing the provision of benefits to eligible employees upon the occurrence of a Change of Control (including resulting from a termination of employment that occurs within a specified time period following a Change of Control), as in effect immediately prior to a Change of Control; and

(7) "Disability" shall be determined in accordance with the Company's long-term disability plan as in effect immediately prior to a Change of Control.

V. (A) To the extent specified above, this Option may be exercised by delivering a notice of exercise in person, by mail, via electronic mail or facsimile or by other authorized method designated by the Company, together with the exercise price to the Company Stock

Administrator, or to such other person as the Company Stock Administrator may designate, during regular business hours, together with such additional documents as the Company may then require pursuant to Section 7.2(b) of the Plan.

(B) Regardless of any action the Company or your actual employer (the "Employer") takes with respect to any or all income tax (including federal, state and local taxes), social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items related to your participation in the Plan and legally applicable to you ("Tax Obligations"), you acknowledge that the ultimate liability for all Tax Obligations is and remains your responsibility and may exceed the amount, if any, actually withheld by the Company and/or your Employer. You further acknowledge that the Company and/or your Employer: (a) make no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Option grant or the underlying Shares, including, but not limited to, the grant, vesting or exercise of the Option, the subsequent sale of Shares acquired pursuant to such exercise and the receipt of any dividends; and (b) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Option to reduce or eliminate your liability for Tax Obligations or achieve any particular tax result. Furthermore, if you become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or your Employer (or former employer, as applicable) may be required to withhold or account for Tax Obligations in more than one jurisdiction.

(C) Prior to any relevant taxable or tax withholding event, as applicable, you shall pay or make adequate arrangements satisfactory to the Company and/or your Employer to satisfy all Tax Obligations. In this regard, you authorize the Company and/or your Employer, or their respective agents, at their discretion, to satisfy all applicable Tax Obligations by one or a combination of the following:

(1) withholding from your wages or other cash compensation paid to you by the Company and/or your Employer;

(2) withholding from proceeds of the sale of Shares acquired upon exercise of the Option either through your voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization); or

(3) withholding in Shares issuable, or cash to be paid, upon exercise of the Option, provided that, if such Shares are withheld, the Company and your Employer shall only withhold an amount of Shares with a fair market value not to exceed the Tax Obligations as determined in the discretion of the Company or your Employer, as applicable.

Depending on the withholding method, the Company may withhold or account for Tax Obligations by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates. If the Tax Obligations are satisfied by withholding in Shares, for tax purposes you are deemed to have been issued the full number of Shares subject to the exercised Option, notwithstanding that a number of the Shares is held back and not issued solely for the purpose of paying the Tax Obligations due as a result of any aspect of your participation in the Plan.

(D) Finally, you shall pay to the Company or your Employer any amount of Tax Obligations that the Company or your Employer may be required to withhold or account for as a result of your participation in the Plan that cannot be or were not satisfied by the means previously described. You agree to take any further actions and execute any additional documents as may be necessary to effectuate the provisions of this Section V. Notwithstanding anything to the contrary contained herein, the Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares if you fail to comply with your obligations in connection with the Tax Obligations.

VI. This Option is not transferable, except by will or the laws of descent and distribution, and is exercisable during your life only by you except if you have named a trust created for the benefit of you, your spouse, or members of your immediate family (a "Trust") as beneficiary of this Option, this Option may be exercised by the Trust after your death.

VII. Any notices provided for in this Option or the Plan shall be given in writing or electronically and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail or equivalent foreign postal service, postage prepaid, addressed to you at such address as is currently maintained in the Company's records or at such other address as you hereafter designate by written notice to the Company Stock Administrator. Such notices may be given using any automated system for the documentation, granting or exercise of Awards, such as a system using an internet website or interactive voice response, as approved by the Company.

VIII. This Option is subject to all the provisions of the Plan and its provisions are hereby made a part of this Option, including without limitation the provisions of Articles 6 and 7 of the Plan relating to Options, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of this Option and those of the Plan, the provisions of the Plan shall control.

IX. ***In order for the Company to facilitate your participation in the Plan, the Company and your Employer must collect and use personal data about you. In accordance with applicable laws, reasonable security measures will be implemented and maintained to protect the security of your personal data; however, you understand that absolute security cannot be guaranteed.***

You understand that the Company and your Employer may hold certain personal information about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor, for the purposes of implementing, administering and managing the Plan ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your

participation in the Plan to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received upon exercise of this Option may be deposited. You understand that such authorized recipients of your personal data may be located in countries that do not provide the same level of data privacy laws and protections as the country in which your personal data originated. Transfers of personal data among Company and its group entities follow applicable laws and our Binding Corporate Rules (BCRs). For more information on Company's BCRs, please visit http://www.amgen.com/bcr/. You acknowledge that the collection, use and transfer of your personal data is necessary to facilitate to your participation in the Plan, as well as to grant you Options or other equity awards and administer or maintain such awards.

You may correct or update your personal data previously provided to Company, by completing the form located at https://preferences.amgen.com. Subject to applicable law, you may have additional rights, including the right to object and/or request destruction of your personal data. To exercise these rights, where applicable, please contact your local human resources representative.

X. The terms of this Option shall be governed by the laws of the State of Delaware without giving effect to principles of conflicts of laws. For purposes of litigating any dispute that arises hereunder, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the courts of the State of Delaware, or the federal courts for the United States for the federal district located in the State of Delaware, and no other courts, where this Option is made and/or to be performed.

XI. Notwithstanding any provision of this Option to the contrary, if you are employed by the Company or an Affiliate in any of the countries identified in the attached Appendix A (which constitutes a part of this Agreement), are subject to the laws of any foreign jurisdiction, or relocate to one of the countries included in the attached Appendix A, the Option granted hereunder shall be subject to any additional terms and conditions for your country set forth in Appendix A and the following additional terms and conditions:

a. the terms and conditions of this Option, including Appendix A, are deemed modified to the extent necessary or advisable to comply with applicable foreign laws or facilitate the administration to the Plan;

b. if applicable, the effectiveness of this Option is conditioned upon its compliance with any applicable foreign laws, regulations, rules or local governmental regulatory exemption and subject to receipt of any required foreign regulatory approvals; and

c. the Company may take any other action before or after the date of this Option that it deems advisable to obtain approval or comply with any necessary local governmental regulatory exemptions or approvals.

XII. (A) In accepting this Option, you acknowledge, understand and agree that:

(1) the Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, as provided in the Plan;

(2) the grant of this Option is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of options, or benefits in lieu of options even if options have been awarded in the past;

(3) all decisions with respect to future awards, if any, will be at the sole discretion of the Company;

(4) your participation in the Plan is voluntary;

(5) the grant of Options, the underlying Shares, and the income from and value of same, are not intended to replace any pension rights or compensation;

(6) neither the grant of options nor any provision of this Option, the Plan or the policies adopted pursuant to the Plan confer upon you any right with respect to employment or continuation of current employment and shall not interfere with the ability of your Employer to terminate your employment or service relationship (if any) at any time;

(7) in the event that you are not an employee of the Company or any Affiliate, the Option shall not be interpreted to form an employment contract or relationship with the Company or any Affiliate;

(8) the future value of the underlying Shares is unknown, indeterminable, and cannot be predicted with certainty;

(9) if the underlying Shares do not increase in value, this Option will have no value; if you exercise this Option and obtain Shares, the value of those Shares acquired upon exercise may increase or decrease in value, even below the Grant Price per Share;

(10) in consideration of the grant of this Option, no claim or entitlement to compensation or damages arises from forfeiture of options resulting from termination of your employment by the Company or an Affiliate (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), and you irrevocably release the Company and your Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, you shall be deemed irrevocably to have waived your entitlement to pursue such claim;

(11) unless otherwise agreed with the Company, the Options, the underlying Shares, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company;

(12) except as otherwise provided in this Agreement or the Plan, the Options and the benefits evidenced by this Agreement do not create any entitlement to have the Options or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; and

(13) the following provisions apply only if you are providing services outside the United States:

(i) for employment law purposes outside the United States, the Option, underlying Shares, and the income from and value of same, are not part of normal or

expected compensation or salary for any purpose, including but not limited to for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, holiday pay, long-service awards, pension or retirement benefits or similar mandatory payments; and

(ii) neither the Company, your Employer nor any Affiliate of the Company shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Option or of any amounts due to you pursuant to the exercise of the Option or the subsequent sale of any Shares acquired upon exercise of the Option.

(B) The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying Shares. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

XIII. If one or more of the provisions of this Option shall be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and the invalid, illegal or unenforceable provisions shall be deemed null and void; however, to the extent permissible by law, any provisions which could be deemed null and void shall first be construed, interpreted or revised retroactively to permit this Option to be construed so as to foster the intent of this Option and the Plan.

XIV. By electing to accept this Agreement, you acknowledge that you are sufficiently proficient in English, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Furthermore, if you have received this Option or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

XV. This Option is not intended to constitute “nonqualified deferred compensation” within the meaning of Code Section 409A, but rather is intended to be exempt from the application of Code Section 409A. To the extent that this Option is nevertheless deemed to be subject to Code Section 409A for any reason, this Option shall be interpreted in accordance with Code Section 409A and U.S. Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Grant Date. Notwithstanding any provision herein to the contrary, in the event that following the Grant Date, the Committee (as defined in the Plan) determines that this Option may be or become subject to Code Section 409A, the Committee may adopt such amendments to the Plan and/or this Option or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Committee determines are necessary or appropriate to (a) exempt the Plan and/or this Option from the application of Code Section 409A and/or preserve the intended tax treatment of the benefits provided with respect to this Option, or (b) comply with the requirements of Code Section 409A; provided, however, that this paragraph shall not create an obligation on the part of the Committee to adopt any such amendment, policy or procedure or take any such other action.

XVI. By electing to accept this Option, you acknowledge receipt of this Option and hereby confirm your understanding that the terms set forth in this Option constitute, subject to the terms of the Plan, which terms shall control in the event of any conflict between the Plan and this Option, the entire agreement and understanding of the parties with respect to the matters contained herein and supersede any and all prior agreements, arrangements and understandings,

both oral and written, between the parties concerning the subject matter of this Option. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan (including this Agreement) by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

XVII. The Company reserves the right to impose other requirements on your participation in the Plan, on this Option and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

XVIII. This Option and all compensation payable with respect to it shall be subject to recovery by the Company pursuant to any and all of the Company's policies with respect to the recovery of compensation, as they shall be in effect and may be amended from time to time, to the maximum extent permitted by applicable law.

XIX. You acknowledge that a waiver by the Company of breach of any provision of this Option shall not operate or be construed as a waiver of any other provision of this Option, or of any subsequent breach by you or any other grantee.

Very truly yours,

AMGEN INC.

By_____
Duly authorized on behalf
of the Board of Directors

APPENDIX A

ADDITIONAL TERMS AND CONDITIONS OF THE AMENDED AND RESTATED AMGEN INC. 2009 EQUITY INCENTIVE PLAN, AS AMENDED AND/OR RESTATED FROM TIME TO TIME

GRANT OF STOCK OPTION (BY COUNTRY)

Certain capitalized terms used but not defined in this Appendix A shall have the meanings set forth in the Plan and/or the Agreement to which this Appendix is attached.

TERMS AND CONDITIONS

This Appendix includes additional terms and conditions that govern any Options granted under the Plan if, under applicable law, you are a resident of, are deemed to be a resident of or are working in one of the countries listed below. Furthermore, the additional terms and conditions that govern any Options granted hereunder may apply to you if you transfer employment and/or residency to one of the countries listed below and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to you.

NOTIFICATIONS

This Appendix also includes notifications relating to exchange control and other issues of which you should be aware with respect to your participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the countries to which this Appendix refers as of October 2021. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the notifications herein as the only source of information relating to the consequences of your participation in the Plan because the information may be outdated when you exercise the Options and acquire Shares under the Plan, or when you subsequently sell Shares acquired under the Plan.

In addition, the notifications are general in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you should seek appropriate professional advice as to how the relevant laws in your country may apply to your situation. Finally, if you are a citizen or resident of a country other than the one in which you are currently residing and/or working or are considered a resident of another country for local law purposes, the information contained herein may not be applicable to you or you may be subject to the provisions of one or more jurisdictions.

ALL NON-U.S. JURISDICTIONS

TERMS AND CONDITIONS

Method of Exercise. The following provision replaces Section II(3):

To the extent permitted by applicable statutes and regulations, payment of the exercise price per Share is due in full in cash or check upon exercise of all or any part of this Option which has become exercisable by you. Due to legal restrictions outside the U.S., you are not permitted to pay the exercise price by delivery of already-owned Shares of a value equal to the exercise price of the Shares for which this Option is being exercised. Furthermore, payment may not be made by a combination of cash and already-owned Common Stock.

Tax Withholding. The following provision supplements Section V(C) of the Agreement:

In the event the Company withholds or accounts for Tax Obligations by considering maximum applicable rates in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash and will not be entitled to the equivalent amount in Shares, or if not refunded, you may seek a refund from the local tax authorities. In the event of under-withholding, you may be required to pay any additional Tax Obligations directly to the applicable tax authority or to the Company and/or your Employer.

NOTIFICATIONS

Insider Trading Restrictions/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the Shares are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares (*e.g.*, Options) or rights linked to the value of Shares during such times as you are considered to have "inside information" regarding the Company (as defined by the laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you place before you possessed inside information. Furthermore you could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You are responsible for ensuring your compliance with any applicable restrictions and you should speak with your personal legal advisor on this matter.

Foreign Asset/Account, Tax Reporting Information. Your country of residence may have certain foreign asset and/or account reporting requirements which may affect your ability to acquire or hold Shares under the Plan or cash received from participating in the Plan (including from any dividends received, or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside of your country. You may be required to report such accounts, assets or transactions to the tax or other authorities in your country. You also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to your country within a certain time after receipt. You are responsible for ensuring your compliance with such regulations, and you should speak with your personal legal advisor on this matter.

ALL EUROPEAN ECONOMIC AREA ("EEA") / EUROPEAN UNION ("EU") JURISDICTIONS, UNITED KINGDOM AND SWITZERLAND

TERMS AND CONDITIONS

Data Privacy Notice. This provision replaces Section IX of the Agreement:

Please refer to the Fair Processing Notice previously provided by your local human resources representative, which notice governs the collection, use and transfer of your personal data necessary for the Company to facilitate your participation in the Plan. If you have any questions or concerns regarding the Fair Processing Notice, including questions about your rights afforded thereunder, you should contact your local human resources representative or send an email to staffing-hrconnect@amgen.com.

For purposes of implementing, administering and managing the Plan, Company and your Employer may hold certain personal data about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your participation in the Plan to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received upon exercise of this Option may be deposited.

ARGENTINA

TERMS AND CONDITIONS

Method of Exercise. Due to legal restrictions in Argentina, you may be required to pay the exercise price for any Shares subject to the Option granted hereunder by a cashless sell-all exercise, such that all Shares will be sold immediately upon exercise and the cash proceeds of sale, less the exercise price, any Tax Obligations and broker's fees or commissions, will be remitted to you. The Company reserves the right to provide additional methods of exercise depending on local developments.

Labor Law Acknowledgement. The following provision supplements Section XII of the Agreement:

In accepting this Option, you acknowledge, understand and agree that the grant of the Option is made by the Company (not your Employer) in its sole discretion and that the value of the Option or any Shares acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law including, but not limited to, the calculation of (i) any labor benefits including, without limitation, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, etc., or (ii) any termination or severance indemnities or similar payments.

NOTIFICATIONS

Securities Law Information. Neither the Option nor the underlying Shares are publicly offered or listed on any stock exchange in Argentina.

Exchange Control Information. Provided you are not required to purchase foreign currency and remit funds out of Argentina to acquire Shares under the Plan, local exchange control restrictions would not apply. However, if so required, you personally are responsible for complying with any and all Argentine currency exchange regulations, approvals and reporting requirements. Exchange control requirements in Argentina are subject to change; you should consult with your personal advisor regarding any obligations you have under the Plan.

Foreign Asset/Account Reporting Information. If you are an Argentine resident, you are required to report certain information regarding any Shares you hold as of December 31 each year to the Argentine tax authorities on your annual tax return.

AUSTRALIA

NOTIFICATIONS

Securities Law Information. If you acquire Shares under the Plan and offer the Shares for sale to a person or entity resident in Australia, the offer may be subject to disclosure requirements under Australian law. You should consult with your own legal advisor before making any such offer in Australia.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to the Options granted under the Plan, such that the Options are intended to be subject to deferred taxation.

Exchange Control Information. If you are an Australian resident, exchange control reporting is required for cash transactions exceeding AUD10,000 and for international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on your behalf. If there is no Australian bank involved in the transfer, you will be required to file the report.

AUSTRIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you are an Austrian resident and you hold Shares acquired under the Plapn outside of Austria, you may be subject to reporting obligations to the Austrian National Bank.

Exchange Control Information. A separate reporting requirement applies when you sell Shares acquired under the Plan or receive a cash dividend paid on such Shares. In that case, there may be exchange control obligations if the cash proceeds are held outside of Austria. If the transaction volume of all cash accounts abroad meets or exceeds a specified threshold, the movements and balances of all accounts must be reported monthly, as of the last day of the month, on or before the 15th day of the following month, on the prescribed form (*Meldungen SI-Forderungen und/oder SI-Verpflichtungen*).

BELGIUM

NOTIFICATIONS

Taxation of the Option. Your tax consequences will vary depending on when you accept the Option. If you accept the Option in writing within 60 days of the offer date, you will be subject to taxation on the 60th day after the offer date. If you accept the Option more than 60 days after the offer date, you will be subject to taxation at exercise. Please refer to the additional materials that will be delivered to you for a more detailed description of the tax consequences of accepting the Option. You should consult your personal tax advisor prior to accepting the Option.

Tax Reporting; Foreign Asset/Account Reporting Information. If you are a Belgian resident, you are required to report any taxable income attributable to the Option granted hereunder on your annual tax return. You are also required to report any securities (*e.g.*, Shares acquired under the Plan) held and bank accounts (including brokerage accounts) opened and maintained outside of Belgium on your annual tax return. The first time you report the foreign security and/

or bank account on your annual income tax return you will have to provide the National Bank of Belgium Central Contact Point with the account details of any such foreign accounts (including the account number, bank name and country in which such account was opened) in a separate form. This report, as well as information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the *Kredietcentrales / Centrales des crédits* caption.

Stock Exchange Tax Information. A stock exchange tax applies to transactions executed by a Belgian resident through a non-Belgian financial intermediary, such as a U.S. broker. The stock exchange tax likely will apply when the Option is exercised and when Shares acquired under the Plan are sold. It is your responsibility to comply with this tax obligation and you should consult your personal tax advisor for additional details on your obligations with respect to the stock exchange tax.

Annual Securities Accounts Tax Information. An annual securities accounts tax may be payable if the total value of securities held in a Belgian or foreign securities account (e.g., Shares acquired under the Plan) exceeds a certain threshold on four reference dates within the relevant reporting period (i.e., December 31, March 31, June 30 and September 30). In such case, the tax will be due on the value of the qualifying securities held in such account. It is your responsibility to comply with this obligation and you should consult with your personal tax or financial advisor for additional details.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the Option, you acknowledge that you agree to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the exercise of the Option, the sale of Shares acquired under the Plan and the payment of dividends on such Shares.

Nature of Grant. This provision supplements Section XII of the Agreement:

In accepting this Option, you acknowledge (i) that you are making an investment decision, (ii) that the Options will be exercisable by you only if the vesting conditions are met and any necessary services are rendered by you during the vesting period set forth in the Vesting Schedule, and (iii) that the value of the underlying Shares is not fixed and may increase or decrease in value over the vesting period without compensation to you.

NOTIFICATIONS

Exchange Control Information. If you are resident or domiciled in Brazil, you will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights on December 31 of each year exceeds US$1,000,000. If such amount exceeds US$100,000,000, the referenced declaration must be submitted quarterly, in the month following the end of each quarter. Assets and rights that must be reported include the following: (i) bank deposits; (ii) loans; (iii) financing transactions; (iv) leases; (v) direct investments; (vi) portfolio investments, including Shares acquired under the Plan; (vii) financial derivatives investments; and (viii) other investments, such as real estate. Please note that foreign individuals holding Brazilian visas are considered Brazilian residents for purposes of this reporting requirement and must declare at least the assets held abroad that were acquired subsequent to the date of admittance as a resident of Brazil. Individuals holding assets and rights outside of Brazil valued at less than US$1,000,000 are not required to submit a declaration.

BULGARIA

NOTIFICATIONS

Exchange Control Information. If funds are remitted to purchase Shares abroad, a declaration of the purpose of the remittance must be provided to the local bank that is transferring the funds. If the funds are remitted to a bank outside the European Union and the amount exceeds a specified amount, documentation evidencing the underlying transaction (for instance a copy of the option agreement) must be provided.

Foreign Asset/Account Reporting Information. You will be required to annually file statistical forms with the Bulgarian National Bank regarding your receivables in bank accounts abroad as well as your securities abroad (*e.g.*, Shares acquired under the Plan) if the total sum of all such receivables and securities equals or exceeds a specified amount as of the previous calendar year-end. The reports are due by March 31. You should contact your bank in Bulgaria for additional information regarding this requirement.

CANADA

TERMS AND CONDITIONS

Termination of Employment. Section IV(B)(1) of the Agreement is amended to read as follows:

(1) "termination of your employment" shall mean the last date you are either an active employee of the Company or an Affiliate or actively engaged as Director to the Company or an Affiliate; in the event of involuntary termination of your employment (regardless of the reason for such termination and whether or not later found to be invalid or unlawful, including for breaching employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), your right to receive the Option and vest under the Plan, if any, will terminate effective as of the date that is the earlier of: (1) the date you receive written notice of termination of employment from the Company or your Employer, or (2) the date you are no longer actively employed by the Company or your Employer regardless of any period during which notice, pay in lieu of notice or related payments or damages are provided or required to be provided under local law. Your right, if any, to acquire Shares pursuant to the Option after termination of employment will be measured by the date of termination of your active employment and will not be extended by any notice period mandated under local law. You will not earn or be entitled to any pro-rated vesting for that portion of time before the date on which your right to vest terminates, nor will you be entitled to any compensation for lost vesting. Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued vesting during a statutory notice period, your right to vest in the Options, if any, will terminate effective as of the last day of your minimum statutory notice period, but you will not earn or be entitled to pro-rated vesting if the vesting date falls after the end of your statutory notice period, nor will you be entitled to any compensation for lost vesting;

The following provisions will apply to you if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that this Agreement, as well as all documents, notices, and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Consentement Relatif à la Langue Utilisée. *Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention (« Agreement »), ainsi que de tous documents, avis et procédures*

judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.

Data Privacy Notice. This provision supplements Section IX of the Agreement:

You hereby authorize the Company and the Company's representative to discuss with and obtain all relevant information from all personnel (professional or not) involved in the administration of the Plan. You further authorize the Company, your Employer and Merrill Lynch Bank & Trust Co., FSB (or any other stock plan service provider) to disclose and discuss your participation in the Plan with their advisors. You also authorize the Company and your Employer to record such information and keep it in your file.

NOTIFICATIONS

Securities Law Information. You are permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan, if any, provided that the resale of such Shares takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed (*e.g.*, the Nasdaq Global Select Market).

Foreign Asset/Account Reporting Information. Specified foreign property, including Shares, Options and other rights to receive Shares of a non-Canadian company held by a Canadian resident employee generally must be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the employee's specified foreign property exceeds C$100,000 at any time during the year. Thus, such Options must be reported – generally at nil cost – if the C$100,000 cost threshold is exceeded because other specified foreign property is held by the employee. When Shares are acquired, their cost generally is the adjusted cost base ("ACB") of the Shares. The ACB ordinarily would equal the fair market value of the Shares at the time of acquisition, but if the employee owns other shares of the same company, this ACB may have to be averaged with the ACB of the other shares.

CHINA

TERMS AND CONDITIONS

The following terms apply only to nationals of the People's Republic of China (the "PRC") residing in the PRC:

Method of Exercise. Due to legal restrictions in the PRC, you will be required to pay the exercise price for any Shares subject to the Option granted hereunder by a cashless sell-all exercise, such that all Shares will be sold immediately upon exercise and the cash proceeds of sale, less the exercise price, any Tax Obligations and broker's fees or commissions, will be remitted to you. The Company reserves the right to provide additional methods of exercise depending on local developments.

Termination of Employment. To comply with requirements imposed by the State Administration of Foreign Exchange, to the extent that, under Section IV of the Agreement, you may exercise any Option after termination of your employment, you will be permitted to exercise such Option for the shorter of the period set forth in Section IV of the Agreement and six (6) months from the date of termination of your employment; any unexercised Option shall immediately lapse six (6) months following the termination of your employment.

The Company reserves the right to impose such further restrictions or conditions as may be necessary to comply with changes in applicable local laws in the PRC.

Please note that the above provisions will apply to all Options granted to you under the Plan, as well as to any Options granted to you in the past under the Plan.

Exchange Control Requirements. You understand and agree that, pursuant to PRC exchange control requirements, you will be required to repatriate the cash proceeds from the sale of the Shares issued upon the exercise of the Option to China. You further understand that, under applicable laws, such repatriation of your cash proceeds will need to be effectuated through a special exchange control account established by the Company or any Affiliate, including your Employer, and you hereby consent and agree that any proceeds from the sale of the Shares may be transferred to such special account prior to being delivered to you. You also understand that the Company will deliver the proceeds to you as soon as possible, but that there may be delays in distributing the funds to you due to exchange control requirements in China. Proceeds may be paid to you in U.S. dollars or local currency at the Company's discretion. If the proceeds are paid to you in U.S. dollars, you will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid to you in local currency, the Company is under no obligation to secure any particular currency conversion rate and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. You agree to bear any currency fluctuation risk between the date the Option is exercised and the time that (i) the Tax Obligations are converted to local currency and remitted to the tax authorities, and (ii) net proceeds are converted to local currency and distributed to you. You acknowledge that neither the Company nor any Affiliate will be held liable for any delay in delivering the proceeds to you. You agree to sign any agreements, forms and/or consents that may be requested by the Company or the Company's designated broker to effectuate any of the remittances, transfers, conversions or other processes affecting the proceeds. You further agree to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

COLOMBIA

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section XII of the Agreement:

You acknowledge that pursuant to Article 15 of Law 50/1990 (Article 128 of the Colombian Labor Code), the Plan and related benefits do not constitute a component of "salary" for any purpose. Therefore, they are considered to be of an extraordinary nature and will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amounts, subject to the limitations provided in Law 1393/2010.

NOTIFICATIONS

Securities Law Information. The Shares are not and will not be registered with the Colombian registry of publicly traded securities (*Registro Nacional de Valores y Emisores*) and therefore the Shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

Exchange Control Information. Investment in assets located abroad (such as Shares acquired under the Plan) does not require prior approval from the Central Bank (*Banco de la República*). Nonetheless, such investments are subject to registration before the Central Bank as foreign investments held abroad, regardless of value. In addition, you must file an annual informative return with the local tax authority detailing assets you hold abroad, which must include the

Shares acquired at exercise (every year as long as you keep them). This obligation is only applicable if the assets held abroad exceed the amount of 2,000 Tax Units (approx. US$22.000)

All payments for your investment originating in Colombia (and the liquidation of such investments) must be transferred through the Colombian foreign exchange market (*e.g.*, local banks), which includes the obligation to correctly complete and file the appropriate foreign exchange form (*declaración de cambio*).

CROATIA

NOTIFICATIONS

Exchange Control Information. Croatian residents may be required to report any foreign investments (including Shares acquired under the Plan) to the Croatian National Bank for statistical purposes. You should be aware that exchange control regulations in Croatia are subject to frequent change and you are solely responsible for ensuring your continued compliance with current Croatian exchange control laws.

CZECH REPUBLIC

NOTIFICATIONS

Exchange Control Information. A Czech resident may be required to notify the Czech National Bank ("CNB") of the acquisition of Shares under the Plan or maintenance of a foreign account if (i) he or she maintains foreign direct investments with a value of 2,500,000 Kč or more in the aggregate, (ii) he or she maintains other foreign financial assets with a value of 200,000,000 Kč or more, or (iii) the Czech resident is specifically requested to do so by the CNB.

DENMARK

TERMS AND CONDITIONS

Danish Stock Option Act. In accepting this Option, you acknowledge that you have received an Employer Statement translated into Danish, which is being provided to comply with the Danish Stock Option Act, as amended with effect from January 1, 2019.

NOTIFICATIONS

Exchange Control Information. The requirement to report certain information to the Danish Tax Administration via Form V or K was eliminated effective January 1, 2019. However, you still must report the foreign bank/brokerage accounts and their deposits, and Shares held in a foreign bank or brokerage account in your tax return under the section on foreign affairs and income.

EGYPT

NOTIFICATIONS

Exchange Control Information. If you transfer funds into or out of Egypt in connection with the exercise of the Option or the receipt of sale proceeds, you are required to transfer the funds through a registered bank in Egypt.

FINLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. There are no specific reporting requirements with respect to foreign assets/accounts. However, please note that you must check your pre-completed tax return to confirm that the ownership of Shares and other securities (foreign or domestic) are correctly reported. If you find any errors or omissions, you must make the necessary corrections electronically or by sending specific paper forms to the local tax authorities.

FRANCE

TERMS AND CONDITIONS

Language Consent. By accepting the grant, you confirm having read and understood the Plan and Agreement which were provided in the English language. You accept the terms of these documents accordingly.

Consentement Relatif à la Langue Utilisée. *En acceptant l'attribution, vous confirmez avoir lu et compris le Plan et le Contrat, qui ont été communiqués en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.*

NOTIFICATIONS

Foreign Asset/Account Reporting Information. French residents and non-residents must declare to the Customs Authorities the cash and securities they import or export without the use of a financial institution when the value of such cash or securities exceeds €10,000. French residents also must report all foreign bank and brokerage accounts on an annual basis (including accounts opened or closed during the tax year) on Form N° 3916, together with the income tax return. Failure to comply could trigger significant penalties.

GERMANY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If your acquisition of Shares under the Plan leads to a qualified participation at any point during the calendar year, you will need to report the acquisition when you file your tax return for the relevant year. A qualified participation is attained only in the unlikely event (i) you own at least 1% of the Company and the value of the Shares acquired exceeds €150,000 or (ii) you hold Shares exceeding 10% of the Company's total Common Stock.

Exchange Control Information. Cross-border payments in excess of €12,500 must be reported monthly to the German Federal Bank (*Bundesbank*). In case of payments in connection with securities (including proceeds realized upon the sale of Shares or the receipt of dividends), the report must be made by the 5th day of the month following the month in which the payment was received and must be filed electronically. The form of report (*Allgemeines Meldeportal Statistik*) can be accessed via the *Bundesbank's* website (www.bundesbank.de) and is available in both German and English. You are responsible for satisfying any applicable reporting obligation.

GREECE

NOTIFICATIONS

Foreign Asset/Account Reporting Information. The reporting of foreign assets (including Shares and other investments) is your own obligation and takes place through your annual tax return.

Exchange Control Information. If you exercise the Option through a cash exercise, withdraw funds from a bank in Greece and remit those funds out of Greece (in an amount exceeding a specified threshold), you may be required to submit a written application to the bank.

If you exercise the Option by way of a cashless method of exercise as described in Section II(2)(ii) of the Agreement, this application will not be required because no funds will be remitted out of Greece.

HONG KONG

TERMS AND CONDITIONS

Sale of Shares. Shares received at exercise are accepted as a personal investment. In the event that Shares are issued in respect of the Options within six (6) months of the Grant Date, you agree that you will not offer to the public or otherwise dispose of the Shares prior to the six (6)-month anniversary of the Grant Date.

NOTIFICATIONS

SECURITIES WARNING: *The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You should exercise caution in relation to the offer. If you are in doubt about any of the contents of the Agreement, including this Appendix, or the Plan, you should obtain independent professional advice. The Option and any Shares issued in respect of the Option do not constitute a public offering of securities under Hong Kong law and are available only to members of the Board and Employees. The Agreement, including this Appendix, the Plan and other incidental communication materials have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. The Option and any documentation related thereto are intended solely for the personal use of each member of the Board and/or Employee and may not be distributed to any other person.*

HUNGARY

There are no country-specific provisions.

ICELAND

TERMS AND CONDITIONS

Method of Exercise. Due to legal restrictions in Iceland, you will be required to pay the exercise price for any Shares subject to the Option granted hereunder by a cashless sell-all exercise, such that all Shares will be sold immediately upon exercise and the cash proceeds of sale, less the exercise price, any Tax Obligations and broker's fees or commissions, will be remitted to you. The Company reserves the right to provide additional methods of exercise depending on local developments.

NOTIFICATIONS

Exchange Control Information. Approval by the Central Bank of Iceland is no longer required to participate in the Plan, regardless of the value of the Shares acquired under the Plan. Despite the recent relaxation of the exchange control requirements, you should consult with your personal advisor to ensure compliance with applicable exchange control regulations in Iceland as such regulations are subject to frequent change. You are responsible for ensuring compliance with all exchange control laws in Iceland.

INDIA

TERMS AND CONDITIONS

Method of Exercise. Due to legal restrictions in India, you will not be permitted to pay the exercise price for Shares subject to the Option granted hereunder by a cashless "sell-to-cover" procedure, under which method a number of Shares with a value sufficient to cover the exercise price, brokerage fees and any applicable Tax Obligations would be sold upon exercise and you would receive only the remaining Shares subject to the exercised Option. The Company reserves the right to permit this procedure for payment of the exercise price in the future, depending on the development of local law.

NOTIFICATIONS

Exchange Control Information. If you remit funds out of India to purchase Shares at exercise of the Option granted hereunder, you are responsible for complying with applicable exchange control regulations. In particular, it will be your obligation to determine whether approval from the Reserve Bank of India is required prior to exercise or whether you have exhausted the investment limit of US$250,000 for the relevant fiscal year.

You must repatriate any cash dividends paid on Shares acquired under the Plan to India, as well as any proceeds from the sale of Shares acquired under the Plan within a prescribed period of time (currently, within one hundred and eighty (180) days of receipt of cash dividends, and within ninety (90) days of receipt of sale proceeds), or such other period of time as may be required under applicable regulations. You will receive a foreign inward remittance certificate ("FIRC") from the bank where you deposit the foreign currency, and you must maintain the FIRC as proof of repatriation of funds in the event that the Reserve Bank of India or your Employer requests proof of repatriation. It is your responsibility to comply with these requirements.

Foreign Asset/Account Reporting Information. You are required to declare foreign bank accounts and any foreign financial assets (including Shares held outside of India) in your annual tax return. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor in this regard.

IRELAND

TERMS AND CONDITIONS

Nature of Grant. This provision supplements Section XII of the Agreement:

In accepting this Option, you acknowledge that the benefits received under the Plan will not be taken into account for any redundancy or unfair dismissal claim.

ITALY

TERMS AND CONDITIONS

Method of Exercise. Due to legal restrictions in Italy, you will be required to pay the exercise price for any Shares subject to the Option granted hereunder by a cashless sell-all exercise, such that all Shares will be sold immediately upon exercise and the cash proceeds of sale, less the exercise price, any Tax Obligations and broker's fees or commissions, will be remitted to you. The Company reserves the right to provide additional methods of exercise depending on local developments.

Nature of Grant. In accepting this Option, you acknowledge that (1) you have received a copy of the Plan, the Agreement and this Appendix; (2) you have reviewed the applicable documents in their entirety and fully understand the contents thereof; and (3) you accept all provisions of the Plan, the Agreement and this Appendix.

For the Option granted, you further acknowledge that you have read and specifically and explicitly approve, without limitation, the following Sections of the Option Agreement: Section I, Section IV, Section V, Section X, Section XII, Section XIII, Section XIV, Section XVII and the Data Privacy Notice for All European Economic Area ("EEA") / European Union ("EU") Jurisdictions, United Kingdom and Switzerland in this Appendix.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Italian residents who, at any time during the fiscal year, hold foreign financial assets (including cash and Shares) which may generate income taxable in Italy are required to report these assets on their annual tax returns (UNICO Form, RW Schedule) for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations will also apply to Italian residents who are the beneficial owners of foreign financial assets under Italian money laundering provisions.

Foreign Financial Assets Tax. The fair market value of any Shares held outside of Italy is subject to a foreign assets tax at a flat rate. The fair market value is considered to be the value of the Shares on the Nasdaq Global Select Market on December 31 of the applicable year in which you held the Shares (or when the Shares are acquired during the course of the year, the tax is levied in proportion to the actual days of holding over the calendar year). No tax payment duties arise if the amount of the foreign financial assets tax calculated on all financial assets held abroad does not exceed a certain threshold. You should consult with your personal tax advisor about the foreign financial assets tax.

JAPAN

NOTIFICATIONS

Exchange Control Information. If you acquire Shares valued at more than ¥100,000,000 in a single transaction, you must file a Securities Acquisition Report with the Ministry of Finance through the Bank of Japan within 20 days of the purchase of the Shares.

In addition, if you pay more than ¥30,000,000 in a single transaction for the purchase of Shares when you exercise the Option, you must file a Payment Report with the Ministry of Finance through the Bank of Japan by the 20th day of the month following the month in which the payment was made. The precise reporting requirements vary depending on whether or not the relevant payment is made through a bank in Japan.

A Payment Report is required independently from a Securities Acquisition Report. Therefore, if the total amount that you pay upon a one-time transaction for exercising the Option and purchasing Shares exceeds ¥100,000,000, then you must file both a Payment Report and a Securities Acquisition Report.

Foreign Asset/Account Reporting Information. You will be required to report to the Japanese tax authorities details of any assets held outside of Japan as of December 31st (including any Shares acquired under the Plan) to the extent such assets have a total net fair market value exceeding ¥50,000,000. Such report will be due by March 15 each year. You should consult with your personal tax advisor as to whether the reporting obligation applies to you and whether you will be required to include in the report details of any outstanding Options, Shares or cash that you hold.

KOREA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. You are required to declare all foreign financial accounts (*e.g.* non-Korean bank accounts, brokerage accounts holding Shares, etc.) to the Korean tax authority and file a report regarding such accounts if the monthly balance of such accounts exceeds a certain threshold on any month-end date during a calendar year. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor to ensure compliance with this requirement.

LEBANON

NOTIFICATIONS

Securities Law Information. The Plan does not constitute the marketing or offering of securities in Lebanon pursuant to Law No. 161 (2011), the Capital Markets Law. Offerings under the Plan are being made only to eligible employees of your Employer, the Company or an Affiliate.

LITHUANIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you (i) hold certain job positions established by the law or (ii) donate to political parties or political campaigners, you must file an Annual Asset Return of the Individual (Family) in Form No. FR0001 with respect to assets held outside of Lithuania (*e.g.*, Shares). If you open an account in a foreign financial institution and annual turnover in the account exceeds EUR 15,000, you must file a foreign account report.

MEXICO

TERMS AND CONDITIONS

Acknowledgement of the Agreement. In accepting the Option granted hereunder, you acknowledge that you have received a copy of the Plan, have reviewed the Plan and the Option Agreement, including this Appendix, in their entirety and fully understand and accept all provisions of the Plan and the Agreement, including this Appendix. You further acknowledge that you have read and specifically and expressly approve the terms and conditions of Section XII of the Agreement, in which the following is clearly described and established:

(1) Your participation in the Plan does not constitute an acquired right.

(2) The Plan and your participation in the Plan are offered by Amgen Inc. on a wholly discretionary basis.

(3) Your participation in the Plan is voluntary.

(4) Amgen Inc. and its Affiliates are not responsible for any decrease in the value of the Option granted and/or Shares issued under the Plan.

Labor Law Acknowledgement and Policy Statement. In accepting the Option granted hereunder, you expressly recognize that Amgen Inc., with registered offices at One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., is solely responsible for the administration of the Plan and that your participation in the Plan and acquisition of Shares do not constitute an employment relationship between you and Amgen Inc. since you are participating in the Plan on a wholly commercial basis and your sole employer is Amgen Mexico S.A. de C.V. ("Amgen-Mexico"). Based on the foregoing, you expressly recognize that the Plan and the benefits that you may derive from participation in the Plan do not establish any rights between you and your Employer, Amgen-Mexico, and do not form part of the employment conditions and/or benefits provided by Amgen-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of your employment.

You further understand that your participation in the Plan is as a result of a unilateral and discretionary decision of Amgen Inc.; therefore, Amgen Inc. reserves the absolute right to amend and/or discontinue your participation in the Plan at any time without any liability to you.

Finally, you hereby declare that you do not reserve to yourself any action or right to bring any claim against Amgen Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and you therefore grant a full and broad release to Amgen Inc., its Affiliates, stockholders, officers, agents or legal representatives with respect to any claim that may arise.

Spanish Translation

Reconocimiento del Otorgamiento. Al aceptar cualquier Opción bajo el presente documento, usted reconoce que ha recibido una copia del Plan, que ha revisado el mismo en su totalidad, así como también el Acuerdo de Opción, incluyendo este Apéndice, además que comprende y está de acuerdo con todas las disposiciones tanto del Plan y del Opción, incluyendo este Apéndice. Asimismo, usted reconoce que ha leído y manifiesta específicamente y expresamente la conformidad con los términos y condiciones establecidos en la Sección XII del Acuerdo de Opción, en los que se establece y describe claramente que:

(1) Su participación en el Plan de ninguna manera constituye un derecho adquirido.

(2) El Plan y su participación en el mismo son ofrecidos por Amgen Inc. de forma completamente discrecional.

(3) Su participación en el Plan es voluntaria.

(4) Amgen Inc. y sus Afiliados no son responsables de ninguna disminución en el valor de la opción otorgada y/o de las Acciones Comunes emitidas mediante el Plan.

Reconocimiento de la Ley Laboral y Declaración de Política. Al aceptar cualquier Opción bajo el presente, usted reconoce expresamente que Amgen Inc., con oficinas registradas localizadas en One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., es la única responsable de la administración del Plan y que su participación en el mismo y la adquisición de Acciones Comunes no constituyen de ninguna manera una relación laboral entre usted y Amgen Inc., debido a que su participación en el Plan es únicamente una relación comercial y que su único empleador es Amgen Mexico S.A. de C.V. ("Amgen-México"). Derivado de lo anterior, usted reconoce expresamente que el Plan y los beneficios a su favor que pudieran derivar de la participación en el mismo, no establecen ningún derecho entre usted y su empleador, Amgen – México, y no forman parte de las condiciones laborales y/o los beneficios otorgados por Amgen – México, y cualquier modificación del Plan o la terminación del mismo no constituirá un cambio o desmejora de los términos y condiciones de su trabajo.

Asimismo, usted entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de Amgen Inc., por lo tanto, Amgen Inc. se reserva el derecho absoluto de modificar y/o descontinuar su participación en el Plan en cualquier momento y sin ninguna responsabilidad para usted.

Finalmente, usted manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de Amgen Inc., por cualquier compensación o daños y perjuicios, en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia usted exime amplia y completamente a Amgen Inc. de toda responsabilidad, como así también a sus Afiliadas, accionistas, directores, agentes o representantes legales con respecto a cualquier demanda que pudiera surgir.

NOTIFICATIONS

Securities Law Information. The Options and the Shares offered under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the Plan, the Agreement and any other document relating to the Options may not be publicly distributed in Mexico. These materials are addressed to you only because of your existing relationship with the Company and your Employer and these materials should not be reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of Amgen-Mexico made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

NETHERLANDS

NOTIFICATIONS

Securities Law Information.

Attention! This investment falls outside AFM supervision.
No prospectus required for this activity.

NORWAY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Norwegian residents may be subject to foreign asset reporting as part of their ordinary tax return. Norwegian banks, financial institutions, limited companies etc. must report certain information to the Tax Administration. Such information may then be pre-completed in a Norwegian resident's tax return. However, if the resident has traded, or is the owner of, financial instruments (*e.g.*, Shares) not pre-completed in the tax return, the Norwegian resident must enter this information in Form RF-1159, which is an appendix to the tax return.

Options will be considered assets and are, therefore, subject to wealth tax. An exemption from wealth tax may be available for non-transferrable awards. However, because the wealth tax regulations and the practice of the tax authorities are not well developed, Norwegian residents should provide the tax authorities with information concerning the Options in the annual tax return even if the Norwegian resident maintains that no wealth tax is payable.

Exchange Control Information. In general, Norwegian residents should not be subject to any foreign exchange requirements in connection with their acquisition or sale of Shares under the Plan, except normal reporting requirements to the Norwegian Currency Registry. If any transfer of funds into or out of Norway is made through a Norwegian bank, the bank will make the registration.

POLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Polish residents holding foreign securities (including Shares) and maintaining accounts abroad must file reports with the National Bank of Poland if the aggregate value of Shares and cash held in such foreign accounts exceeds PLN 7,000,000. If required, the reports are due on a quarterly basis by the 20th day following the end of each quarter and must be filed on special forms available on the website of the National Bank of Poland.

Exchange Control Information. In addition, Polish residents are required to transfer funds through a bank account in Poland if the transferred amount in any single transaction exceeds a specified threshold (currently €15,000 (or PLN 15,000 if such transfer of funds is associated with the business activity of a consultant)). You must store all documents connected with any foreign exchange transactions you engage in for a period of five (5) years from the end of the year when such transactions were made. Penalties may apply for failure to comply with exchange control requirements.

PORTUGAL

TERMS AND CONDITIONS

Consent to Receive Information in English. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan and Agreement.

Conhecimento da Lingua. *Por meio do presente, eu declaro expressamente que tem pleno conhecimento da língua inglesa e que li, compreendi e livremente aceitei e concordei com os termos e condições estabelecidas no Plano e no Acordo.*

ROMANIA

NOTIFICATIONS

Exchange Control Information. Certain transfers of funds may need to be reported to the National Office for Prevention and Control of Money Laundering on specific forms by the relevant bank or financial institution. If you deposit proceeds from the sale of Shares or the receipt of dividends in a bank account in Romania, you may be required to provide the Romanian bank assisting with the transaction with appropriate documentation explaining the source of the income. You should consult with a legal advisor to determine whether you will be required to submit such documentation to the Romanian bank.

RUSSIA

TERMS AND CONDITIONS

Exchange Control Requirements. You may be required to repatriate certain cash amounts received with respect to the Option to Russia (*e.g.*, cash dividends, sale proceeds) as soon as you intend to use those cash amounts for any purpose, including reinvestment. If the repatriation requirement applies, such funds must initially be credited to you through a foreign currency account at an authorized bank in Russia. After the funds are initially received in Russia, they may be further remitted to foreign banks in accordance with Russian exchange control laws. Under the Directive N 5371-U of the Russian Central Bank (the "CBR"), the repatriation requirement may not apply in certain cases with respect to cash amounts received in an account that is considered by the CBR to be a foreign brokerage account. Statutory exceptions to the repatriation requirement also may apply.

You should consult with your personal legal advisor to determine the applicability of the repatriation requirement to any cash received in connection with your participation in the Plan and to ensure compliance with any applicable exchange control requirements.

Securities Law Requirements. The Option granted hereunder, the Agreement, including this Appendix, the Plan and all other materials you may receive regarding your participation in the Plan or the Option granted hereunder do not constitute advertising or an offering of securities in Russia. The issuance of Shares under the Plan has not and will not be registered in Russia; therefore, Shares may not be offered or placed in public circulation in Russia.

In no event will Shares acquired under the Plan be delivered to you in Russia; any and all Shares will be maintained on your behalf in the United States.

You are not permitted to sell any Shares acquired under the Plan directly to a Russian legal entity or resident.

Data Privacy Notice. The following provision supplements Section IX of the Agreement:

You understand and agree that you must complete and return a Consent to Processing of Personal Data (the "Consent") form to the Company. Further, you understand and agree that if you do not complete and return a Consent form to the Company, the Company will not be able to administer or maintain the Option. Therefore, you understand that refusing to complete a Consent form or withdrawing your consent may affect your ability to participate in the Plan.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Russian residents are required to file the following reports or notifications with the Russian tax authorities, if applicable: (i) annual cash flow reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); (ii) financial asset (including Shares) reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); and (ii) a one-time notification within one (1) month of opening, closing, or changing details of an offshore brokerage account. You are encouraged to contact your personal tax advisor before remitting your proceeds from participation in the Plan to Russia to ensure compliance with applicable requirements.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan). You should consult with your personal legal advisor to determine whether this restriction applies to your circumstances.

SINGAPORE

TERMS AND CONDITIONS

Restriction on Sale and Transferability. You hereby agree that any Shares acquired pursuant to the Option will not be offered for sale in Singapore prior to the six (6)-month anniversary of the Grant Date, unless such sale or offer is made pursuant to one or more exemptions under Part XIII Division 1 Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) ("SFA"), or pursuant to, and in accordance with the conditions of, any other applicable provisions of the SFA.

NOTIFICATIONS

Securities Law Information. The grant of the Option is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the SFA, on which basis it is exempt from the prospectus and registration requirements under the SFA, and is not made with a view to the Option being subsequently offered for sale to any other party. The Plan has not been, and will not be, lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Requirement. Directors (including alternate, substitute, associate and shadow directors) of a Singapore Affiliate are subject to certain notification requirements under the Singapore Companies Act, regardless of whether they are resident or employed in Singapore. Directors of a Singapore Affiliate must notify the Singapore Affiliate in writing of an interest (*e.g.*, Options, Shares, etc.) in the Company or any related company within two (2) business days of (i) its acquisition or disposal, (ii) any change in a previously disclosed interest (*e.g.*, when the Shares are sold), or (iii) becoming a director.

SLOVAK REPUBLIC

There are no country-specific provisions.

SLOVENIA

There are no country-specific provisions.

SPAIN

TERMS AND CONDITIONS

Nature of Grant. The following provision supplements Section XII of the Agreement:

In accepting this Option, you consent to participation in the Plan and acknowledge that you have received a copy of the Plan.

You understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant the Option under the Plan to individuals who may be members of the Board or Employees of the Company or its Affiliates throughout the world. The decision is a limited decision, which is entered into upon the express assumption and condition that the Option granted will not economically or otherwise bind the Company or any of its Affiliates on an ongoing basis, other than as expressly set forth in the Agreement, including this Appendix. Consequently, you understand that the Option granted hereunder is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any of its Affiliates) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Further, you understand and freely accept that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant of the Option since the future value of the Option and the underlying Shares is unknown and unpredictable. In addition, you understand that the Option granted hereunder would not be made but for the assumptions and conditions referred to above; thus, you understand, acknowledge and freely accept that, should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of an Option or right to an Option shall be null and void.

Further, the vesting of the Option is expressly conditioned on your continued and active rendering of service, such that if your employment terminates for any reason whatsoever, the Option may cease vesting immediately, in whole or in part, effective on the date of your termination of employment (unless otherwise specifically provided in Section IV of the Agreement). This will be the case, for example, even if (1) you are considered to be unfairly dismissed without good cause (*i.e.*, subject to a "despido improcedente"); (2) you are dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) you terminate service due to a change of work location, duties or any other employment or contractual condition; (4) you terminate service due to a unilateral breach of contract by the Company or an Affiliate; or (5) your employment terminates for any other reason whatsoever. Consequently, upon termination of your employment for any of the above reasons, you may automatically lose any rights to Options that were not vested on the date of your termination of employment, as described in the Plan and the Agreement.

You acknowledge that you have read and specifically accept the conditions referred to in Section IV of the Agreement.

NOTIFICATIONS

Securities Law Information. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory. The Agreement (including this Appendix) has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Exchange Control Information. If you acquire Shares under the Plan, you must declare the acquisition to the *Direccion General de Comercio e Inversiones* (the "DGCI"). If you acquire the Shares through the use of a Spanish financial institution, that institution will automatically

make the declaration to the DGCI for you; otherwise, you will be required to make the declaration by filing a D-6 form. You must declare ownership of any Shares with the DGCI each January while the Shares are owned and must also report, in January, any sale of Shares that occurred in the previous year for which the report is being made, unless the sale proceeds exceed the applicable threshold, in which case the report is due within one (1) month of the sale.

Foreign Asset/Account Reporting Information. You are required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts if the value of the transactions during the prior tax year or the balances in such accounts as of December 31 of the prior tax year exceed €1,000,000.

To the extent that you hold Shares and/or have bank accounts outside of Spain with a value in excess of €50,000 (for each type of asset) as of December 31 each year, you will be required to report information on such assets in your tax return (tax form 720) for such year. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously-reported Shares or accounts increases by more than €20,000 or if you sell or otherwise dispose of any previously-reported Shares or accounts. If the value of such Shares and/or accounts as of December 31 does not exceed €50,000, a summarized form of declaration may be presented.

SWEDEN

TERMS AND CONDITIONS

Authorization to Withhold. This provision supplements Section V of the Agreement:

Without limiting the Company's and the Employer's authority to satisfy their withholding obligations for Tax Obligations as set forth in the Agreement, in accepting the Options, you authorize the Company to withhold Shares or to sell Shares otherwise issuable to you upon exercise to satisfy Tax Obligations, regardless of whether the Company and/or Employer have an obligation to withhold such Tax Obligations, provided that such withholding would not, in the Company's determination, result in adverse accounting consequences to the Company.

SWITZERLAND

NOTIFICATIONS

Securities Law Information. Neither this document nor any other materials relating to the Option (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or one of its Subsidiaries or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority.

TAIWAN

NOTIFICATIONS

Exchange Control Information. You may acquire and remit foreign currency (including proceeds from the sale of Shares or the receipt of dividends) up to US$5,000,000 per year without justification. If the transaction amount is TWD500,000 or more in a single transaction, you must submit a Foreign Exchange Transaction Form. If the transaction amount is

US$500,000 or more in a single transaction, you must also provide supporting documentation to the satisfaction of the remitting bank.

THAILAND

NOTIFICATIONS

Exchange Control Information. If you receive funds in connection with the Plan (*e.g.*, dividends or sale proceeds) with a value equal to or greater than US$1,000,000 per transaction, you are required to immediately repatriate such funds to Thailand. Any foreign currency repatriated to Thailand must be converted to Thai Baht or deposited into a foreign currency deposit account opened with any commercial bank in Thailand acting as the authorized agent within 360 days from the date the funds are repatriated to Thailand. You are also required to inform the authorized agent of the details of the foreign currency transaction, including your identification information and the purpose of the transaction.

If you do not comply with the above obligations, you may be subject to penalties assessed by the Bank of Thailand. Because exchange control regulations change frequently and without notice, you should consult your legal advisor before selling any Shares (or receiving any other funds in connection with the Plan) to ensure compliance with current regulations. It is your responsibility to comply with exchange control laws in Thailand, and neither the Company nor your Employer will be liable for any fines or penalties resulting from failure to comply with applicable laws.

TURKEY

NOTIFICATIONS

Securities Law Information. The Option is made available only to Employees of the Company and its Affiliates, and the offer of participation in the Plan is a private offering. The grant of the Option and the issuance of Shares at exercise takes place outside of Turkey.

Exchange Control Information. Any activity related to investments in foreign securities (*e.g.*, the sale of Shares under the Plan or the receipt of cash dividends) must be conducted through a bank or financial intermediary institution licensed by the Turkish Capital Markets Board and should be reported to the Turkish Capital Markets Board by the bank or intermediary assisting with the transaction. You should contact a personal legal advisor for further information regarding these requirements.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Information. Options under the Plan are granted only to select Board members and Employees of the Company and its Affiliates and are for the purpose of providing equity incentives. The Plan and the Agreement are intended for distribution only to such Board members and Employees and must not be delivered to, or relied on by, any other person. You should conduct your own due diligence on the Options offered pursuant to this Agreement. If you do not understand the contents of the Plan and/or the Agreement, you should consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai

Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Further, the Ministry of the Economy and the Dubai Department of Economic Development have not approved the Plan or the Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents.

UNITED KINGDOM

TERMS AND CONDITIONS

Tax Withholding. This provision supplements Section V of the Agreement:

Without limitation to Section V of the Agreement, you agree that you are liable for all Tax Obligations and hereby covenant to pay all such Tax Obligations as and when requested by the Company or your Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and your Employer against any taxes that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on your behalf.

Notwithstanding the foregoing, if you are an executive officer or director within the meaning of Section 13(k) of the Exchange Act, as amended from time to time, you understand that you may not be able to indemnify the Company or your Employer for the amount of income tax not collected from or paid by you, as it may be considered a loan. In the event that you are an executive officer or director and income tax is not collected from you within ninety (90) days after the end of the tax year in which the Taxable Event occurs, the amount of any uncollected income tax may constitute an additional benefit to you on which additional income tax and national insurance contributions ("NICs") may be payable. You acknowledge that you are responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying your Employer for the amount of any NICs due on this additional benefit, which the Company or your Employer may obtain from you by any of the means set forth in Section V of the Agreement.

If the maximum applicable withholding rate is used, any over-withheld amount may be credited to you by the Company or your Employer (with no entitlement to the Common Stock equivalent) or if not so credited, you may seek a refund from the local tax authorities.

Joint Election. If you are a resident of the United Kingdom between the Grant Date and the vesting of the Option, as a condition of the Option granted hereunder, you agree to accept any liability for secondary Class 1 National Insurance Contributions (the "Employer NICs"), which may be payable by the Company or your Employer with respect to the exercise of the Option and issuance of Shares subject to the Option, the assignment or release of the Option for consideration, or the receipt of any other benefit in connection with the Option.

Without limitation to the foregoing, you agree to make an election (the "Election"), in the form specified and/or approved for such election by HMRC, that the liability for your Employer NICs payments on any such gains shall be transferred to you to the fullest extent permitted by law. You further agree to execute such other elections as may be required between you and any successor to the Company and/or your Employer. You hereby authorize the Company and your Employer to withhold such Employer NICs by any of the means set forth in Section V of the Agreement.

Failure by you to enter into an Election, withdrawal of approval of the Election by HMRC or a joint revocation of the Election by you and the Company or your Employer, as applicable, shall be grounds for the forfeiture and cancellation of the Option, without any liability to the Company or your Employer.

UNITED STATES

TERMS AND CONDITIONS

Nature of Grant. The following provision replaces Section IV(B)(1) of the Agreement:

(1) "termination of your employment" shall mean the last date you are either an active employee of the Company or an Affiliate or actively engaged as a Director of the Company or an Affiliate; in the event of termination of your employment (whether or not in breach of local labor laws), your right to exercise the Option and vest under the Plan, if any, will terminate effective as of the date that you are no longer actively employed; provided, however, that such right will be extended by any notice period mandated by law (e.g. the Worker Adjustment and Retraining Notification Act ("WARN Act") notice period or similar periods pursuant to local law) and any paid administrative leave (as applicable), unless the Company shall provide you with written notice otherwise before the commencement of such notice period or leave. Your right, if any, to exercise the Option after termination of employment will be measured by the date of termination of your active employment; provided, however, that such right will be extended by any notice period mandated by law (e.g. the Worker Adjustment and Retraining Notification Act ("WARN Act") notice period or similar periods pursuant to local law) and any paid administrative leave, unless the Company shall provide you with written notice otherwise before the commencement of such notice period or leave. Notwithstanding anything to the contrary herein, in no event shall the term of this Option extend beyond the Expiration Date set forth on the Award Notice and in this Agreement.

Form of Award Notice

[*The information set forth in this Award Notice will be contained on the related pages on Merrill Lynch Benefits Website (or the website of any successor company to Merrill Lynch Bank & Trust Co., FSB). This Award Notice shall be replaced by the equivalent pages on such website. References to Award Notice in this Agreement shall then refer to the equivalent pages on such website.*]

This notice of Award (the "Award Notice") sets forth certain details relating to the grant by the Company to you of the Award identified below, pursuant to the Plan. The terms of this Award Notice are incorporated into the Agreement that accompanies this Award Notice and made part of the Agreement. Capitalized terms used in this Award Notice that are not otherwise defined in this Award Notice have the meanings given to such terms in the Agreement.

Employee:
Employee ID:
Address:
Award Type:
Grant ID:
Plan: Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, as amended and/or restated from time to time
Grant Date:
Grant Price: $_____
Number of Shares:
Number of Units
Vesting Date: Means the vesting date indicated in the Vesting Schedule
Vesting Schedule: Means the schedule of vesting set forth under Vesting Details
Vesting Details: Means the presentation (tabular or otherwise) of the Vesting Date and the quantity of Shares vesting

IMPORTANT NOTICE REGARDING ACCEPTANCE OF THE AWARD AND THE REQUIREMENT TO OPEN A BROKERAGE ACCOUNT[1]:

RESIDENTS OF THE U.S. AND PUERTO RICO: Please read this Award Notice, the Plan and the Agreement (collectively, the "Grant Documents") carefully. If you, as a resident of the U.S. or Puerto Rico, do **not** wish to receive this Award and/or you do **not** consent and agree to the terms and conditions on which this Award is offered, as set forth in the Grant Documents, then you must reject the Award by contacting the Merrill Lynch call center (800) 97AMGEN (800-972-6436) within the U.S., Puerto Rico and Canada or +1 (609) 818-8910 from all other countries (Merrill Lynch will accept the charges for your call) no later than the forty-fifth calendar day following the day on which this Award Notice is made available to you, in which case the Award will be cancelled. For the purpose of determining the forty-five calendar days, Day 1 will be the day **immediately** following the day on which this Award Notice is made available to you. Your failure to notify the Company of your rejection of the Award within this specified period will constitute your acceptance of the Award and your agreement with all terms and conditions of the Award, as set forth in the Grant Documents. If you agree to the terms and conditions of your grant and you desire to accept it, then no further action is needed on your part to accept the grant. However, you must still open a brokerage account as directed by the Company, by 1:00 pm Pacific Time on or before the date that is 11 months after the date of grant. This step is necessary to process transactions related to your equity grant. If you do not open a brokerage account by this deadline, **your grant will be cancelled**.

[1] *This provision is only for use on the form of grant used for the U.S. and Puerto Rico.*

RESTRICTED STOCK UNIT AGREEMENT

THE SPECIFIC TERMS OF YOUR GRANT OF RESTRICTED STOCK UNITS ARE FOUND IN THE PAGES RELATING TO THE GRANT OF RESTRICTED STOCK UNITS FOUND ON MERRILL LYNCH BENEFITS WEBSITE (OR THE WEBSITE OF ANY SUCCESSOR COMPANY TO MERRILL LYNCH BANK & TRUST CO., FSB) (THE "AWARD NOTICE") WHICH ACCOMPANIES THIS DOCUMENT. THE TERMS OF THE AWARD NOTICE ARE INCORPORATED INTO THIS RESTRICTED STOCK UNIT AGREEMENT.

On the Grant Date specified in the Award Notice, Amgen Inc., a Delaware corporation (the "Company"), has granted to you, the grantee named in the Award Notice, under the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, as amended and/or restated from time to time (the "Plan"), the Number of Units with respect to the number of shares of the $0.0001 par value common stock of the Company (the "Shares") specified in the Award Notice, on the terms and conditions set forth in this Restricted Stock Unit Agreement, any additional terms and conditions for your country set forth in the attached Appendix A and the Award Notice (together, the "Agreement"). The Units shall constitute Restricted Stock Units under Section 9.5 of the Plan, which is incorporated herein by reference. Capitalized terms not defined herein shall have the meanings assigned to such terms in the Plan.

I. Vesting Schedule and Termination of Units.

a. *General*. Subject to the terms and conditions of this Agreement, on each Vesting Date, the Number of Units indicated on the Vesting Schedule shall vest, provided that you have remained continuously and actively employed with the Company or an Affiliate (as defined in the Plan) through each applicable Vesting Date, unless (i) [your employment has terminated due to your Voluntary Termination (as defined in paragraph (d) of this Section I below)]*[2], [(ii)] you experience a Qualified Termination (as defined below), or (iii)[(ii)] as otherwise determined by the Company in the exercise of its discretion as provided in paragraph (f) of this Section I. The Units represent an unfunded, unsecured promise by the Company to deliver Shares. Only whole Shares shall be issued upon vesting of the Units, and the Company shall be under no obligation to issue any fractional Shares to you. If your employment with the Company or an Affiliate is terminated for any reason or for no reason, including if your active employment is terminated by the Company or an Affiliate without Cause (as defined below), or in the event of any other termination of your active employment caused directly or indirectly by the Company or an Affiliate, except as otherwise provided in paragraphs (b), (c), [(d),]*[(1)] (e) or (f) of this Section I below, your unvested Units shall automatically expire and terminate on the date of termination of your active employment. Notwithstanding anything herein to the contrary, the Vesting Schedule may be accelerated (by notice in writing) by the Company in its sole discretion at any time that the Units remain outstanding and unvested (in whole or in part). In addition, if not prohibited by local law, vesting may be suspended by the Company in its sole discretion during a leave of absence as provided from time to time according to Company policies and practices.

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[2] *Paragraph (d) of Section I of this Agreement is not applicable to awards identified by the Administrator as new hire, retention, special or promotion grants and the provisions of such paragraph shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

b. *Permanent and Total Disability.* Notwithstanding the provisions in paragraph (a) above, if your employment with the Company or an Affiliate terminates due to your Permanent and Total Disability (as defined below), then the vesting of Units granted under this Agreement shall be accelerated, subject to your execution of a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company), to vest as of the day immediately preceding such termination of your employment with respect to all Units granted hereunder, except that if the Units were granted in the calendar year in which such termination occurs, the Units shall be accelerated to vest with respect to a number of Units equal to the number of Units subject to this Agreement multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any Units that remain unvested shall automatically expire and terminate on the date of the termination of your active employment due to your Permanent and Total Disability without consideration therefor.

c. *Death*. Notwithstanding the provisions in paragraph (a) above, if your employment with the Company or an Affiliate terminates due to your death, then the vesting of Units granted under this Agreement shall be accelerated to vest as of the day immediately preceding your death with respect to all Units granted hereunder, except that if the Units were granted in the calendar year in which your death occurs the Units shall be accelerated to vest with respect to a number of Units equal to the number of Units subject to this Agreement multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any Units that remain unvested shall automatically expire and terminate on the date of the termination of your active employment due to your death without consideration therefor.

d. *[Retirement*. Notwithstanding the provisions in paragraph (a) above, if you terminate your employment with the Company or an Affiliate due to your voluntary termination (and such voluntary termination is not the result of Permanent and Total Disability (as defined below)) after you are at least sixty-five (65) years of age, or after you are at least fifty-five (55) years of age and have been an employee of the Company and/or an Affiliate for at least ten (10) years in the aggregate as determined by the Company in its sole discretion according to Company policies and practices as in effect from time to time ("Voluntary Termination"), then the Units will vest pursuant to the Vesting Schedule without regard to the termination of employment prior to the Vesting Date, subject to your execution of a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company), with respect to all Units granted hereunder; provided, however, that if the Units were granted in the calendar year in which the Voluntary Termination occurs, the Units will vest pursuant to the Vesting Schedule provided in the Award Notice, provided, that each tranche of Units scheduled to vest upon each remaining Vesting Date in the Vesting Schedule will vest only with respect to the number of Units in such tranche multiplied by a fraction, the numerator of which is the number of complete months you remained continuously and actively employed during such calendar year, and the denominator of which is twelve (12), and any Units that remain unvested in excess of such number of Units shall automatically expire and terminate on the date of termination of your active employment due to your Voluntary Termination without consideration therefor; provided, further, however, that in the event of your death following your Voluntary Termination, any Units that remain

outstanding as of the date of your death will become vested (and the Vesting Date with respect to such Units will occur) as of the day immediately preceding your death. Notwithstanding the definition of Voluntary Termination set forth above, if the Company receives an opinion of counsel that there has been a legal judgment and/or legal development in your jurisdiction that would likely result in the favorable treatment upon Voluntary Termination described above being deemed unlawful and/or discriminatory, then the Committee will not apply the favorable treatment described above.][Reserved]*[3]

e. *Qualified Termination after a Change of Control*. Notwithstanding the provisions in paragraph (a) above, in the event of a Qualified Termination (as defined below), then, to the extent permitted by applicable law, the vesting of Units granted under this Agreement shall be accelerated to vest as of the day immediately prior to the Qualified Termination.

f. *Continued Vesting*. Notwithstanding the provisions in paragraph (a) above, the Company may in its sole discretion at any time during the term of this Agreement, in writing, otherwise provide that the Units will vest pursuant to the Vesting Schedule without regard to the termination of employment prior to the Vesting Date, subject to any terms and conditions that the Company may determine.

For purposes of this Agreement:

(i) "termination of your active employment" shall mean the last date that you are either an active employee of the Company or an Affiliate or actively engaged as a Director of the Company or an Affiliate; in the event of termination of your employment (whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are working or the terms of your employment agreement, if any), your right to receive Units and vest under the Plan, if any, will terminate effective as of the date that you are no longer actively providing services and will not be extended by any notice period (*e.g.*, active employment would not include any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any). The Company shall have exclusive discretion to determine when you are no longer actively providing services for purposes of this Agreement (including whether you may still be considered to be providing services while on a leave of absence);

(ii) "Cause" shall mean (i) your conviction of a felony (or similar crime under applicable law, as determined by the Company), or (ii) your engaging in conduct that constitutes willful gross neglect or willful gross misconduct in carrying out your duties, resulting, in either case, in material economic harm to the Company or any Affiliate, unless you believed in good faith that such conduct was in, or not contrary to, the best interests of the Company or any Affiliate. For purposes of clause (ii) above, no act, or failure to act, on your part shall be deemed "willful" unless done, or omitted to be done, by you not in good faith;

(iii) "Permanent and Total Disability" shall have the meaning ascribed to such term under Section 22(e)(3) of the Code and with such permanent and total disability being certified prior to termination of your employment by (i) the U.S. Social Security Administration, (ii) the comparable governmental authority applicable to an Affiliate, (iii) such other body having the

[3] *Paragraph(d) of Section I of this Agreement is not applicable to awards identified by the Administrator as new hire, retention, special or promotion grants and the provisions of such paragraph shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

relevant decision-making power applicable to an Affiliate, or (iv) an independent medical advisor appointed by the Company in its sole discretion, as applicable, in any such case;

(iv) "Qualified Termination" shall mean

(a) if you are an employee who participates in the Change of Control Plan (as defined below), your termination of employment within two (2) years following a Change of Control (i) by the Company other than for Cause, Disability (as defined below), or as a result of your death or (ii) by you for Good Reason (as defined in the Change of Control Plan); or

(b) if you are an employee who does not participate in the Change of Control Plan or the Change of Control Plan is no longer in effect, your termination of employment within two (2) years following a Change of Control by the Company other than for Cause, Disability (as defined below), or as a result of your death;

(v) "Change of Control" shall mean the occurrence of any of the following:

(A) the acquisition (other than from the Company) by any person, entity or "group," within the meaning of Section 13(d)(3) or 14(d)(2) of the Exchange Act (excluding, for this purpose, the Company or any of its Affiliates, or any employee benefit plan of the Company or any of its Affiliates which acquires beneficial ownership of voting securities of the Company), of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of fifty percent (50%) or more of either the then-outstanding Shares or the combined voting power of the Company's then-outstanding voting securities entitled to vote generally in the election of directors; or

(B) the consummation by the Company of a reorganization, merger, consolidation, (in each case, with respect to which persons who were the stockholders of the Company immediately prior to such reorganization, merger or consolidation do not, immediately thereafter, own more than fifty percent (50%) of the combined voting power entitled to vote generally in the election of directors of the reorganized, merged or consolidated company's then-outstanding voting securities) or a liquidation or dissolution of the Company or of the sale of all or substantially all of the assets of the Company.

Notwithstanding anything herein or in the Agreement to the contrary, if a Change of Control constitutes a payment event with respect to any Unit that is subject to United States income tax and which provides for a deferral of compensation that is subject to Section 409A of the Code, the transaction or event described in subsection (A) or (B) above must also constitute a "change in control event," as defined in U.S. Treasury Regulation § 1.409A-3(i)(5), in order to constitute a Change of Control for purposes of payment of such Unit.

(vi) "Change of Control Plan" shall mean the Company's change of control and severance plan, including the Amgen Inc. Change of Control Severance Plan, as amended and restated, effective as of December 9, 2010 (and any subsequent amendments thereto), or equivalent plan governing the provision of benefits to eligible employees upon the occurrence of a Change of Control (including resulting from a termination of employment that occurs within a specified time period following a Change of Control), as in effect immediately prior to a Change of Control; and

(vii) "Disability" shall be determined in accordance with the Company's long-term disability plan as in effect immediately prior to a Change of Control.

II. Form and Timing of Settlement. Subject to satisfaction of Tax Obligations or similar obligations as provided for in Section III, any vested Units shall be settled by the Company delivering to you a number of Shares equal to the number of such vested Units or in a lump sum in cash with a value equal to the Fair Market Value of the number of Shares subject to the vested Units as of the applicable Vesting Date (without interest thereon), or in a combination of Shares and cash, as determined by the Administrator at any time prior to settlement and in its discretion, as soon as practicable, and in any event within 90 days, after the applicable Vesting Date, which for purposes of this Section II, includes the date of any accelerated vesting, if any (the "Settlement Period"). [(For the avoidance of doubt, in the event that any Units continue to vest following a Voluntary Termination in accordance with Section 1(d) above, the Vesting Date(s) for purposes of settlement pursuant to this Section II shall be the regularly scheduled Vesting Dates following such termination.)]*[4] Notwithstanding anything to the contrary in the foregoing, in the event that (i) the vesting and settlement of Units is conditioned on your execution and delivery of a release and (ii) the Settlement Period commences in one calendar year and ends in the next calendar year, the Units will be settled in the second calendar year. Shares issued in respect of a Unit shall be deemed to be issued in consideration of past services actually rendered by you to the Company or an Affiliate or for its benefit for which you have not previously been compensated or for future services to be rendered, as the case may be, which the Company deems to have a value at least equal to the aggregate par value thereof.

III. Tax Withholding; Issuance of Shares. Regardless of any action the Company or your actual employer (the "Employer") takes with respect to any or all income tax (including federal, state and local taxes), social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items related to your participation in the Plan and legally applicable to you ("Tax Obligations"), you acknowledge that the ultimate liability for all Tax Obligations is and remains your responsibility and may exceed the amount, if any, actually withheld by the Company and/or your Employer. You further acknowledge that the Company and/or your Employer (i) make no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Units or the underlying Shares, including the grant of the Units, the vesting of Units, the conversion of the Units into Shares or the receipt of an equivalent cash payment, the subsequent sale of any Shares acquired at vesting and the receipt of any Dividends (as defined in Section IV, below) or Dividend Equivalents, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Units to reduce or eliminate your liability for Tax Obligations or achieve any particular tax result. Furthermore, if you become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or your Employer (or former employer, as applicable) may be required to withhold or account for Tax Obligations in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, you shall pay, or make adequate arrangements satisfactory to the Company or to your Employer (in their sole discretion) to satisfy all Tax Obligations. In this regard, you authorize the Company and/or your Employer or their respective agents, at their discretion, to satisfy all applicable Tax Obligations by one or a combination of the following:

(a) withholding from your wages or other cash compensation paid to you by the Company and/or your Employer; or

[4] *Paragraph (d) of Section I of this Agreement is not applicable to awards identified by the Administrator as new hire, retention, special or promotion grants and the provisions of such paragraph shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

(b) withholding from proceeds of the sale of Shares acquired upon vesting or payment of the Units either through your voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization); or

(c) withholding in Shares issuable, or cash to be paid, upon vesting or payment of the Units, provided that, if such Shares are withheld, the Company and your Employer shall only withhold an amount of Shares with a fair market value not to exceed the Tax Obligations as determined in the discretion of the Company or your Employer, as applicable.

Depending on the withholding method, the Company may withhold or account for Tax Obligations by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates. If the Tax Obligations are satisfied by withholding in Shares, for tax purposes you are deemed to have been issued the full number of Shares subject to the vested Units, notwithstanding that a number of the Shares is held back and not issued solely for the purpose of paying the Tax Obligations due as a result of any aspect of your participation in the Plan (any Shares withheld by the Company hereunder shall not be deemed to have been issued by the Company for any purpose under the Plan and shall remain available for issuance thereunder).

Finally, you shall pay to the Company or your Employer any amount of Tax Obligations that the Company or your Employer may be required to withhold or account for as a result of your participation in the Plan that cannot be or were not satisfied by the means previously described. You agree to take any further actions and execute any additional documents as may be necessary to effectuate the provisions of this Section III. Notwithstanding Section II above, the Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares if you fail to comply with your obligations in connection with the Tax Obligations.

IV. Dividend Equivalents

(a) Crediting and Payment of Dividend Equivalents. Subject to this Section IV, Dividend Equivalents shall be credited on each Unit granted to you under this Agreement in the manner set forth in the remainder of this Section IV. If the Company declares one or more dividends or distributions (each, a "Dividend") on its Common Stock with a record date which occurs during the period commencing on the Grant Date through and including the day immediately preceding the day the shares of Common Stock subject to the Units are issued to you, whether in the form of cash, Common Stock or other property, then on the date such Dividend is paid to the Company's stockholders you shall be credited with an amount equal to the amount or fair market value of such Dividend which would have been payable to you if you held a number of shares of Common Stock equal to the number of your Units as of the record date for such Dividend, unless the Units have been forfeited between the record date and payment date for such Dividend. Any such Dividend Equivalents shall be credited and deemed reinvested in the Common Stock as of the Dividend payment date. Dividend Equivalents shall be payable in full shares of Common Stock, unless the Administrator determines, at any time prior to payment and in its discretion, that they shall be payable in cash. Dividend Equivalents payable with respect to fractional shares of Common Stock shall be paid in cash.

(b) Treatment of Dividend Equivalents. Except as otherwise expressly provided in this Section IV, any Dividend Equivalents credited to you shall be subject to all of the provisions of this Agreement which apply to the Units with respect to which they have been credited and shall be payable, if at all, at the time and to the extent that the underlying Unit becomes payable. Dividend Equivalents shall not be payable on any Units that do not vest, or are forfeited, pursuant to the terms of this Agreement. Dividend Equivalent rights and any amounts that may become distributable in respect thereof shall be treated separately from the Units and the rights arising in connection therewith for purposes of the designation of time and

form of payments required by Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Grant Date, "Section 409A").

V. Transferability. No benefit payable under, or interest in, this Agreement or in the Shares that are scheduled to be issued to you hereunder shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance or charge and any such attempted action shall be void and no such benefit or interest shall be, in any manner, liable for, or subject to, your or your beneficiary's debts, contracts, liabilities or torts; provided, however, nothing in this Section V shall prevent transfer (i) by will or (ii) by applicable laws of descent and distribution.

VI. Notices. Any notices provided for in this Agreement or the Plan shall be given in writing or electronically and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail or equivalent foreign postal service, postage prepaid, addressed to you at such address as is currently maintained in the Company's records or at such other address as you hereafter designate by written notice to the Company Stock Administrator. Such notices may be given using any automated system for the documentation, granting or settlement of Awards, such as a system using an internet website or interactive voice response, as approved by the Company.

VII. Plan. This Agreement is subject to all the provisions of the Plan, which provisions are hereby made a part of this Agreement, including without limitation the provisions of Section 9.5 of the Plan relating to Restricted Stock Units, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of this Agreement and those of the Plan, the provisions of the Plan shall control.

VIII. Governing Law and Venue. The terms of this Agreement shall be governed by the laws of the State of Delaware without giving effect to principles of conflicts of laws. For purposes of litigating any dispute that arises hereunder, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the courts of the State of Delaware, or the federal courts for the United States for the federal district located in the State of Delaware, and no other courts, where this Agreement is made and/or to be performed.

IX. Code Section 409A. The time and form of payment of the Units is intended to comply with the requirements of Section 409A and this Agreement shall be interpreted in accordance with Section 409A. Accordingly, no acceleration or deferral of any payment shall be permitted if it would cause the payment of the Units to violate Section 409A. In addition, notwithstanding any provision herein to the contrary, in the event that following the Grant Date, the Committee (as defined in the Plan) determines that it may be necessary or appropriate to do so, the Committee may adopt such amendments to the Plan and/or this Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Committee determines are necessary or appropriate to (a) exempt the Plan and/or the Units from the application of Section 409A and/or preserve the intended tax treatment of the benefits provided with respect to this Award, or (b) comply with the requirements of Section 409A; provided, however, that this paragraph shall not create an obligation on the part of the Committee to adopt any such amendment, policy or procedure or take any such other action. For purposes of Section 409A, the right to receive payment of Units at each Vesting Date shall be treated as a right to receive separate and distinct payments. No payment hereunder shall be made to you during the six (6)-month period following your "separation from service" (within the meaning of Section 409A) to the extent that the Company

determines that paying such amount at the time set forth herein would be a prohibited distribution under Section 409A(a)(2)(B)(i). If the payment of any such amounts is delayed as a result of the previous sentence, then within thirty (30) days following the end of such six (6)-month period (or, if earlier, your death), the Company shall pay to you (or to your estate) the cumulative amounts that would have otherwise been payable to you during such period, without interest.

X. Acknowledgement. By electing to accept this Agreement, you acknowledge receipt of this Agreement and hereby confirm your understanding that the terms set forth in this Agreement constitute, subject to the terms of the Plan, which terms shall control in the event of any conflict between the Plan and this Agreement, the entire agreement and understanding of the parties with respect to the matters contained herein and supersede any and all prior agreements, arrangements and understandings, both oral and written, between the parties concerning the subject matter of this Agreement. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan (including this Agreement) by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

XI. Acknowledgement of Nature of Plan and Units. In accepting this Agreement, you acknowledge, understand and agree that:

(a) the Plan is established voluntarily by the Company, is discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, as provided in the Plan;

(b) the grant of the Units is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of Units, or benefits in lieu of Units even if Units have been awarded in the past;

(c) all decisions with respect to future awards, if any, will be at the sole discretion of the Company;

(d) your participation in the Plan is voluntary;

(e) the grant of Units, the Shares subject to the Units, and the income from and value of same, are not intended to replace any pension rights or compensation;

(f) neither the grant of Units nor any provision of this Agreement, the Plan or the policies adopted pursuant to the Plan confer upon you any right with respect to employment or continuation of current employment and shall not interfere with the ability of your Employer to terminate your employment or service relationship (if any) at any time;

(g) in the event that you are not an employee of the Company or any Affiliate, the Units shall not be interpreted to form an employment contract or relationship with the Company or any Affiliate;

(h) the future value of the underlying Shares is unknown, indeterminable and cannot be predicted with certainty;

(i) in consideration of the grant of Units hereunder, no claim or entitlement to compensation or damages arises from termination of Units, and no claim or entitlement to compensation or damages shall arise from forfeiture of the Units resulting from termination of your employment by the Company or an Affiliate (regardless of the reason for

such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), and you irrevocably release the Company and your Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, you shall be deemed irrevocably to have waived your entitlement to pursue such claim;

(j) unless otherwise agreed with the Company, the Units, the Shares subject to the Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company;

(k) except as otherwise provided in this Agreement or the Plan, the Units and the benefits evidenced by this Agreement do not create any entitlement to have the Units or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company;

(l) the following provisions apply only if you are providing services outside the United States:

(i) for employment law purposes outside the United States, the Units, Shares subject to the Units, and the income from and value of same, are not part of normal or expected compensation or salary for any purpose, including but not limited to for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, holiday pay, long-service awards, pension or retirement benefits or similar mandatory payments; and

(ii) neither the Company, your Employer nor any Affiliate of the Company shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Units or of any amounts due to you pursuant to the settlement of the Units or the subsequent sale of any Shares acquired upon settlement.

XII. No Advice Regarding Award. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying Shares. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

XIII. Compliance with Laws. Notwithstanding any provision of this Agreement to the contrary, if you are employed by the Company or an Affiliate in any of the countries identified in the attached Appendix A (which constitutes a part of this Agreement), are subject to the laws of any foreign jurisdiction, or relocate to one of the countries included in the attached Appendix A, the Units granted hereunder shall be subject to any additional terms and conditions for your country set forth in Appendix A and to the following additional terms and conditions:

a. the terms and conditions of this Agreement, including Appendix A, are deemed modified to the extent necessary or advisable to comply with applicable foreign laws or facilitate the administration of the Plan;

b. if applicable, the effectiveness of your award of Units is conditioned upon its compliance with any applicable foreign laws, regulations, rules or local governmental

regulatory exemption and subject to receipt of any required foreign regulatory approvals;

c. to the extent necessary to comply with applicable foreign laws, the payment of any earned Units shall be made in cash or Common Stock, at the Company's election; and

d. the Company may take any other action, before or after an award of Units is made, that it deems advisable to obtain approval or comply with any necessary local governmental regulatory exemptions or approvals.

Notwithstanding anything to the contrary contained herein, the Company shall not take any actions hereunder that would violate the Securities Act, the Exchange Act, the Code, or any other securities or tax or other applicable law or regulation, or the rules of any Securities Exchange. Notwithstanding anything to the contrary contained herein, the Shares issuable upon vesting of the Unit shall not be issued unless such Shares are then registered under the Securities Act, or, if such Shares are not then so registered, the Company has determined that such vesting and issuance would be exempt from the registration requirements of the Securities Act, and that the issuance satisfied all other applicable legal requirements.

XIV. ***Data Privacy. In order for the Company to facilitate your participation in the Plan, the Company and your Employer must collect and use personal data about you. In accordance with applicable laws, reasonable security measures will be implemented and maintained to protect the security of your personal data; however, you understand that absolute security cannot be guaranteed.***

You understand that the Company and your Employer may hold certain personal information about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor, for the purposes of implementing, administering and managing the Plan ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your participation in the Plan to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received in settlement of the Units may be deposited. You understand that such authorized recipients of your personal data may be located in countries that do not provide the same level of data privacy laws and protections as the country in which your personal data originated. Transfers of personal data among Company and its group entities follow applicable laws and our Binding Corporate Rules (BCRs). For more information on Company's BCRs, please visit http://www.amgen.com/bcr/. You acknowledge that the collection, use and transfer of your personal data is necessary to facilitate to your participation in the Plan, as well as to grant you Units or other equity awards and administer or maintain such awards.

You may correct or update your personal data previously provided to Company, by completing the form located at https://preferences.amgen.com. Subject to applicable law, you may have additional rights, including the right to object and/or request destruction of your

personal data. To exercise these rights, where applicable, please contact your local human resources representative.

XV. Severability. If one or more of the provisions of this Agreement shall be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and the invalid, illegal or unenforceable provisions shall be deemed null and void; however, to the extent permissible by law, any provisions which could be deemed null and void shall first be construed, interpreted or revised retroactively to permit this Agreement to be construed so as to foster the intent of this Agreement and the Plan.

XVI. Language. By electing to accept this Agreement, you acknowledge that you are sufficiently proficient in English, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Further, if you have received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

XVII. Imposition of Other Requirements. The Company reserves the right to impose other requirements on your participation in the Plan, on the Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

XVIII. Compensation Subject to Recovery. The Units subject to this Award and all compensation payable with respect to them shall be subject to recovery by the Company pursuant to any and all of the Company's policies with respect to the recovery of compensation, as they shall be in effect and may be amended from time to time, to the maximum extent permitted by applicable law.

XIX. Waiver. You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by you or any other grantee.

XX. Headings. This Agreement's section headings are for convenience only and shall not constitute a part of this Agreement or affect this Agreement's meaning.

Very truly yours,
AMGEN INC.

By:_____
Name:
Title:

APPENDIX A

ADDITIONAL TERMS AND CONDITIONS OF THE AMENDED AND RESTATED AMGEN INC. 2009 EQUITY INCENTIVE PLAN, AS AMENDED AND/OR RESTATED FROM TIME TO TIME

GRANT OF RESTRICTED STOCK UNITS (BY COUNTRY)

Certain capitalized terms used but not defined in this Appendix A shall have the meanings set forth in the Plan and/or the Agreement to which this Appendix is attached.

TERMS AND CONDITIONS

This Appendix includes additional terms and conditions that govern any Units granted under the Plan if, under applicable law, you are a resident of, are deemed to be a resident of or are working in one of the countries listed below. Furthermore, the additional terms and conditions that govern any Units granted hereunder may apply to you if you transfer employment and/or residency to one of the countries listed below and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to you.

NOTIFICATIONS

This Appendix also includes notifications relating to exchange control and other issues of which you should be aware with respect to your participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the countries to which this Appendix refers as of October 2021. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the notifications herein as the only source of information relating to the consequences of your participation in the Plan because the information may be outdated when you vest in the Units and acquire Shares under the Plan, or when you subsequently sell Shares acquired under the Plan.

In addition, the notifications are general in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you should seek appropriate professional advice as to how the relevant laws in your country may apply to your situation. Finally, if you are a citizen or resident of a country other than the one in which you are currently residing and/or working or are considered a resident of another country for local law purposes, the information contained herein may not be applicable to you or you may be subject to the provisions of one or more jurisdictions.

ALL NON-U.S. JURISDICTIONS

TERMS AND CONDITIONS

Tax Withholding; Issuance of Certificates. The following provision supplements Section III of the Agreement:

In the event the Company withholds or accounts for Tax Obligations by considering maximum applicable rates in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash and will not be entitled to the equivalent amount in Shares, or if not refunded, you may seek a refund from the local tax authorities. In the event of under-withholding, you may be required to pay any additional Tax Obligations directly to the applicable tax authority or to the Company and/or your Employer.

NOTIFICATIONS

Insider Trading Restrictions/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the Shares are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares (*e.g.*, Units) or rights linked to the value of Shares (*e.g.*, Dividend Equivalents) during such times as you are considered to have "inside information" regarding the Company (as defined by the laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you place before you possessed inside information. Furthermore you could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You are responsible for ensuring your compliance with any applicable restrictions and you should speak with your personal legal advisor on this matter.

Foreign Asset/Account, Tax Reporting Information. Your country of residence may have certain foreign asset and/or account reporting requirements which may affect your ability to acquire or hold Shares under the Plan or cash received from participating in the Plan (including from any Dividends or Dividend Equivalents received, or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside of your country. You may be required to report such accounts, assets or transactions to the tax or other authorities in your country. You also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to your country within a certain time after receipt. You are responsible for ensuring your compliance with such regulations, and you should speak with your personal legal advisor on this matter.

ALL EUROPEAN ECONOMIC AREA ("EEA") / EUROPEAN UNION ("EU") JURISDICTIONS, UNITED KINGDOM AND SWITZERLAND

TERMS AND CONDITIONS

Data Privacy Notice. This provision replaces Section XIV of the Agreement:

Please refer to the Fair Processing Notice previously provided by your local human resources representative, which notice governs the collection, use and transfer of your personal data necessary for the Company to facilitate your participation in the Plan. If you have any questions or concerns regarding the Fair Processing Notice, including questions about your rights afforded thereunder, you should contact your local human resources representative or send an email to staffing-hrconnect@amgen.com.

For purposes of implementing, administering and managing the Plan, Company and your Employer may hold certain personal data about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your participation in the Plan to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received in settlement of the Units may be deposited.

ARGENTINA

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section XI of the Agreement:

In accepting this Agreement, you acknowledge, understand and agree that the grant of the Units is made by the Company (not your Employer) in its sole discretion and that the value of the Units or any Shares acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law including, but not limited to, the calculation of (i) any labor benefits including, without limitation, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, etc., or (ii) any termination or severance indemnities or similar payments.

NOTIFICATIONS

Securities Law Information. Neither the Units nor the underlying Shares are publicly offered or listed on any stock exchange in Argentina.

Exchange Control Information. Exchange control regulations in Argentina are subject to frequent change. You should consult with your personal legal advisor regarding any exchange

control obligations that you may have prior to receiving proceeds from Dividend Equivalents, the sale of Shares or dividends. You must comply with any and all Argentine currency exchange restrictions, approvals and reporting requirements in connection with your participation in the Plan.

Foreign Asset/Account Reporting Information. If you are an Argentine resident, you are required to report certain information regarding any Shares you hold as of December 31 each year to the Argentine tax authorities on your annual tax return.

AUSTRALIA

NOTIFICATIONS

Australia Offer Document. The offer of the Award is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order CO 14/1000. Additional details are set forth in the Offer Document for the Offer of Restricted Stock Units to Australian Resident Employees.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to the Units granted under the Plan, such that the Units are intended to be subject to deferred taxation.

Exchange Control Information. If you are an Australian resident, exchange control reporting is required for cash transactions exceeding AUD10,000 and for international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on your behalf. If there is no Australian bank involved in the transfer, you will be required to file the report.

AUSTRIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you are an Austrian resident and you hold Shares acquired under the Plan outside of Austria, you may be subject to reporting obligations to the Austrian National Bank.

Exchange Control Information. A separate reporting requirement applies when you sell Shares acquired under the Plan, receive a cash Dividend paid on such Shares or Dividend Equivalents paid in cash. In that case, there may be exchange control obligations if the cash proceeds are held outside of Austria. If the transaction volume of all cash accounts abroad meets or exceeds a specified threshold, the movements and balances of all accounts must be reported monthly, as of the last day of the month, on or before the 15th day of the following month, on the prescribed form (*Meldungen SI-Forderungen und/oder SI-Verpflichtungen*).

BELGIUM

NOTIFICATIONS

Tax Reporting; Foreign Asset/Account Reporting Information. If you are a Belgian resident, you are required to report any taxable income attributable to the Units granted hereunder on your annual tax return. You are also required to report any securities (*e.g.*, Shares acquired under the Plan) held and bank accounts (including brokerage accounts) opened and maintained outside of Belgium on your annual tax return. The first time you report the foreign security and/or bank account on your annual income tax return you will have to provide the National Bank of Belgium Central Contact Point with the account details of any such foreign accounts (including the

account number, bank name and country in which such account was opened) in a separate form. This report, as well as information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the *Kredietcentrales / Centrales des crédits* caption.

Stock Exchange Tax Information. A stock exchange tax applies to transactions executed by a Belgian resident through a non-Belgian financial intermediary, such as a U.S. broker. The stock exchange tax likely will apply when Shares acquired under the Plan are sold. It is your responsibility to comply with this tax obligation and you should consult your personal tax advisor for additional details on your obligations with respect to the stock exchange tax.

Annual Securities Accounts Tax Information. An annual securities accounts tax may be payable if the total value of securities held in a Belgian or foreign securities account (e.g., Shares acquired under the Plan) exceeds a certain threshold on four reference dates within the relevant reporting period (i.e., December 31, March 31, June 30 and September 30). In such case, the tax will be due on the value of the qualifying securities held in such account. It is your responsibility to comply with this obligation and you should consult with your personal tax or financial advisor for additional details.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the Units, you acknowledge that you agree to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the vesting of the Units, the sale of Shares acquired under the Plan, the payment of Dividends on such Shares and the receipt of any Dividend Equivalents paid in cash.

Acknowledgement of Nature of Plan and Units. This provision supplements Section XI of the Agreement:

In accepting this Agreement, you acknowledge (i) that you are making an investment decision, (ii) that the Shares will be issued to you only if the vesting conditions are met and any necessary services are rendered by you during the vesting period set forth in the Vesting Schedule, and (iii) that the value of the underlying Shares is not fixed and may increase or decrease in value over the vesting period without compensation to you.

NOTIFICATIONS

Exchange Control Information. If you are resident or domiciled in Brazil, you will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights on December 31 of each year exceeds US$1,000,000. If such amount exceeds US$100,000,000, the referenced declaration must be submitted quarterly, in the month following the end of each quarter. Assets and rights that must be reported include the following: (i) bank deposits; (ii) loans; (iii) financing transactions; (iv) leases; (v) direct investments; (vi) portfolio investments, including Shares acquired under the Plan; (vii) financial derivatives investments; and (viii) other investments, such as real estate. Please note that foreign individuals holding Brazilian visas are considered Brazilian residents for purposes of this reporting requirement and must declare at least the assets held abroad that were acquired subsequent to the date of admittance as a resident of Brazil. Individuals holding assets and rights outside of Brazil valued at less than US$1,000,000 are not required to submit a declaration.

BULGARIA

Foreign Asset/Account Reporting Information. You will be required to annually file statistical forms with the Bulgarian National Bank regarding your receivables in bank accounts abroad as well as your securities abroad (*e.g.*, Shares acquired under the Plan) if the total sum of all such receivables and securities equals or exceeds BGN 50,000 as of the previous calendar year-end. The reports are due by March 31. You should contact your bank in Bulgaria for additional information regarding this requirement.

CANADA

TERMS AND CONDITIONS

Termination of Employment. Section I(i) of the Agreement is amended to read as follows:

(i) "termination of your active employment" shall mean the last date that you are either an active employee of the Company or an Affiliate or actively engaged as a Director of the Company or an Affiliate; in the event of involuntary termination of your employment (regardless of the reason for such termination and whether or not later found to be invalid or unlawful, including for breaching employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), your right to receive any Units and vest under the Plan, if any, will terminate effective as of the date that is the earlier of: (1) the date you receive written notice of termination of employment from the Company or your Employer, or (2) the date you are no longer actively employed by the Company or your Employer regardless of any period during which notice, pay in lieu of notice or related payments or damages are provided or required to be provided under local law. Your right, if any, to acquire Shares pursuant to the Units after termination of employment will be measured by the date of termination of your active employment and will not be extended by any notice period mandated under local law. You will not earn or be entitled to any pro-rated vesting for that portion of time before the date on which your right to vest terminates, nor will you be entitled to any compensation for lost vesting. Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued vesting during a statutory notice period, your right to vest in the Units, if any, will terminate effective as of the last day of your minimum statutory notice period, but you will not earn or be entitled to pro-rated vesting if the vesting date falls after the end of your statutory notice period, nor will you be entitled to any compensation for lost vesting;

Form of Settlement – Units Payable Only in Shares. Notwithstanding any discretion in Section 9.5 of the Plan or anything to the contrary in the Agreement, the Units do not provide any right for you, as a resident of Canada, to receive a cash payment and shall be paid in Shares only.

The following provisions will apply to you if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices, and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Consentement Relatif à la Langue Utilisée. *Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention (« Agreement »), ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.*

Data Privacy Notice. This provision supplements Section XIV of the Agreement:

You hereby authorize the Company and the Company's representative to discuss with and obtain all relevant information from all personnel (professional or not) involved in the administration of the Plan. You further authorize the Company, your Employer and Merrill Lynch Bank & Trust Co., FSB (or any other stock plan service provider) to disclose and discuss your participation in the Plan with their advisors. You also authorize the Company and your Employer to record such information and keep it in your file.

NOTIFICATIONS

Securities Law Information. You are permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan, if any, provided that the resale of such Shares takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed (*e.g.*, the Nasdaq Global Select Market).

Foreign Asset/Account Reporting Information. Specified foreign property, including Shares, stock options and other rights to receive Shares (*e.g.*, Units) of a non-Canadian company held by a Canadian resident employee generally must be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the employee's specified foreign property exceeds C$100,000 at any time during the year. Thus, such stock options and Units must be reported – generally at nil cost – if the C$100,000 cost threshold is exceeded because other specified foreign property is held by the employee. When Shares are acquired, their cost generally is the adjusted cost base ("ACB") of the Shares. The ACB ordinarily would equal the fair market value of the Shares at the time of acquisition, but if the employee owns other shares of the same company, this ACB may have to be averaged with the ACB of the other shares.

CHINA

TERMS AND CONDITIONS

The following terms apply only to individuals who are subject to exchange control restrictions in the People's Republic of China (the "PRC"), as determined by the Company in its sole discretion:

Vesting of the Units. [Notwithstanding anything to the contrary in Section I(d) of the Agreement, if your employment with the Company or an Affiliate terminates due to your Voluntary Termination, as defined in Section I(d), then the vesting of Units granted under this Agreement shall be accelerated to vest as of the day immediately preceding such Voluntary Termination with respect to all Units granted hereunder.]*[5]

Sale Requirement. Notwithstanding anything to the contrary in the Agreement, due to exchange control laws in the PRC, you agree that the Company reserves the right to require the immediate sale of any Shares issued upon settlement of the Units. You understand and agree that any such immediate sale of Shares will occur as soon as is practical following settlement of the Units. Alternatively, if the Shares are not immediately sold upon settlement of the Units, the Company will require the sale of any Shares you may then hold within six (6) months (or such other period as may be required under applicable legal or exchange control requirements) following the termination of your employment with the Company including its Affiliates.

[5] *Paragraph (d) of Section I of the Agreement is not applicable to awards identified by the Administrator as new hire, retention, special or promotion grants and the provisions of such paragraph shall be reserved and references thereto identified by an asterisk (*) shall be omitted from the agreements evidencing such grants.*

You agree that the Company is authorized to instruct Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company to assist with the sale of the Shares on your behalf pursuant to this authorization, and you expressly authorize such broker to complete the sale of such Shares. You also agree to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or the Company's designated broker) to effectuate the sale of the Shares (including, without limitation, as to the transfers of the proceeds and other exchange control matters noted below) and to otherwise cooperate with the Company with respect to such matters, provided that you shall not be permitted to exercise any influence over how, when or whether the sales occur. Upon the sale of the Shares, you will receive the cash proceeds from the sale, less any applicable Tax Obligations, brokerage fees or commissions, in accordance with applicable exchange control laws and regulations.

You acknowledge that Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company is under no obligation to arrange for the sale of the Shares at any particular price. Due to fluctuations in the Share price and/or applicable exchange rates between the settlement date and (if later) the date on which the Shares are sold, the amount of proceeds ultimately distributed to you may be more or less than the market value of the Shares on the settlement date (which is the amount relevant to determining your liability for Tax Obligations). You understand and agree that the Company is not responsible for the amount of any loss that you may incur and that the Company assumes no liability for any fluctuations in the Share price and/or any applicable exchange rate.

Designated Broker Account. If Shares issued upon the settlement of the Units are not immediately sold, you acknowledge that you are required to maintain the Shares in an account with Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company until the Shares are sold through such Company-designated broker.

Exchange Control Requirements. You understand and agree that, pursuant to local exchange control requirements, you will be required to repatriate the cash proceeds from the sale of the Shares issued to you upon settlement of the Units and from the receipt of any Dividends or Dividend Equivalents to China. You further understand that, under applicable laws, such repatriation of your cash proceeds will need to be effectuated through a special exchange control account established by the Company or any Affiliate, including your Employer, and you hereby consent and agree that any proceeds may be transferred to such special account prior to being delivered to you. You also understand that the Company will deliver the proceeds to you as soon as possible, but that there may be delays in distributing the funds to you due to exchange control requirements in China. Proceeds may be paid to you in U.S. dollars or local currency at the Company's discretion. If the proceeds are paid to you in U.S. dollars, you will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid to you in local currency, the Company is under no obligation to secure any particular currency conversion rate and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. You further agree to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

COLOMBIA

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section XI of the Agreement:

You acknowledge that pursuant to Article 15 of Law 50/1990 (Article 128 of the Colombian Labor Code), the Plan and related benefits do not constitute a component of "salary" for any purpose. Therefore, they are considered to be of an extraordinary nature and will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amounts, subject to the limitations provided in Law 1393/2010.

NOTIFICATIONS

Securities Law Information. The Shares are not and will not be registered with the Colombian registry of publicly traded securities (*Registro Nacional de Valores y Emisores*) and therefore the Shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

Exchange Control Information. Investment in assets located abroad (such as Shares acquired under the Plan) does not require prior approval from the Central Bank (*Banco de la República*). Nonetheless, such investments are subject to registration before the Central Bank as foreign investments held abroad, regardless of value. In addition, you must file an annual informative return with the local tax authority detailing assets you hold abroad, which must include the Shares acquired at vesting (every year as long as you keep them). This obligation is only applicable if the assets held abroad exceed the amount of 2,000 Tax Units (approx. US$22.000).

Any payments for your investment originating in Colombia (and the liquidation of such investments) must be transferred through the Colombian foreign exchange market (*e.g.*, local banks), which includes the obligation to correctly complete and file the appropriate foreign exchange form (*declaración de cambio*).

CROATIA

NOTIFICATIONS

Exchange Control Information. Croatian residents may be required to report any foreign investments (including Shares acquired under the Plan) to the Croatian National Bank for statistical purposes. You should be aware that exchange control regulations in Croatia are subject to frequent change and you are solely responsible for ensuring your continued compliance with current Croatian exchange control laws.

CZECH REPUBLIC

NOTIFICATIONS

Exchange Control Information. A Czech resident may be required to notify the Czech National Bank ("CNB") of the acquisition of Shares under the Plan or maintenance of a foreign account if (i) he or she maintains foreign direct investments with a value of 2,500,000 Kč or more in the aggregate, (ii) he or she maintains other foreign financial assets with a value of 200,000,000 Kč or more, or (iii) the Czech resident is specifically requested to do so by the CNB.

DENMARK

TERMS AND CONDITIONS

Danish Stock Option Act. In accepting the Units, you acknowledge that you have received an Employer Statement translated into Danish, which is being provided to comply with the Danish

Stock Option Act. To the extent more favorable to you and required to comply with the Stock Option Act, as amended with effect from January 1, 2019.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. The requirement to report certain information to the Danish Tax Administration via Form V or K was eliminated effective January 1, 2019. However, you still must report the foreign bank/brokerage accounts and their deposits, and Shares held in a foreign bank or brokerage account in your tax return under the section on foreign affairs and income.

EGYPT

NOTIFICATIONS

Exchange Control Information. If you transfer funds into Egypt in connection with the Units, you are required to transfer the funds through a registered bank in Egypt.

FINLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. There are no specific reporting requirements with respect to foreign assets/accounts. However, please note that you must check your pre-completed tax return to confirm that the ownership of Shares and other securities (foreign or domestic) are correctly reported. If you find any errors or omissions, you must make the necessary corrections electronically or by sending specific paper forms to the local tax authorities.

FRANCE

TERMS AND CONDITIONS

Language Consent. By accepting the grant, you confirm having read and understood the Plan and Agreement which were provided in the English language. You accept the terms of these documents accordingly.

Consentement Relatif à la Langue Utilisée. *En acceptant l'attribution, vous confirmez avoir lu et compris le Plan et le Contrat, qui ont été communiqués en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.*

NOTIFICATIONS

Foreign Asset/Account Reporting Information. French residents and non-residents must declare to the Customs Authorities the cash and securities they import or export without the use of a financial institution when the value of such cash or securities exceeds €10,000. French residents also must report all foreign bank and brokerage accounts on an annual basis (including accounts opened or closed during the tax year) on Form N° 3916, together with the income tax return. Failure to comply could trigger significant penalties.

GERMANY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If your acquisition of Shares under the Plan leads to a qualified participation at any point during the calendar year, you will need to report the acquisition when you file your tax return for the relevant year. A qualified participation is attained only in the unlikely event (i) you own at least 1% of the Company and the value of the Shares acquired exceeds €150,000 or (ii) you hold Shares exceeding 10% of the Company's total Common Stock.

Exchange Control Information. Cross-border payments in excess of €12,500 must be reported monthly to the German Federal Bank (*Bundesbank*). In case of payments in connection with securities (including proceeds realized upon the sale of Shares or the receipt of Dividends or Dividend Equivalents), the report must be made by the 5th day of the month following the month in which the payment was received and must be filed electronically. The form of report (*Allgemeines Meldeportal Statistik*) can be accessed via the *Bundesbank's* website (www.bundesbank.de) and is available in both German and English. You are responsible for satisfying any applicable reporting obligation.

GREECE

NOTIFICATIONS

Foreign Asset/Account Reporting Information. The reporting of foreign assets (including Shares and other investments) is your own obligation and takes place through your annual tax return.

HONG KONG

TERMS AND CONDITIONS

Form of Settlement – Units Payable Only in Shares. Notwithstanding any discretion in Section 9.5 of the Plan or anything to the contrary in the Agreement, the Units do not provide any right for you to receive a cash payment and shall be paid in Shares only.

Sale of Shares. Shares received at vesting are accepted as a personal investment. In the event that Shares are issued in respect of the Units within six (6) months of the Grant Date, you agree that you will not offer to the public or otherwise dispose of the Shares prior to the six (6)-month anniversary of the Grant Date.

NOTIFICATIONS

SECURITIES WARNING: *The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You should exercise caution in relation to the offer. If you are in doubt about any of the contents of the Agreement, including this Appendix, or the Plan, you should obtain independent professional advice. The Units and any Shares issued in respect of the Units do not constitute a public offering of securities under Hong Kong law and are available only to members of the Board and Employees. The Agreement, including this Appendix, the Plan and other incidental communication materials have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. The Units and any*

documentation related thereto are intended solely for the personal use of each member of the Board and/or Employee and may not be distributed to any other person.

HUNGARY

There are no country-specific provisions.

ICELAND

NOTIFICATIONS

Exchange Control Information. Approval by the Central Bank of Iceland is no longer required to participate in the Plan, regardless of the value of the Shares acquired under the Plan. Despite the recent relaxation of the exchange control requirements, you should consult with your personal advisor to ensure compliance with applicable exchange control regulations in Iceland as such regulations are subject to frequent change. You are responsible for ensuring compliance with all exchange control laws in Iceland.

INDIA

NOTIFICATIONS

Exchange Control Information. You understand that you must repatriate any cash Dividends paid on Shares acquired under the Plan to India or any Dividend Equivalents paid in cash, as well as any proceeds from the sale of Shares acquired under the Plan within a prescribed period of time (currently, within one hundred and eighty (180) days of receipt of cash Dividends or Dividend Equivalents, and within ninety (90) days of receipt of sale proceeds), or such other period of time as may be required under applicable regulations. You will receive a foreign inward remittance certificate ("FIRC") from the bank where you deposit the foreign currency, and you must maintain the FIRC as proof of repatriation of funds in the event that the Reserve Bank of India or your Employer requests proof of repatriation. It is your responsibility to comply with these requirements.

Foreign Asset/Account Reporting Information. You are required to declare foreign bank accounts and any foreign financial assets (including Shares held outside of India) in your annual tax return. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor in this regard.

IRELAND

TERMS AND CONDITIONS

Acknowledgement of Nature of Plan and Units. This provision supplements Section XI of the Agreement:

In accepting this Agreement, you understand and agree that the benefits received under the Plan will not be taken into account for any redundancy or unfair dismissal claim.

ITALY

TERMS AND CONDITIONS

Acknowledgement of Nature of Agreement. In accepting this Agreement, you acknowledge that (1) you have received a copy of the Plan, the Agreement and this Appendix; (2) you have

reviewed the applicable documents in their entirety and fully understand the contents thereof; and (3) you accept all provisions of the Plan, the Agreement and this Appendix.

For any Units granted, you further acknowledge that you have read and specifically and explicitly approve, without limitation, the following sections of the Agreement: Section I; Section II; Section III; Section VIII; Section X; Section XI; Section XVI; Section XVII; and the Data Privacy Notice for All European Economic Area ("EEA") / European Union ("EU") Jurisdictions, United Kingdom and Switzerland in this Appendix.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Italian residents who, at any time during the fiscal year, hold foreign financial assets (including cash and Shares) which may generate income taxable in Italy are required to report these assets on their annual tax returns (UNICO Form, RW Schedule) for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations will also apply to Italian residents who are the beneficial owners of foreign financial assets under Italian money laundering provisions.

Foreign Financial Assets Tax. The fair market value of any Shares held outside of Italy is subject to a foreign assets tax at a flat rate. The fair market value is considered to be the value of the Shares on the Nasdaq Global Select Market on December 31 of the applicable year in which you held the Shares (or when the Shares are acquired during the course of the year, the tax is levied in proportion to the actual days of holding over the calendar year). No tax payment duties arise if the amount of the foreign financial assets tax calculated on all financial assets held abroad does not exceed a certain threshold. You should consult with your personal tax advisor about the foreign financial assets tax.

JAPAN

NOTIFICATIONS

Foreign Asset/Account Reporting Information. You will be required to report to the Japanese tax authorities details of any assets held outside of Japan as of December 31st (including any Shares acquired under the Plan) to the extent such assets have a total net fair market value exceeding ¥50,000,000. Such report will be due by March 15 each year. You should consult with your personal tax advisor as to whether the reporting obligation applies to you and whether you will be required to include in the report details of any Shares or cash that you hold.

KOREA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. You are required to declare all foreign financial accounts (*e.g.* non-Korean bank accounts, brokerage accounts holding Shares, etc.) to the Korean tax authority and file a report regarding such accounts if the monthly balance of such accounts exceeds a certain threshold on any month-end date during a calendar year. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor to ensure compliance with this requirement.

LEBANON

NOTIFICATIONS

Securities Law Information. The Plan does not constitute the marketing or offering of securities in Lebanon pursuant to Law No. 161 (2011), the Capital Markets Law. Offerings under the Plan are being made only to eligible Employees of your Employer, the Company or an Affiliate.

LITHUANIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you (i) hold certain job positions established by the law or (ii) donate to political parties or political campaigners, you must file an Annual Asset Return of the Individual (Family) in Form No. FR0001 with respect to assets held outside of Lithuania (*e.g.*, Shares). If you open an account in a foreign financial institution and annual turnover in the account exceeds EUR 15,000, you must file a foreign account report.

MEXICO

TERMS AND CONDITIONS

Acknowledgement of the Agreement. In accepting the Award granted hereunder, you acknowledge that you have received a copy of the Plan, have reviewed the Plan and the Agreement, including this Appendix, in their entirety and fully understand and accept all provisions of the Plan and the Agreement, including this Appendix. You further acknowledge that you have read and specifically and expressly approve the terms and conditions of Section XI of the Agreement, in which the following is clearly described and established:

(1) Your participation in the Plan does not constitute an acquired right.

(2) The Plan and your participation in the Plan are offered by Amgen Inc. on a wholly discretionary basis.

(3) Your participation in the Plan is voluntary.

(4) Amgen Inc. and its Affiliates are not responsible for any decrease in the value of the Units granted and/or Shares issued under the Plan.

Labor Law Acknowledgement and Policy Statement. In accepting any Award granted hereunder, you expressly recognize that Amgen Inc., with registered offices at One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., is solely responsible for the administration of the Plan and that your participation in the Plan and acquisition of Shares do not constitute an employment relationship between you and Amgen Inc. since you are participating in the Plan on a wholly commercial basis and your sole employer is Amgen Mexico S.A. de C.V. ("Amgen-Mexico"). Based on the foregoing, you expressly recognize that the Plan and the benefits that you may derive from participation in the Plan do not establish any rights between you and your Employer, Amgen-Mexico, and do not form part of the employment conditions and/or benefits provided by Amgen-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of your employment.

You further understand that your participation in the Plan is as a result of a unilateral and discretionary decision of Amgen Inc.; therefore, Amgen Inc. reserves the absolute right to amend and/or discontinue your participation in the Plan at any time without any liability to you.

Finally, you hereby declare that you do not reserve to yourself any action or right to bring any claim against Amgen Inc. for any compensation or damages regarding any provision of the Plan

or the benefits derived under the Plan, and you therefore grant a full and broad release to Amgen Inc., its Affiliates, stockholders, officers, agents or legal representatives with respect to any claim that may arise.

Spanish Translation

Reconocimiento del Otorgamiento. Al aceptar cualquier Otorgamiento bajo el presente documento, usted reconoce que ha recibido una copia del Plan, que ha revisado el mismo en su totalidad, así como también el Acuerdo de Opción, el Acuerdo, incluyendo este Apéndice, además que comprende y está de acuerdo con todas las disposiciones tanto del Plan y del Otorgamiento, incluyendo este Apéndice. Asimismo, usted reconoce que ha leído y manifiesta específicamente y expresamente la conformidad con los términos y condiciones establecidos en la Sección XI del Acuerdo, en los que se establece y describe claramente que:

(1) Su participación en el Plan de ninguna manera constituye un derecho adquirido.

(2) El Plan y su participación en el mismo son ofrecidos por Amgen Inc. de forma completamente discrecional.

(3) Su participación en el Plan es voluntaria.

(4) Amgen Inc. y sus Afiliados no son responsables de ninguna disminución en el valor de Unidades o de las Acciones Comunes emitidas mediante el Plan.

Reconocimiento de la Ley Laboral y Declaración de Política. Al aceptar cualquier Otorgamiento de Acciones bajo el presente, usted reconoce expresamente que Amgen Inc., con oficinas registradas localizadas en One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., es la única responsable de la administración del Plan y que su participación en el mismo y la adquisición de Acciones Comunes no constituyen de ninguna manera una relación laboral entre usted y Amgen Inc., debido a que su participación en el Plan es únicamente una relación comercial y que su único empleador es Amgen Mexico S.A. de C.V. ("Amgen-México"). Derivado de lo anterior, usted reconoce expresamente que el Plan y los beneficios a su favor que pudieran derivar de la participación en el mismo, no establecen ningún derecho entre usted y su empleador, Amgen – México, y no forman parte de las condiciones laborales y/o los beneficios otorgados por Amgen – México, y cualquier modificación del Plan o la terminación del mismo no constituirá un cambio o desmejora de los términos y condiciones de su trabajo.

Asimismo, usted entiende que su participación en el Plan es resultado de la decisión unilateral y discrecional de Amgen Inc., por lo tanto, Amgen Inc. se reserva el derecho absoluto de modificar y/o descontinuar su participación en el Plan en cualquier momento y sin ninguna responsabilidad para usted.

Finalmente, usted manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de Amgen Inc., por cualquier compensación o daños y perjuicios, en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia usted exime amplia y completamente a Amgen Inc. de toda responsabilidad, como así también a sus Afiliadas, accionistas, directores, agentes o representantes legales con respecto a cualquier demanda que pudiera surgir.

NOTIFICATIONS

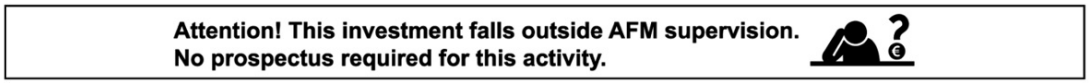
Securities Law Information. The Units and the Shares offered under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the

Plan, the Agreement and any other document relating to the Units may not be publicly distributed in Mexico. These materials are addressed to you only because of your existing relationship with the Company and your Employer and these materials should not be reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of Amgen-Mexico made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

NETHERLANDS

NOTIFICATIONS

Securities Law Information.



NORWAY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Norwegian residents may be subject to foreign asset reporting as part of their ordinary tax return. Norwegian banks, financial institutions, limited companies etc. must report certain information to the Tax Administration. Such information may then be pre-completed in a Norwegian resident's tax return. However, if the resident has traded, or is the owner of, financial instruments (*e.g.*, Shares) not pre-completed in the tax return, the Norwegian resident must enter this information in Form RF-1159, which is an appendix to the tax return.

Exchange Control Information. In general, Norwegian residents should not be subject to any foreign exchange requirements in connection with their acquisition or sale of Shares under the Plan, except normal reporting requirements to the Norwegian Currency Registry. If any transfer of funds into or out of Norway is made through a Norwegian bank, the bank will make the registration.

POLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Polish residents holding foreign securities (including Shares) and maintaining accounts abroad must file reports with the National Bank of Poland if the aggregate value of Shares and cash held in such foreign accounts exceeds PLN 7,000,000. If required, the reports are due on a quarterly basis by the 20th day following the end of each quarter and must be filed on special forms available on the website of the National Bank of Poland.

Exchange Control Information. In addition, Polish residents are required to transfer funds through a bank account in Poland if the transferred amount in any single transaction exceeds a specified threshold (currently €15,000 (or PLN 15,000 if such transfer of funds is associated with the business activity of a consultant)). You must store all documents connected with any foreign exchange transactions you engage in for a period of five (5) years from the end of the year when

such transactions were made. Penalties may apply for failure to comply with exchange control requirements.

PORTUGAL

TERMS AND CONDITIONS

Consent to Receive Information in English. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan and Agreement.

Conhecimento da Lingua. *Por meio do presente, eu declaro expressamente que tem pleno conhecimento da língua inglesa e que li, compreendi e livremente aceitei e concordei com os termos e condições estabelecidas no Plano e no Acordo.*

ROMANIA

NOTIFICATIONS

Exchange Control Information. Certain transfers of funds may need to be reported to the National Office for Prevention and Control of Money Laundering on specific forms by the relevant bank or financial institution. If you deposit proceeds from the sale of Shares or the receipt of Dividends or Dividend Equivalents in a bank account in Romania, you may be required to provide the Romanian bank assisting with the transaction with appropriate documentation explaining the source of the income. You should consult with a legal advisor to determine whether you will be required to submit such documentation to the Romanian bank.

RUSSIA

TERMS AND CONDITIONS

Exchange Control Requirements. You may be required to repatriate certain cash amounts received with respect to the Units to Russia (*e.g.*, cash Dividends, sale proceeds) as soon as you intend to use those cash amounts for any purpose, including reinvestment. If the repatriation requirement applies, such funds must initially be credited to you through a foreign currency account at an authorized bank in Russia. After the funds are initially received in Russia, they may be further remitted to foreign banks in accordance with Russian exchange control laws. Under the Directive N 5371-U of the Russian Central Bank (the "CBR"), the repatriation requirement may not apply in certain cases with respect to cash amounts received in an account that is considered by the CBR to be a foreign brokerage account. Statutory exceptions to the repatriation requirement also may apply.

You should consult with your personal legal advisor to determine the applicability of the repatriation requirement to any cash received in connection with your participation in the Plan and to ensure compliance with any applicable exchange control requirements.

Securities Law Requirements. Any Units granted hereunder, the Agreement, including this Appendix, the Plan and all other materials you may receive regarding your participation in the Plan or any Units granted hereunder do not constitute advertising or an offering of securities in Russia. The issuance of Shares under the Plan has not and will not be registered in Russia; therefore, Shares may not be offered or placed in public circulation in Russia.

In no event will Shares acquired under the Plan be delivered to you in Russia; all Shares will be maintained on your behalf in the United States.

You are not permitted to sell any Shares acquired under the Plan directly to a Russian legal entity or resident.

Labor Law Acknowledgement. You acknowledge that if you continue to hold Shares acquired under the Plan after an involuntary termination of your employment, you will not be eligible to receive unemployment benefits in Russia.

Data Privacy Notice. The following provision supplements Section XIV of the Agreement:

You understand and agree that you must complete and return a Consent to Processing of Personal Data (the "Consent") form to the Company. Further, you understand and agree that if you do not complete and return a Consent form to the Company, the Company will not be able to administer or maintain the Units. Therefore, you understand that refusing to complete a Consent form or withdrawing your consent may affect your ability to participate in the Plan.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Russian residents are required to file the following reports or notifications with the Russian tax authorities, if applicable: (i) annual cash flow reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); (ii) financial asset (including Shares) reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); and (ii) a one-time notification within one (1) month of opening, closing, or changing details of an offshore brokerage account.

You are encouraged to contact your personal tax advisor before remitting your proceeds from participation in the Plan to Russia to ensure compliance with applicable requirements.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan). You should consult with your personal legal advisor to determine whether this restriction applies to your circumstances.

SINGAPORE

TERMS AND CONDITIONS

Restriction on Sale and Transferability. You hereby agree that any Shares acquired pursuant to the Units will not be offered for sale in Singapore prior to the six (6)-month anniversary of the Grant Date, unless such sale or offer is made pursuant to one or more exemptions under Part XIII Division 1 Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) ("SFA"), or pursuant to, and in accordance with the conditions of, any other applicable provisions of the SFA.

NOTIFICATIONS

Securities Law Information. The grant of the Units is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the SFA, on which basis it is exempt from the prospectus and registration requirements under the SFA, and is not made with a view to the Units

being subsequently offered for sale to any other party. The Plan has not been, and will not be, lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Requirement. Directors (including alternate, substitute, associate and shadow directors) of a Singapore Affiliate are subject to certain notification requirements under the Singapore Companies Act, regardless of whether they are resident or employed in Singapore. Directors of a Singapore Affiliate must notify the Singapore Affiliate in writing of an interest (*e.g.*, Units, Shares, etc.) in the Company or any related company within two (2) business days of (i) its acquisition or disposal, (ii) any change in a previously disclosed interest (*e.g.,* when the Shares are sold), or (iii) becoming a director.

SLOVAK REPUBLIC

There are no country-specific provisions.

SLOVENIA

There are no country-specific provisions.

SPAIN

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section XI of the Agreement:
By accepting the Units granted hereunder, you consent to participation in the Plan and acknowledge that you have received a copy of the Plan.

You understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant any Units under the Plan to individuals who may be members of the Board or Employees of the Company or its Affiliates throughout the world. The decision is a limited decision, which is entered into upon the express assumption and condition that any Units granted will not economically or otherwise bind the Company or any of its Affiliates on an ongoing basis, other than as expressly set forth in the Agreement, including this Appendix. Consequently, you understand that the Units granted hereunder are given on the assumption and condition that they shall not become a part of any employment contract (either with the Company or any of its Affiliates) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Further, you understand and freely accept that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant of Units since the future value of the Units and the underlying Shares is unknown and unpredictable. In addition, you understand that any Units granted hereunder would not be made but for the assumptions and conditions referred to above; thus, you understand, acknowledge and freely accept that, should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then any grant of Units or right to Units shall be null and void.

Further, the vesting of the Units is expressly conditioned on your continued and active rendering of service, such that if your employment terminates for any reason whatsoever, the Units may cease vesting immediately, in whole or in part, effective on the date of your termination of employment (unless otherwise specifically provided in Section I of the Agreement). This will be the case, for example, even if (1) you are considered to be unfairly dismissed without good cause (*i.e.*, subject to a "despido improcedente"); (2) you are dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) you terminate service due to a change of work

location, duties or any other employment or contractual condition; (4) you terminate service due to a unilateral breach of contract by the Company or an Affiliate; or (5) your employment terminates for any other reason whatsoever. Consequently, upon termination of your employment for any of the above reasons, you may automatically lose any rights to Units that were not vested on the date of your termination of employment, as described in the Plan and the Agreement.

You acknowledge that you have read and specifically accept the conditions referred to in Section I of the Agreement.

NOTIFICATIONS

Securities Law Information. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory. The Agreement (including this Appendix) has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Exchange Control Information. If you acquire Shares under the Plan, you must declare the acquisition to the *Direccion General de Comercio e Inversiones* (the "DGCI"). If you acquire the Shares through the use of a Spanish financial institution, that institution will automatically make the declaration to the DGCI for you; otherwise, you will be required to make the declaration by filing a D-6 form. You must declare ownership of any Shares with the DGCI each January while the Shares are owned and must also report, in January, any sale of Shares that occurred in the previous year for which the report is being made, unless the sale proceeds exceed the applicable threshold, in which case the report is due within one (1) month of the sale.

Foreign Asset/Account Reporting Information. You are required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts if the value of the transactions during the prior tax year or the balances in such accounts as of December 31 of the prior tax year exceed €1,000,000.

To the extent that you hold Shares and/or have bank accounts outside of Spain with a value in excess of €50,000 (for each type of asset) as of December 31 each year, you will be required to report information on such assets in your tax return (tax form 720) for such year. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously-reported Shares or accounts increases by more than €20,000 or if you sell or otherwise dispose of previously-reported Shares or accounts. If the value of such Shares and/or accounts as of December 31 does not exceed €50,000, a summarized form of declaration may be presented.

SWEDEN

TERMS AND CONDITIONS

Authorization to Withhold. This provision supplements Section III of the Agreement:

Without limiting the Company's and the Employer's authority to satisfy their withholding obligations for Tax Obligations as set forth in the Agreement, in accepting the Units, you authorize the Company to withhold Shares or to sell Shares otherwise issuable to you upon vesting or settlement to satisfy Tax Obligations, regardless of whether the Company and/or Employer have an obligation to withhold such Tax Obligations, provided that such withholding would not, in the Company's determination, result in adverse accounting consequences to the Company.

SWITZERLAND

NOTIFICATIONS

Securities Law Information. Neither this document nor any other materials relating to the Awards (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available in Switzerland to any person other than an employee of the Company or one of its Subsidiaries or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority.

TAIWAN

NOTIFICATIONS

Exchange Control Information. You may acquire and remit foreign currency (including proceeds from the sale of Shares or the receipt of Dividends or Dividend Equivalents) up to US$5,000,000 per year without justification. If the transaction amount is TWD500,000 or more in a single transaction, you must submit a Foreign Exchange Transaction Form. If the transaction amount is US$500,000 or more in a single transaction, you must also provide supporting documentation to the satisfaction of the remitting bank.

THAILAND

NOTIFICATIONS

Exchange Control Information. If proceeds from the sale of Shares or the receipt of any Dividends or Dividend Equivalents exceed US$1,000,000, you must (i) immediately repatriate such funds to Thailand and (ii) report the inward remittance to the Bank of Thailand on a Foreign Exchange Transaction Form. In addition, within three hundred and sixty (360) days of repatriation, you must either convert any funds repatriated to Thailand to Thai Baht or deposit the funds in a foreign exchange account with a Thai commercial bank. Any such commercial bank must be duly authorized by the Bank of Thailand to engage in the purchase, exchange and withdrawal of foreign currency.

TURKEY

NOTIFICATIONS

Securities Law Information. The Units are made available only to employees of the Company and its Affiliates, and the offer of participation in the Plan is a private offering. The grant of the Award and the issuance of Shares at vesting takes place outside of Turkey.

Exchange Control Information. Any activity related to investments in foreign securities (*e.g.*, the sale of Shares under the Plan, the receipt of cash Dividends or Dividend Equivalents) must be conducted through a bank or financial intermediary institution licensed by the Turkish Capital Markets Board and should be reported to the Turkish Capital Markets Board by the bank or intermediary assisting with the transaction. You should contact a personal legal advisor for further information regarding these requirements.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Information. Units under the Plan are granted only to select Board members and Employees of the Company and its Affiliates and are for the purpose of providing equity incentives. The Plan and the Agreement are intended for distribution only to such Board members and Employees and must not be delivered to, or relied on by, any other person. You should conduct your own due diligence on the Units offered pursuant to this Agreement. If you do not understand the contents of the Plan and/or the Agreement, you should consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Further, the Ministry of the Economy and the Dubai Department of Economic Development have not approved the Plan or the Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents.

UNITED KINGDOM

TERMS AND CONDITIONS

Tax Withholding. This provision supplements Section III of the Agreement:

Without limitation to Section III of the Agreement, you agree that you are liable for all Tax Obligations and hereby covenant to pay all such Tax Obligations as and when requested by the Company or your Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and your Employer against any taxes that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on your behalf.

Notwithstanding the foregoing, if you are an executive officer or director (as within the meaning of Section 13(k) of the Exchange Act, as amended from time to time), you understand that you may not be able to indemnify the Company or your Employer for the amount of income tax not collected from or paid by you, as it may be considered a loan. In the event that you are an executive officer or director and income tax is not collected from you within ninety (90) days after the end of the tax year in which the Taxable Event occurs, the amount of any uncollected income tax may constitute an additional benefit to you on which additional income tax and national insurance contributions ("NICs") may be payable. You acknowledge that you are responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying your Employer for the amount of any NICs due on this additional benefit, which the Company or your Employer may obtain from you by any of the means set forth in Section III of the Agreement.

If the maximum applicable withholding rate is used, any over-withheld amount may be credited to you by the Company or your Employer (with no entitlement to the Common Stock equivalent) or if not so credited, you may seek a refund from the local tax authorities.

Joint Election. If you are a resident of the United Kingdom between the Grant Date and the vesting of the Units, as a condition of the Units granted hereunder, you agree to accept any liability for secondary Class 1 National Insurance Contributions (the "Employer NICs"), which may be payable by the Company or your Employer with respect to the Units and/or payment of the Units and issuance of Shares pursuant to the Units, the assignment or release of the Units for consideration, or the receipt of any other benefit in connection with the Units.

Without limitation to the foregoing, you agree to make an election (the "Election"), in the form specified and/or approved for such election by HMRC, that the liability for your Employer NICs payments on any such gains shall be transferred to you to the fullest extent permitted by law. You further agree to execute such other elections as may be required between you and any successor to the Company and/or your Employer. You hereby authorize the Company and your Employer to withhold such Employer NICs by any of the means set forth in Section III of the Agreement.

Failure by you to enter into an Election, withdrawal of approval of the Election by HMRC or a joint revocation of the Election by you and the Company or your Employer, as applicable, shall be grounds for the forfeiture and cancellation of the Units, without any liability to the Company or your Employer.

UNITED STATES

TERMS AND CONDITIONS

Termination of Employment. The following provision replaces Section I(i) of the Agreement:

(i) "termination of your active employment" shall mean the last date that you are either an active employee of the Company or an Affiliate or actively engaged as a Director of the Company or an Affiliate; in the event of termination of your employment (whether or not in breach of local labor laws), your right to receive Units and vest under the Plan, if any, will terminate effective as of the date that you are no longer actively employed; *provided*, *however*, that such right will be extended by any notice period mandated by law (*e.g.*, the Worker Adjustment and Retraining Notification Act ("WARN Act") notice period or similar periods pursuant to local law) and any paid administrative leave (as applicable), unless the Company shall provide you with written notice otherwise before the commencement of such notice period or leave; *provided further*, that notwithstanding the effect of any such extension, in no event will the Units be paid later than the 90th day following your termination of employment;

Form of Award Notice

[*The information set forth in this Award Notice will be contained on the related pages on Merrill Lynch Benefits Website (or the website of any successor company to Merrill Lynch Bank & Trust Co., FSB). This Award Notice shall be replaced by the equivalent pages on such website. References to Award Notice in this Agreement shall then refer to the equivalent pages on such website.*]

This notice of Award (the "Award Notice") sets forth certain details relating to the grant by the Company to you of the Award identified below, pursuant to the Plan. The terms of this Award Notice are incorporated into the Agreement that accompanies this Award Notice and made part of the Agreement. Capitalized terms used in this Award Notice that are not otherwise defined in this Award Notice have the meanings given to such terms in the Agreement.

Employee:
Employee ID:
Address:
Award Type:
Grant ID:
Plan: Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, as amended and/or restated from time to time
Program Amgen Inc. 2009 Performance Award Program, as amended and/or restated from time to time
Grant Date:
Number of Shares:
Number of
Performance Units:
Performance Period: The Performance Period beginning on and ending on .
Resolutions: The Resolutions of the Compensation and Management Development Committee of the Board of Directors of Amgen Inc. establishing the performance goals and Performance Period applicable to this Award.
Vesting Date: Means the vesting date indicated in the Vesting Schedule
Vesting Schedule: Means the schedule of vesting set forth under Vesting Details
Vesting Details: Means the presentation (tabular or otherwise) of the Vesting Date and the quantity of Shares vesting.

IMPORTANT NOTICE REGARDING ACCEPTANCE OF THE AWARD AND THE REQUIREMENT TO OPEN A BROKERAGE ACCOUNT [1]**:**

***RESIDENTS OF THE U.S. AND PUERTO RICO*:** Please read this Award Notice, the Plan and the Agreement (collectively, the "Grant Documents") carefully. If you, as a resident of the U.S. or Puerto Rico, do **not** wish to receive this Award and/or you do **not** consent and agree to the terms and conditions on which this Award is offered, as set forth in the Grant Documents, then you must reject the Award by contacting the Merrill Lynch call center (800) 97AMGEN (800-972-6436) within the U.S., Puerto Rico and Canada or +1 (609) 818-8910 from all other countries (Merrill Lynch will accept the charges for your call) no later than the forty-fifth calendar day following the day on which this Award Notice is made available to you, in which case the Award will be cancelled. For the purpose of determining the forty-five calendar days, Day 1 will be the day **immediately** following the day on which this Award Notice is made

[1] *This provision is only for use on the form of grant used for the U.S. and Puerto Rico.*

available to you. Your failure to notify the Company of your rejection of the Award within this specified period will constitute your acceptance of the Award and your agreement with all terms and conditions of the Award, as set forth in the Grant Documents. If you agree to the terms and conditions of your grant and you desire to accept it, then no further action is needed on your part to accept the grant. However, you must still open a brokerage account as directed by the Company, by 1:00 pm Pacific Time on or before the date that is 11 months after the date of grant. This step is necessary to process transactions related to your equity grant. **If you do not open a brokerage account by this deadline, your grant will be cancelled**.

PERFORMANCE UNIT AGREEMENT

THE SPECIFIC TERMS OF YOUR GRANT OF PERFORMANCE UNITS ARE FOUND IN THE PAGES RELATING TO THE GRANT OF PERFORMANCE UNITS FOUND ON MERRILL LYNCH BENEFITS WEBSITE (OR THE WEBSITE OF ANY SUCCESSOR COMPANY TO MERRILL LYNCH BANK & TRUST CO., FSB) (THE "AWARD NOTICE") WHICH ACCOMPANIES THIS DOCUMENT. THE TERMS OF THE AWARD NOTICE ARE INCORPORATED INTO THIS PERFORMANCE UNIT AGREEMENT.

On the Grant Date specified in the Award Notice, Amgen Inc., a Delaware corporation (the "Company"), has granted to you, the grantee named in the Award Notice, under the Amgen Inc. Amended and Restated 2009 Equity Incentive Plan, as amended and/or restated from time to time (the "Plan"), the Number of Performance Units (the "Performance Units") specified in the Award Notice on the terms and conditions set forth in this Performance Unit Agreement (and any applicable additional terms and conditions for your country set forth in the attached Appendix A (as described in greater detail in Section XIV below)) (collectively, this "Agreement"), the Plan, the Amgen Inc. 2009 Performance Award Program, as amended and/or restated from time to time (the "Program") and the Resolutions (as defined in the Award Notice). Capitalized terms not defined herein shall have the meanings assigned to such terms in the Program.

I. Performance Period. The Performance Period shall have the meaning set forth in the Award Notice.

II. Value of Performance Units. The value of each Performance Unit is equal to a share of Common Stock.

III. Performance Goals. An amount of the Performance Units up to the maximum amount specified in the Resolutions shall be earned, depending on the extent to which the Company achieves objectively determinable performance goals established by the Committee pursuant to the Resolutions. The Performance Units earned shall be calculated in accordance with the Resolutions and the Program.

IV. Form and Timing of Settlement.

(a) *General*. Subject to Section XIII and subject to satisfaction of Tax Obligations or similar obligations as provided in Section V, and except as set forth in the Program, any Performance Units earned pursuant to Section III above shall be settled by the Company delivering to you a number of Shares equal to the number of Shares covered by the earned Performance Units or in a lump sum in cash with a value equal to the Fair Market Value of the number of Shares subject to the earned Performance Units as of the last day of the Performance Period (without interest thereon), or in a combination of Shares and cash, as determined by the Administrator at any time prior to settlement and in its discretion, as soon as practicable, and in any event within 90 days, after the last day of the Performance Period, in each case, subject to the terms of the Program (including Section 4.2 thereof). Shares issued in respect of a Performance Unit shall be deemed to be issued in consideration of past services actually rendered by you to the Company or an Affiliate or for its benefit for which you have not previously been compensated or for future services to be rendered, as the case may be, which the Company deems to have a value at least equal to the aggregate par value thereof.

(b) *Retirement*. In the event that your employment with the Company or an Affiliate is terminated prior to the last business day of the Performance Period by reason of your Voluntary Retirement and you are Retirement-Eligible on the date of such termination,

the full or prorated amount of your Award, if any, applicable to the Performance Period shall be paid in accordance with the provisions of Article VI of the Program. For purposes of the foregoing, the amount of your Award (rounded down to the nearest whole number) shall be determined based on the Company's performance as compared to the Performance Goals for the Performance Period and (i) if the Award was granted with respect to a Performance Period commencing in a calendar year prior to the calendar year in which your Voluntary Retirement occurs, the full amount of the Award is payable, and (ii) if the Award was granted with respect to the Performance Period commencing in the calendar year in which your Voluntary Retirement occurs, the Award otherwise payable is multiplied by a fraction (rounded to two decimal places), the numerator of which is the number of complete months of employment during such calendar year, and the denominator of which is twelve (12). Notwithstanding the foregoing, you shall not be entitled to such full or prorated amount of your Award pursuant to this paragraph (b) unless either you sign a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company) and deliver it to the Company no later than the date specified by the Company, or the Company waives such release requirement in writing; *provided, however,* that in no event shall payment of such full or prorated amount of your Award be made later than the specified payment date as set forth in Section 6.1 of the Program. This paragraph (b) shall supersede Section 7.1(a) of the Program.

(c) *Death and Disability*. In the event that your employment with the Company or an Affiliate is terminated prior to the last business day of the Performance Period by reason of your death or Permanent and Total Disability, the full or prorated amount of your Award, if any, applicable to such Performance Period shall be paid in accordance with the provisions of Article VI of the Program. For purposes of the foregoing, the amount of your Award (rounded down to the nearest whole number) shall be determined based on the Company's performance as compared to the Performance Goals for the Performance Period and (i) if the Award was granted with respect to a Performance Period commencing in a calendar year prior to the calendar year in which such termination occurs, the full amount of the Award is payable, and (ii) if the Award was granted with respect to the Performance Period commencing in the calendar year in which such termination occurs, the Award otherwise payable is multiplied by a fraction (rounded to two decimal places), the numerator of which is the number of complete months of employment during such calendar year, and the denominator of which is twelve (12). Notwithstanding the foregoing, if your employment is terminated due to your Permanent and Total Disability, you shall not be entitled to such full or prorated amount of your Award pursuant to this paragraph (c) unless either you sign a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company) and deliver it to the Company no later than the date specified by the Company, or the Company waives such release requirement in writing; *provided*, *however*, that in no event shall payment of such full or prorated amount of your Award be made later than the specified payment date as set forth in Section 6.1 of the Program. This paragraph (c) shall supersede Section 7.1(b) of the Program.

(d) *Other*. In the event that your employment with the Company or an Affiliate is terminated prior to the last business day of the Performance Period for any reason other than as specified in paragraphs (b) and (c) above, all of your rights to an Award for the Performance Period shall be forfeited, unless, prior to the payment date described in Article VI of the Program, the Company, in its sole discretion, makes a written determination to otherwise pay the full or prorated amount of your Award, if any, applicable to the Performance Period, which full or prorated amount shall be paid in

accordance with the provisions of Article VI of the Program. For purposes of the foregoing, if the payment of your Award is prorated, the amount of your Award (rounded down to the nearest whole number) shall be determined based on the Company's performance as compared to the Performance Goals for the Performance Period and (i) if the Award was granted with respect to a Performance Period commencing in a calendar year prior to the calendar year in which such termination occurs, the full amount of the Award is payable, and (ii) if the Award was granted with respect to the Performance Period commencing in the calendar year in which such termination occurs, the Award otherwise payable is multiplied by a fraction (rounded to two decimal places), the numerator of which is the number of complete months of employment during such calendar year, and the denominator of which is twelve (12). Notwithstanding the foregoing, you shall not be entitled to such full or prorated amount of your Award pursuant to this paragraph (d) unless either you sign a general release and waiver in a form provided by the Company (for the purpose of resolving any potential or actual disputes arising from your employment and the termination of your employment with the Company) and deliver it to the Company no later than the date specified by the Company, or the Company waives such release requirement in writing; *provided*, *however*, that in no event shall payment of such full or prorated amount of your Award be made later than the specified payment date as set forth in Section 6.1 of the Program. This paragraph (d) shall supersede Section 7.1(c) of the Program.

V. Issuance of Shares; Tax Withholding. Regardless of any action the Company or your actual employer (the "Employer") takes with respect to any or all income tax (including federal, state and local taxes), social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items related to your participation in the Plan and the Program and legally applicable to you (the "Tax Obligations"), you acknowledge that the ultimate liability for all Tax Obligations is and remains your responsibility and may exceed the amount, if any, actually withheld by the Company and/or your Employer. You further acknowledge that the Company and/or your Employer (i) make no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Performance Units or the underlying Shares, including the grant of the Performance Units, the vesting of the Performance Units, the conversion of the Performance Units into shares or the receipt of an equivalent cash payment, the subsequent sale of any shares acquired at settlement and the receipt of any Dividends (as defined in Section VI, below) or Dividend Equivalents; and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Performance Units to reduce or eliminate your liability for Tax Obligations or to achieve any particular tax result. Furthermore, if you become subject to tax in more than one jurisdiction, you acknowledge that the Company and/or your Employer (or former employer, as applicable) may be required to withhold or account for Tax Obligations in more than one jurisdiction.

Prior to any relevant taxable or tax withholding event, as applicable, you shall pay or make adequate arrangements satisfactory to the Company or to your Employer (in their sole discretion) to satisfy all Tax Obligations. In this regard, you authorize the Company and/ or your Employer, or their respective agents, at their discretion, to satisfy all applicable Tax Obligations by one or a combination of the following:

(a) withholding from your wages or other cash compensation paid to you by the Company and/or your Employer; or

(b) withholding from proceeds of the sale of Shares issued upon settlement of the Performance Units, either through your voluntary sale or through a mandatory sale arranged by the Company (on your behalf pursuant to this authorization); or

(c) withholding in Shares issuable, or cash to be paid, upon settlement of the Performance Units provided that, if such Shares are withheld, the Company and your Employer shall only withhold an amount of Shares with a fair market value not to exceed the Tax Obligations as determined in the discretion of the Company or your Employer, as applicable.

Depending on the withholding method, the Company may withhold or account for Tax Obligations by considering applicable minimum statutory withholding rates or other applicable withholding rates, including maximum applicable rates. If the Tax Obligations are satisfied by withholding in Shares, for tax purposes you are deemed to have been issued the full number of Shares subject to the earned Performance Units, notwithstanding that a number of Shares is held back and not issued solely for the purpose of paying the Tax Obligations due as a result of any aspect of your participation in the Plan (any Shares withheld by the Company hereunder shall not be deemed to have been issued by the Company for any purpose under the Plan and shall remain available for issuance thereunder).

Finally, you shall pay to the Company or your Employer any amount of Tax Obligations that the Company or your Employer may be required to withhold or account for as a result of your participation in the Plan and the Program that cannot be or were not satisfied by the means previously described. You agree to take any further actions and to execute any additional documents as may be necessary to effectuate the provisions of this Section V. Notwithstanding Section IV above, the Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares if you fail to comply with your obligations in connection with the Tax Obligations.

VI. Dividend Equivalents

(a) Crediting of Dividend Equivalents. Subject to this Section VI, Dividend Equivalents shall be credited on each Performance Unit granted to you under this Agreement in the manner set forth in the remainder of this Section VI. If the Company declares one or more dividends or distributions (each, a "Dividend") on its Common Stock with a record date which occurs during the period commencing on the Grant Date through and including the day immediately preceding the day the Shares subject to the Performance Units are issued to you, whether in the form of cash, Common Stock or other property, then, on the date such Dividend is paid to the Company's stockholders, you shall be credited with an amount equal to the amount or fair market value of such Dividend which would have been payable to you if you held a number of Shares equal to the number of Performance Units granted to you on the Grant Date (including any previously credited Dividends which have been deemed to have been reinvested in Common Stock as provided by the next succeeding sentence), as of each such record date for each such Dividend (not including on any Performance Units which were previously paid or forfeited) as if each such amount had been reinvested in Common Stock as of the date of the payment of such Dividend (such accumulated dividends, the "Target Accumulated Dividends"). Each such Dividend Equivalent shall be deemed to have been reinvested in Common Stock as of the Dividend payment date. Dividend Equivalents shall be payable in full Shares, unless the Administrator determines, at any time prior to payment and in its discretion, that they shall be payable in cash. Dividend Equivalents payable with respect to fractional Shares shall be paid in cash.

(b) Treatment of Dividend Equivalents. Except as otherwise expressly provided in this Section VI any Dividend Equivalents credited to you shall be subject to all of the provisions of this Agreement which apply to the Performance Units with respect to which they have been credited and shall be payable, if at all, at the time and to the extent that the underlying Performance Unit becomes payable. Dividend Equivalents shall not be payable on any

Performance Units that do not vest, or are forfeited, pursuant to the terms of this Agreement. Dividend Equivalent rights and any amounts that may become distributable in respect thereof shall be treated separately from the Performance Units and the rights arising in connection therewith for purposes of the designation of time and form of payments required by Section 409A of the Internal Revenue Code of 1986, as amended (the "Code") (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Grant Date, "Section 409A").

VII. Nontransferability. No benefit payable under, or interest in, this Agreement or in the Shares that may become issuable to you hereunder shall be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance or charge and any such attempted action shall be void and no such benefit or interest shall be, in any manner, liable for, or subject to, your or your beneficiary's debts, contracts, liabilities or torts; *provided, however*, nothing in this Section VII shall prevent transfer (i) by will or (ii) by applicable laws of descent and distribution.

VIII. No Contract for Employment. This Agreement is not an employment or service contract with the Company or an Affiliate and nothing in this Agreement shall be deemed to create in any way whatsoever any obligation on your part to continue in the employ or service of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment or service with the Company or an Affiliate.

IX. Nature of Grant. In accepting the grant of Performance Units, you acknowledge, understand and agree that:

(a) the Plan and the Program are established voluntarily by the Company, are discretionary in nature and may be modified, amended, suspended or terminated by the Company at any time, as provided in the Plan and in the Program;

(b) the grant of the Performance Units is exceptional, voluntary and occasional and does not create any contractual or other right to receive future awards of Performance Units, or benefits in lieu of Performance Units, even if Performance Units have been awarded in the past;

(c) all decisions with respect to future awards, if any, will be at the sole discretion of the Company;

(d) your participation in the Plan and the Program is voluntary;

(e) the grant of Performance Units, the Shares subject to the Performance Units, and the income from and value of same, are not intended to replace any pension rights or compensation;

(f) neither the grant of Performance Units nor any provision of this Agreement, the Plan, the Program or the policies adopted pursuant to the Plan or Program confer upon you any right with respect to employment or continuation of current employment and shall not interfere with the ability of your Employer to terminate your employment or service relationship (if any) at any time;

(g) in the event that you are not an employee of the Company or any Affiliate, the Performance Units shall not be interpreted to form an employment contract or relationship with the Company or any Affiliate;

(h) the future value of the Shares that may be earned upon the end of the Performance Period is unknown, indeterminable, and cannot be predicted with certainty;

(i) in consideration of the grant of Performance Units hereunder, no claim or entitlement to compensation or damages arises from termination of Performance Units, and no claim or entitlement to compensation or damages shall arise from forfeiture of the Performance Units resulting from termination of your employment by the Company or an Affiliate (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) and you irrevocably release the Company and your Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, you shall be deemed irrevocably to have waived your entitlement to pursue such claim;

(j) in the event of termination of your employment (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), your right to receive Performance Units and receive shares under the Plan and the Program, if any, will terminate effective as of the date that you are no longer actively employed and will not be extended by any notice period (*e.g.*, active employment would not include a period of "garden leave" or similar period mandated under employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any);

(k) unless otherwise agreed with the Company, the Performance Units, the Shares subject to the Performance Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service you may provide as a director of an Affiliate of the Company;

(l) except as otherwise provided in this Agreement or the Plan, the Performance Units and the benefits evidenced by this Agreement do not create any entitlement to have the Performance Units or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the shares of the Company; and

(m) the following provisions apply only if you are providing services outside the United States:

(A) for employment law purposes outside the United States, the Performance Units, the Shares subject to the Performance Units, and the income from and value of same, are not part of normal or expected compensation or salary for any purpose, including but not limited to for purposes of calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, holiday pay, long-service awards, pension or retirement benefits or similar mandatory payments; and

(B) neither the Company, your Employer nor any Affiliate of the Company shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Performance Units or of any amounts due to you pursuant to the settlement of the Performance Units or the subsequent sale of any Shares acquired upon settlement.

X. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan and the Program, or your acquisition or sale of the underlying Shares. You should

consult with your personal tax, legal and financial advisors regarding your participation in the Plan and the Program before taking any action related thereto.

XI. Notices. Any notices provided for in this Agreement, the Plan or the Program shall be given in writing or electronically and shall be deemed effectively given upon receipt or, in the case of notices delivered by the Company to you, five (5) days after deposit in the United States mail or equivalent foreign postal service, postage prepaid, addressed to you at such address as is currently maintained in the Company's records or at such other address as you hereafter designate by written notice to the Company Stock Administrator. Such notices may be given using any automated system for the documentation, granting or settlement of Awards, such as a system using an internet website or interactive voice response, as approved by the Company.

XII. Resolutions, Plan and Program. This Agreement is subject to all of the provisions of the Resolutions, the Plan and the Program and their provisions are hereby made a part of this Agreement and incorporated herein by reference, including, without limitation, the provisions of Articles 5 and 9 of the Plan (relating to Performance-Based Compensation and Performance Awards, respectively) and Section 13.2 of the Plan (relating to adjustments upon changes in the Common Stock), and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the provisions of this Agreement and those of the Resolutions, the Plan and the Program, the provisions of the Plan shall control. Notwithstanding any provision of this Agreement or the Program to the contrary, any earned Performance Units paid in cash rather than Shares shall not be deemed to have been issued by the Company for any purpose under the Plan.

XIII. Code Section 409A. The time and form of payment of the Performance Units is intended to comply with the requirements of Section 409A and this Agreement shall be interpreted in accordance with Section 409A. Accordingly, no acceleration or deferral of any payment shall be permitted if it would cause the payment of the Performance Units to violate Section 409A. In addition, notwithstanding any provision herein to the contrary, in the event that following the Grant Date, the Committee determines that it may be necessary or appropriate to do so, the Committee may adopt such amendments to the Plan, Program and/or this Agreement or adopt other policies and procedures (including amendments, policies and procedures with retroactive effect), or take any other actions, that the Committee determines are necessary or appropriate to (a) exempt the Plan, Program and/or the Performance Units from the application of Section 409A and/or preserve the intended tax treatment of the benefits provided with respect to this Award, or (b) comply with the requirements of Section 409A; *provided*, *however*, that this paragraph shall not create an obligation on the part of the Committee to adopt any such amendment, policy or procedure or take any such other action. No payment hereunder shall be made to you during the six (6)-month period following your "separation from service" (within the meaning of Section 409A) to the extent that the Company determines that paying such amount at the time set forth herein would be a prohibited distribution under Section 409A(a)(2)(B)(i). If the payment of any such amounts is delayed as a result of the previous sentence, then within thirty (30) days following the end of such six (6)-month period (or, if earlier, your death), the Company shall pay to you (or to your estate) the cumulative amounts that would have otherwise been payable to you during such period, without interest.

XIV. Provisions Applicable to Participants in Foreign Jurisdictions. Notwithstanding any provision of this Agreement or the Program to the contrary, if you are employed by the Company or an Affiliate in any of the countries identified in the attached Appendix A (which constitutes a part of this Agreement), are subject to the laws of any foreign jurisdiction, or relocate to one of the countries included in the attached Appendix A, your award of Performance Units shall be subject to any additional terms and conditions for such country set forth in Appendix A and to the following additional terms and conditions:

(a) the terms and conditions of this Agreement, including Appendix A, are deemed modified to the extent necessary or advisable to comply with applicable foreign laws or facilitate the administration of the Plan and the Program;

(b) if applicable, the effectiveness of your Award is conditioned upon its compliance with any applicable foreign laws, regulations, rules or local governmental regulatory exemption and subject to receipt of any required foreign regulatory approvals;

(c) to the extent necessary to comply with applicable foreign laws, the payment of any earned Performance Units shall be made in cash or Common Stock, at the Company's election; and

(d) the Committee may take any other action, before or after an award of Performance Units is made, that it deems necessary or advisable to obtain approval or comply with any necessary local governmental regulatory exemptions or approvals.

Notwithstanding anything to the contrary contained herein, the Company shall not take any actions hereunder, and no Award of Performance Units shall be granted, and no Shares payable with respect to an Award shall be issued, that would violate the Securities Act, the Exchange Act, the Code, or any other securities or tax or other applicable law or regulation, or the rules of any Securities Exchange. Notwithstanding anything to the contrary contained herein, no Shares issuable with respect to an Award shall be issued unless such shares are then registered under the Securities Act, or, if such shares are not then so registered, the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act and that the issuance satisfied all other applicable legal requirements.

XV. ***Data Privacy. In order for the Company to facilitate your participation in the Plan and the Program, the Company and your Employer must collect and use personal data about you. In accordance with applicable laws, reasonable security measures will be implemented and maintained to protect the security of your personal data; however, you understand that absolute security cannot be guaranteed.***

You understand that the Company and your Employer may hold certain personal information about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor, for the purposes of implementing, administering and managing the Plan and the Program ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your participation in the Plan and the Program to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan and the Program, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received in settlement of the Performance Units may be deposited. You understand that such authorized recipients of your personal data may be located in countries that do not provide the same level of data privacy laws and protections as the country in which your personal data originated. Transfers of personal data among Company and its group entities follow applicable laws and our Binding Corporate Rules (BCRs). For more information on

Company's BCRs, please visit http://www.amgen.com/bcr/. You acknowledge that the collection, use and transfer of your personal data is necessary to facilitate to your participation in the Plan, as well as to grant you Performance Units or other equity awards and administer or maintain such awards.

You may correct or update your personal data previously provided to Company, by completing the form located at https://preferences.amgen.com. Subject to applicable law, you may have additional rights, including the right to object and/or request destruction of your personal data. To exercise these rights, where applicable, please contact your local human resources representative.

XVI. Language. By electing to accept this Agreement, you acknowledge that you are sufficiently proficient in English, or have consulted with an advisor who is sufficiently proficient in English, so as to allow you to understand the terms and conditions of this Agreement. Furthermore, if you have received this Agreement or any other document related to the Plan and/or the Program translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

XVII. Governing Law and Venue. The terms of this Agreement shall be governed by the laws of the State of Delaware without giving effect to principles of conflicts of laws. For purposes of litigating any dispute that arises hereunder, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation shall be conducted in the courts of the State of Delaware, or the federal courts for the United States for the federal district located in the State of Delaware, and no other courts, where this Agreement is made and/or to be performed.

XVIII. Severability. If one or more of the provisions of this Agreement shall be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby and the invalid, illegal or unenforceable provisions shall be deemed null and void; however, to the extent permissible by law, any provisions which could be deemed null and void shall first be construed, interpreted or revised retroactively to permit this Agreement to be construed so as to foster the intent of this Agreement and the Plan.

XIX. Electronic Delivery and Participation. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan and/or the Program (including this Agreement) by electronic means. You hereby consent to receive such documents by electronic delivery and agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

XX. Imposition of Other Requirements. The Company reserves the right to impose other requirements on your participation in the Plan and the Program, on the Performance Units and on any Shares acquired under the Plan and the Program, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

XXI. Waiver. You acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by you or any other grantee.

XXII. Headings. This Agreement's section headings are for convenience only and shall not constitute a part of this Agreement or affect this Agreement's meaning.

Very truly yours,
AMGEN INC.

By:_____
Name:
Title:

APPENDIX A

ADDITIONAL TERMS AND CONDITIONS OF THE AMENDED AND RESTATED AMGEN INC. 2009 EQUITY INCENTIVE PLAN, AS AMENDED AND/OR RESTATED FROM TIME TO TIME

AWARD OF PERFORMANCE UNITS (BY COUNTRY)

Certain capitalized terms used but not defined in this Appendix A shall have the meanings set forth in the Plan and/or the Agreement to which this Appendix is attached.

TERMS AND CONDITIONS

This Appendix includes additional terms and conditions that govern any Performance Units granted under the Plan if, under applicable law, you are a resident of, are deemed to be a resident of or are working in one of the countries listed below. Furthermore, the additional terms and conditions that govern the Performance Units granted hereunder may apply to you if you transfer employment and/or residency to one of the countries listed below and the Company shall, in its discretion, determine to what extent the terms and conditions contained herein shall apply to you.

NOTIFICATIONS

This Appendix also includes notifications relating to exchange control and other issues of which you should be aware with respect to your participation in the Plan. The information is based on the exchange control, securities and other laws in effect in the countries to which this Appendix refers as of October 2021. Such laws are often complex and change frequently. As a result, the Company strongly recommends that you not rely on the notifications herein as the only source of information relating to the consequences of your participation in the Plan because the information may be outdated when you acquire Shares under the Plan, or when you subsequently sell Shares acquired under the Plan and the Program.

In addition, the notifications are gen eral in nature and may not apply to your particular situation, and the Company is not in a position to assure you of any particular result. Accordingly, you should seek appropriate professional advice as to how the relevant laws in your country may apply to your situation. Finally, if you are a citizen or resident of a country other than the one in which you are currently residing and/or working or are considered a resident of another country for local law purposes, the information contained herein may not be applicable to you or you may be subject to the provisions of one or more jurisdictions.

ALL NON-U.S. JURISDICTIONS

TERMS AND CONDITIONS

Issuance of Certificates; Tax Withholding. The following provision supplements Section V. of the Agreement:

In the event the Company withholds or accounts for Tax Obligations by considering maximum applicable rates in your jurisdiction(s). In the event of over-withholding, you may receive a refund of any over-withheld amount in cash and will not be entitled to the equivalent amount in Shares, or if not refunded, you may seek a refund from the local tax authorities. In the event of under-withholding, you may be required to pay any additional Tax Obligations directly to the applicable tax authority or to the Company and/or your Employer.

NOTIFICATIONS

Insider Trading Restrictions/Market Abuse Laws. You may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the Shares are listed and in applicable jurisdictions including the United States and your country or your broker's country, if different, which may affect your ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares (*e.g.*, Performance Units) or rights linked to the value of Shares (*e.g.*, Dividend Equivalents) during such times as you are considered to have "inside information" regarding the Company (as defined by the laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders you place before you possessed inside information. Furthermore you could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees (other than on a "need to know" basis) and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. You are responsible for ensuring your compliance with any applicable restrictions and you should speak with your personal legal advisor on this matter.

Foreign Asset/Account, Tax Reporting Information. Your country of residence may have certain foreign asset and/or account reporting requirements which may affect your ability to acquire or hold Shares under the Plan or cash received from participating in the Plan (including from any Dividends or Dividend Equivalents received, or sale proceeds arising from the sale of Shares) in a brokerage or bank account outside of your country. You may be required to report such accounts, assets or transactions to the tax or other authorities in your country. You also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to your country within a certain time after receipt. You are responsible for ensuring your compliance with such regulations, and you should speak with your personal legal advisor on this matter.

ALL EUROPEAN ECONOMIC AREA ("EEA") / EUROPEAN UNION ("EU") JURISDICTIONS, UNITED KINGDOM AND SWITZERLAND

TERMS AND CONDITIONS

Data Privacy Notice. This provision replaces Section XV of the Agreement:

Please refer to the Fair Processing Notice previously provided by your local human resources representative, which notice governs the collection, use and transfer of your personal data necessary for the Company to facilitate your participation in the Plan and the Program. If you have any questions or concerns regarding the Fair Processing Notice, including questions about your rights afforded thereunder, you should contact your local human resources representative or send an email to staffing-hrconnect@amgen.com.

For purposes of implementing, administering and managing the Plan, Company and your Employer may hold certain personal data about you, including your name, home address and telephone number, email address, date of birth, social insurance/security number (to the extent permitted under applicable local law), passport or other identification number, salary, nationality, job title/work history/service periods, residency status, citizenship, tax withholding and payroll data, any shares of stock or directorships held in the Company, details of all equity compensation or any other entitlement to Shares awarded, cancelled, vested, unvested or outstanding in your favor ("personal data").

You authorize the transfer of your personal data to Merrill Lynch Bank & Trust Co., FSB, or any successor thereto, and any other third parties which may assist the Company (presently or in the future) with implementing, administering and managing your participation in the Plan and the Program to receive, possess, use, retain and transfer your personal data, in electronic or other form, for the purpose of implementing, administering and managing your participation in the Plan and the Program, including any requisite transfer of such personal data as may be required to any other broker, escrow agent or other third party with whom the Shares received in settlement of the Performance Units may be deposited.

ARGENTINA

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section IX of the Agreement:

In accepting the grant of Performance Units, you acknowledge, understand and agree that the grant of the Performance Units is made by the Company (not your Employer) in its sole discretion and that the value of the Performance Units or any Shares acquired under the Plan and the Program shall not constitute salary or wages for any purpose under Argentine labor law including, but not limited to, the calculation of (i) any labor benefits including, without limitation, vacation pay, thirteenth salary, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, etc., or (ii) any termination or severance indemnities or similar payments.

NOTIFICATIONS

Securities Law Information. Neither the Performance Units nor the underlying Shares are publicly offered or listed on any stock exchange in Argentina.

Exchange Control Information. Exchange control regulations in Argentina are subject to frequent change. You should consult with your personal legal advisor regarding any exchange control obligations that you may have prior to receiving proceeds from Dividend Equivalents, the sale of Shares or dividends. You must comply with any and all Argentine currency exchange restrictions, approvals and reporting requirements in connection with your participation in the Plan and the Program.

Foreign Asset/Account Reporting Information. If you are an Argentine resident, you are required to report certain information regarding any Shares you hold as of December 31 each year to the Argentine tax authorities on your annual tax return.

AUSTRALIA

NOTIFICATIONS

Australia Offer Document. The offer of the Award is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order CO 14/1000. Additional details are set forth in the Offer Document for the Offer of Performance Units to Australian Resident Employees.

Tax Information. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to the Performance Units granted under the Plan, such that the Performance Units are intended to be subject to deferred taxation.

Exchange Control Information. If you are an Australian resident, exchange control reporting is required for cash transactions exceeding AUD10,000 and for international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on your behalf. If there is no Australian bank involved in the transfer, you will be required to file the report.

AUSTRIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you are an Austrian resident and you hold Shares acquired under the Plan and the Program outside of Austria, you may be subject to reporting obligations to the Austrian National Bank.

Exchange Control Information. A separate reporting requirement applies when you sell Shares acquired under the Plan and the Program, receive a cash Dividend paid on such Shares or Dividend Equivalents paid in cash. In that case, there may be exchange control obligations if the cash proceeds are held outside of Austria. If the transaction volume of all cash accounts abroad meets or exceeds a specified threshold, the movements and balances of all accounts must be reported monthly, as of the last day of the month, on or before the 15th day of the following month, on the prescribed form (*Meldungen SI-Forderungen und/oder SI-Verpflichtungen*).

BELGIUM

NOTIFICATIONS

Tax Reporting; Foreign Asset/Account Reporting Information. If you are a Belgian resident, you are required to report any taxable income attributable to the Award granted hereunder on your annual tax return. You are also required to report any securities (*e.g.*, Shares acquired under the Plan and the Program) held and bank accounts (including brokerage accounts) opened and maintained outside of Belgium on your annual tax return. The first time you report the

foreign security and/or bank account on your annual income tax return you will have to provide the National Bank of Belgium Central Contact Point with the account details of any such foreign accounts (including the account number, bank name and country in which such account was opened) in a separate form. This report, as well as information on how to complete it, can be found on the website of the National Bank of Belgium, www.nbb.be, under the *Kredietcentrales / Centrales des crédits* caption.

Stock Exchange Tax Information. A stock exchange tax applies to transactions executed by a Belgian resident through a non-Belgian financial intermediary, such as a U.S. broker. The stock exchange tax likely will apply when Shares acquired under the Plan and the Program are sold. It is your responsibility to comply with this tax obligation and you should consult your personal tax advisor for additional details on your obligations with respect to the stock exchange tax.

Annual Securities Accounts Tax Information. An annual securities accounts tax may be payable if the total value of securities held in a Belgian or foreign securities account (e.g., Shares acquired under the Plan and the Program) exceeds a certain threshold on four reference dates within the relevant reporting period (i.e., December 31, March 31, June 30 and September 30). In such case, the tax will be due on the value of the qualifying securities held in such account. It is your responsibility to comply with this obligation and you should consult with your personal tax or financial advisor for additional details.

BRAZIL

TERMS AND CONDITIONS

Compliance with Law. By accepting the Performance Units, you acknowledge that you agree to comply with applicable Brazilian laws and pay any and all applicable taxes associated with the vesting of the Performance Units, the sale of Shares acquired under the Plan and the Program, the payment of Dividends on such Shares and the receipt of any Dividend Equivalents paid in cash.

Nature of Grant. This provision supplements Section IX of the Agreement:

In accepting the grant of Performance Units, you acknowledge (i) that you are making an investment decision, (ii) that the Shares will be issued to you only if the vesting conditions are met and any necessary services are rendered by you during the vesting period set forth in the Vesting Schedule, and (iii) that the value of the underlying Shares is not fixed and may increase or decrease in value over the vesting period without compensation to you.

NOTIFICATIONS

Exchange Control Information. If you are resident or domiciled in Brazil, you will be required to submit annually a declaration of assets and rights held outside of Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights on December 31 of each year exceeds US$1,000,000. If such amount exceeds US$100,000,000, the referenced declaration must be submitted quarterly, in the month following the end of each quarter. Assets and rights that must be reported include the following: (i) bank deposits; (ii) loans; (iii) financing transactions; (iv) leases; (v) direct investments; (vi) portfolio investments, including Shares acquired under the Plan and the Program; (vii) financial derivatives investments; and (viii) other investments, such as real estate. Please note that foreign individuals holding Brazilian visas are considered Brazilian residents for purposes of this reporting requirement and must declare at least the assets held abroad that were acquired subsequent to the date of admittance as a resident of Brazil. Individuals holding assets and rights outside of Brazil valued at less than US$1,000,000 are not required to submit a declaration.

BULGARIA

Foreign Asset/Account Reporting Information. You will be required to annually file statistical forms with the Bulgarian National Bank regarding your receivables in bank accounts abroad as well as your securities abroad (*e.g.*, Shares acquired under the Plan) if the total sum of all such receivables and securities equals or exceeds BGN 50,000 as of the previous calendar year-end. The reports are due by March 31. You should contact your bank in Bulgaria for additional information regarding this requirement.

CANADA

TERMS AND CONDITIONS

Termination of Service. This provision supplements Section IX(j) of the Agreement:

in the event of involuntary termination of your employment (regardless of the reason for such termination and whether or not later found to be invalid or unlawful, including for breaching employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any), your right to receive an Award and vest in such Award under the Plan and the Program, if any, will terminate effective as of the date that is the earlier of: (1) the date you receive written notice of termination of employment from the Company or your Employer, or (2) the date you are no longer actively employed by the Company or your Employer regardless of any period during which notice, pay in lieu of notice or related payments or damages are provided or required to be provided under local law. Your right, if any, to acquire Shares pursuant to an Award after termination of employment will be measured by the date of termination of your active employment and will not be extended by any notice period mandated under local law. You will not earn or be entitled to any pro-rated vesting for that portion of time before the date on which your right to vest terminates, nor will you be entitled to any compensation for lost vesting. Notwithstanding the foregoing, if applicable employment standards legislation explicitly requires continued vesting during a statutory notice period, your right to vest in the Performance Units, if any, will terminate effective as of the last day of your minimum statutory notice period, but you will not earn or be entitled to pro-rated vesting if the vesting date falls after the end of your statutory notice period, nor will you be entitled to any compensation for lost vesting;

Form of Settlement - Performance Units Payable Only in Shares. Notwithstanding any discretion in Section 9.5 of the Plan or the Program or anything to the contrary in the Agreement, the Award does not provide any right for you, as a resident of Canada, to receive a cash payment and shall be paid in Shares only.

The following provisions will apply to you if you are a resident of Quebec:

Language Consent. The parties acknowledge that it is their express wish that the Agreement, as well as all documents, notices, and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Consentement Relatif à la Langue Utilisée. *Les parties reconnaissent avoir exigé la rédaction en anglais de cette convention (« Agreement »), ainsi que de tous documents, avis et procédures judiciaires, exécutés, donnés ou intentés en vertu de, ou liés directement ou indirectement à, la présente convention.*

Data Privacy Notice. This provision supplements Section XV of the Agreement:

You hereby authorize the Company and the Company's representative to discuss with and obtain all relevant information from all personnel (professional or not) involved in the administration of the Plan and the Program. You further authorize the Company, your Employer and Merrill Lynch Bank & Trust Co., FSB (or any other stock plan service provider) to disclose and discuss your participation in the Plan with their advisors. You also authorize the Company and your Employer to record such information and keep it in your file.

NOTIFICATIONS

Securities Law Information. You are permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan, if any, provided that the resale of such Shares takes place outside of Canada through the facilities of a stock exchange on which the Shares are listed (*e.g.*, the Nasdaq Global Select Market).

Foreign Asset/Account Reporting Information. Specified foreign property, including Shares, stock options and other rights to receive Shares (*e.g.*, Performance Units) of a non-Canadian company held by a Canadian resident employee generally must be reported annually on a Form T1135 (Foreign Income Verification Statement) if the total cost of the employee's specified foreign property exceeds C$100,000 at any time during the year. Thus, such stock options and Performance Units must be reported – generally at nil cost – if the C$100,000 cost threshold is exceeded because other specified foreign property is held by the employee. When Shares are acquired, their cost generally is the adjusted cost base ("ACB") of the Shares. The ACB ordinarily would equal the fair market value of the Shares at the time of acquisition, but if the employee owns other shares of the same company, this ACB may have to be averaged with the ACB of the other shares.

CHINA

TERMS AND CONDITIONS

The following terms apply only to individuals who are subject to exchange control restrictions in the People's Republic of China (the "PRC"), as determined by the Company in its sole discretion:

Vesting of the Performance Units. Notwithstanding anything to the contrary in Article 7.1 of the Program, if your employment with the Company or an Affiliate terminates at any time during the Performance Period, you shall forfeit all Performance Units.

Sale Requirement. Notwithstanding anything to the contrary in the Agreement, due to exchange control laws in the PRC, you agree that the Company reserves the right to require the immediate sale of any Shares acquired upon settlement of the Performance Units. You understand and agree that any such immediate sale of Shares will occur as soon as is practical following settlement of the Performance Units. Alternatively, if the Shares are not immediately sold upon settlement of the Performance Units, the Company will require the sale of any Shares you may then hold within six (6) months (or such other period as may be required under applicable legal or exchange control requirements) following the termination of your employment with the Company, including its Affiliates.

You agree that the Company is authorized to instruct Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company to assist with the sale of the Shares on your behalf pursuant to this authorization, and you expressly authorize such broker to complete the sale of such Shares. You also agree to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or the Company's designated broker) to effectuate the sale of the Shares (including, without limitation, as to the transfers of the proceeds

and other exchange control matters noted below) and to otherwise cooperate with the Company with respect to such matters, provided that you shall not be permitted to exercise any influence over how, when or whether the sales occur. Upon the sale of the Shares, you will receive the cash proceeds from the sale, less any applicable Tax Obligations, brokerage fees or commissions, in accordance with applicable exchange control laws and regulations.

You acknowledge that Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company is under no obligation to arrange for the sale of the Shares at any particular price. Due to fluctuations in the Share price and/or applicable exchange rates between the settlement date and (if later) the date on which the Shares are sold, the amount of proceeds ultimately distributed to you may be more or less than the market value of the Shares on the settlement date (which is the amount relevant to determining your liability for Tax Obligations). You understand and agree that the Company is not responsible for the amount of any loss that you may incur and that the Company assumes no liability for any fluctuations in the Share price and/or any applicable exchange rate.

Designated Broker Account. If Shares issued upon the settlement of the Performance Units are not immediately sold, you acknowledge that you are required to maintain the Shares in an account with Merrill Lynch Bank & Trust Co., FSB or such other designated broker as may be selected by the Company until the Shares are sold through such Company-designated broker.

Exchange Control Requirements. You understand and agree that, pursuant to local exchange control requirements, you will be required to repatriate the cash proceeds from the sale of the Shares issued upon settlement of the Performance Units and from the receipt of any Dividends or Dividend Equivalents to China. You further understand that, under applicable laws, such repatriation of your cash proceeds will need to be effectuated through a special exchange control account established by the Company or any Affiliate, including your Employer, and you hereby consent and agree that any proceeds may be transferred to such special account prior to being delivered to you. You also understand that the Company will deliver the proceeds to you as soon as possible, but that there may be delays in distributing the funds to you due to exchange control requirements in China. Proceeds may be paid to you in U.S. dollars or local currency at the Company's discretion. If the proceeds are paid to you in U.S. dollars, you will be required to set up a U.S. dollar bank account in China so that the proceeds may be deposited into this account. If the proceeds are paid to you in local currency, the Company is under no obligation to secure any particular currency conversion rate and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. You further agree to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

COLOMBIA

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section IX of the Agreement:

You acknowledge that pursuant to Article 15 of Law 50/1990 (Article 128 of the Colombian Labor Code), the Plan, the Program and related benefits do not constitute a component of "salary" for any purpose. Therefore, they are considered to be of an extraordinary nature and will not be included and/or considered for purposes of calculating any and all labor benefits, such as legal/fringe benefits, vacations, indemnities, payroll taxes, social insurance contributions and/or any other labor-related amounts, subject to the limitations provided in Law 1393/2010.

NOTIFICATIONS

Securities Law Information. The Shares are not and will not be registered with the Colombian registry of publicly traded securities (*Registro Nacional de Valores y Emisores*) and therefore the Shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

Exchange Control Information. Investment in assets located abroad (such as Shares acquired under the Plan and the Program) does not require prior approval from the Central Bank (Banco de la República). Nonetheless, such investments are subject to registration before the Central Bank as foreign investments held abroad, regardless of value. In addition, you must file an annual informative return with the local tax authority detailing assets you hold abroad, which must include the Shares acquired at vesting (every year as long as you keep them). This obligation is only applicable if the assets held abroad exceed the amount of 2,000 Tax Units (approx. US $22.000).

Any payments for your investment originating in Colombia (and the liquidation of such investments) must be transferred through the Colombian foreign exchange market (*e.g.*, local banks), which includes the obligation to correctly complete and file the appropriate foreign exchange form (*declaración de cambio*).

CROATIA

NOTIFICATIONS

Exchange Control Information. Croatian residents may be required to report any foreign investments (including Shares acquired under the Plan and the Program) to the Croatian National Bank for statistical purposes. You should be aware that exchange control regulations in Croatia are subject to frequent change and you are solely responsible for ensuring your continued compliance with current Croatian exchange control laws.

CZECH REPUBLIC

NOTIFICATIONS

Exchange Control Information. A Czech resident may be required to notify the Czech National Bank ("CNB") of the acquisition of Shares under the Plan or maintenance of a foreign account if (i) he or she maintains foreign direct investments with a value of 2,500,000 Kč or more in the aggregate, (ii) he or she maintains other foreign financial assets with a value of 200,000,000 Kč or more, or (iii) the Czech resident is specifically requested to do so by the CNB.

DENMARK

TERMS AND CONDITIONS

Danish Stock Option Act. In accepting the Performance Units, you acknowledge that you have received an Employer Statement translated into Danish, which is being provided to comply with the Danish Stock Option Act. To the extent more favorable to you and required to comply with the Stock Option Act, as amended with effect from January 1, 2019.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. The requirement to report certain information to the Danish Tax Administration via Form V or K was eliminated effective January 1, 2019.

However, you still must report the foreign bank/brokerage accounts and their deposits, and Shares held in a foreign bank or brokerage account in your tax return under the section on foreign affairs and income.

EGYPT

NOTIFICATIONS

Exchange Control Information. If you transfer funds into Egypt in connection with the Performance Units, you are required to transfer the funds through a registered bank in Egypt.

FINLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. There are no specific reporting requirements with respect to foreign assets/accounts. However, please note that you must check your pre-completed tax return to confirm that the ownership of Shares and other securities (foreign or domestic) are correctly reported. If you find any errors or omissions, you must make the necessary corrections electronically or by sending specific paper forms to the local tax authorities.

FRANCE

TERMS AND CONDITIONS

Language Consent. By accepting the Award, you confirm having read and understood the Plan and Agreement which were provided in the English language. You accept the terms of these documents accordingly.

Consentement Relatif à la Langue Utilisée. *En acceptant l'prix, vous confirmez avoir lu et compris le Plan et le Contrat, qui ont été communiqués en langue anglaise. Vous acceptez les termes de ces documents en connaissance de cause.*

NOTIFICATIONS

Foreign Asset/Account Reporting Information. French residents and non-residents must declare to the Customs Authorities the cash and securities they import or export without the use of a financial institution when the value of such cash or securities exceeds €10,000. French residents also must report all foreign bank and brokerage accounts on an annual basis (including accounts opened or closed during the tax year) on Form N° 3916, together with the income tax return. Failure to comply could trigger significant penalties.

GERMANY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If your acquisition of Shares under the Plan leads to a qualified participation at any point during the calendar year, you will need to report the acquisition when you file your tax return for the relevant year. A qualified participation is attained only in the unlikely event (i) you own at least 1% of the Company and the value of the

Shares acquired exceeds €150,000 or (ii) you hold Shares exceeding 10% of the Company's total Common Stock.

Exchange Control Information. Cross-border payments in excess of €12,500 must be reported monthly to the German Federal Bank (*Bundesbank*). In case of payments in connection with securities (including proceeds realized upon the sale of Shares or the receipt of Dividends or Dividend Equivalents), the report must be made by the 5th day of the month following the month in which the payment was received and must be filed electronically. The form of report (*Allgemeines Meldeportal Statistik*) can be accessed via the Bundesbank's website (www.bundesbank.de) and is available in both German and English. You are responsible for satisfying any applicable reporting obligation.

GREECE

NOTIFICATIONS

Foreign Asset/Account Reporting Information. The reporting of foreign assets (including Shares and other investments) is your own obligation and takes place through your annual tax return.

HONG KONG

TERMS AND CONDITIONS

Form of Settlement - Performance Units Payable Only in Shares. Notwithstanding any discretion in Section 9.5 of the Plan or the Program or anything to the contrary in the Agreement, the Award does not provide any right for you, as a resident of Hong Kong, to receive a cash payment and shall be paid in Shares only.

Sale of Shares. Shares received at vesting are accepted as a personal investment. In the event that Shares are issued in respect of Performance Units within six (6) months of the Grant Date, you agree that you will not offer to the public or otherwise dispose of such Shares prior to the six (6)-month anniversary of the Grant Date.

NOTIFICATIONS

SECURITIES WARNING: *The contents of this document have not been reviewed by any regulatory authority in Hong Kong. You should exercise caution in relation to the offer. If you are in doubt about any of the contents of the Agreement, including this Appendix, or the Plan, you should obtain independent professional advice. The Performance Units and any Shares issued in respect of the Performance Units do not constitute a public offering of securities under Hong Kong law and are available only to members of the Board and Employees. The Agreement, including this Appendix, the Plan and other incidental communication materials have not been prepared in accordance with and are not intended to constitute a "prospectus" for a public offering of securities under the applicable securities legislation in Hong Kong. The Performance Units and any documentation related thereto are intended solely for the personal use of each member of the Board and/or Employee and may not be distributed to any other person.*

HUNGARY

There are no country-specific provisions.

ICELAND

NOTIFICATIONS

Exchange Control Information. Approval by the Central Bank of Iceland is no longer required to participate in the Plan and the Program, regardless of the value of the Shares acquired under the Plan and the Program. Despite the recent relaxation of the exchange control requirements, you should consult with your personal advisor to ensure compliance with applicable exchange control regulations in Iceland as such regulations are subject to frequent change. You are responsible for ensuring compliance with all exchange control laws in Iceland.

INDIA

NOTIFICATIONS

Exchange Control Information. You understand that you must repatriate any cash Dividends paid on Shares acquired under the Plan and the Program to India or any Dividend Equivalents paid in cash, as well as any proceeds from the sale of Shares within a prescribed period of time (currently, within one hundred and eighty (180) days of receipt of cash Dividends or Dividend Equivalents, and within ninety (90) days of receipt of sale proceeds), or such other period of time as may be required under applicable regulations. You will receive a foreign inward remittance certificate ("FIRC") from the bank where you deposit the foreign currency, and you must maintain the FIRC as proof of repatriation of funds in the event that the Reserve Bank of India or your Employer requests proof of repatriation. It is your responsibility to comply with these requirements.

Foreign Asset/Account Reporting Information. You are required to declare foreign bank accounts and any foreign financial assets (including Shares held outside of India) in your annual tax return. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor in this regard.

IRELAND

TERMS AND CONDITIONS

Nature of Grant. This provision supplements Section IX of the Agreement:

In accepting the grant of Performance Units, you acknowledge that the benefits received under the Plan will not be taken into account for any redundancy or unfair dismissal claim.

ITALY

TERMS AND CONDITIONS

Nature of Grant. In accepting the grant of Performance Units, you acknowledge that (1) you have received a copy of the Plan, the Program, the Agreement and this Appendix; (2) you have reviewed the applicable documents in their entirety and fully understand the contents thereof; and (3) you accept all provisions of the Plan, the Program, the Agreement and this Appendix.

You further acknowledge that you have read and specifically and explicitly approve, without limitation, the following sections of the Agreement: Section III, Section IV, Section V, Section IX, Section IV, Section XVI, Section XX and the Data Privacy Notice for All European Economic Area ("EEA") / European Union ("EU") Jurisdictions, United Kingdom and Switzerland in this Appendix.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Italian residents who, at any time during the fiscal year, hold foreign financial assets (including cash and Shares) which may generate income taxable in Italy are required to report these assets on their annual tax returns (UNICO Form, RW Schedule) for the year during which the assets are held, or on a special form if no tax return is due. These reporting obligations will also apply to Italian residents who are the beneficial owners of foreign financial assets under Italian money laundering provisions.

Foreign Financial Assets Tax. The fair market value of any Shares held outside of Italy is subject to a foreign assets tax at a flat rate. The market value is considered to be the value of the Shares on the Nasdaq Global Select Market on December 31 of the applicable year in which you held the Shares (or when the Shares are acquired during the course of the year, the tax is levied in proportion to the actual days of holding over the calendar year). No tax payment duties arise if the amount of the foreign financial assets tax calculated on all financial assets held abroad does not exceed a certain threshold. You should consult with your personal tax advisor about the foreign financial assets tax.

JAPAN

NOTIFICATIONS

Foreign Asset/Account Reporting Information. You will be required to report to the Japanese tax authorities details of any assets held outside of Japan as of December 31st (including any Shares acquired under the Plan and the Program) to the extent such assets have a total net fair market value exceeding ¥50,000,000. Such report will be due by March 15 each year. You should consult with your personal tax advisor as to whether the reporting obligation applies to you and whether you will be required to include in the report details of any Shares or cash that you hold.

KOREA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. You are required to declare all foreign financial accounts (*e.g.* non-Korean bank accounts, brokerage accounts holding Shares, etc.) to the Korean tax authority and file a report regarding such accounts if the monthly balance of such accounts exceeds a certain threshold on any month-end date during a calendar year. It is your responsibility to comply with this reporting obligation and you should consult your personal tax advisor to ensure compliance with this requirement.

LEBANON

NOTIFICATIONS

Securities Law Information. The Plan does not constitute the marketing or offering of securities in Lebanon pursuant to Law No. 161 (2011), the Capital Markets Law. Offerings under the Plan are being made only to eligible Employees of your Employer, the Company or an Affiliate.

LITHUANIA

NOTIFICATIONS

Foreign Asset/Account Reporting Information. If you (i) hold certain job positions established by the law or (ii) donate to political parties or political campaigners, you must file an Annual Asset Return of the Individual (Family) in Form No. FR0001 with respect to assets held outside of Lithuania (*e.g.*, Shares). If you open an account in a foreign financial institution and annual turnover in the account exceeds EUR 15,000, you must file a foreign account report.

MEXICO

TERMS AND CONDITIONS

Acknowledgement of the Grant. In accepting the Award granted hereunder, you acknowledge that you have received a copy of the Plan and the Program, have reviewed the Plan and the Program and the Agreement, including this Appendix, in their entirety and fully understand and accept all provisions of the Plan, the Program and the Agreement, including this Appendix. You further acknowledge that you have read and specifically and expressly approve the terms and conditions of Section IX of the Agreement, in which the following is clearly described and established:

(1) Your participation in the Plan and the Program do not constitute an acquired right.

(2) The Plan and your participation in the Plan and the Program are offered by Amgen Inc. on a wholly discretionary basis.

(3) Your participation in the Plan and the Program is voluntary.

(4) Amgen Inc. and its Affiliates are not responsible for any decrease in the value of any Shares issued with respect to the Award.

Labor Law Acknowledgement and Policy Statement. In accepting any Award granted hereunder, you expressly recognize that Amgen Inc., with registered offices at One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., is solely responsible for the administration of the Plan and that your participation in the Plan and acquisition of Shares do not constitute an employment relationship between you and Amgen Inc. since you are participating in the Plan on a wholly commercial basis and your sole employer is Amgen Mexico S.A. de C.V. ("Amgen-Mexico"). Based on the foregoing, you expressly recognize that the Plan and the Program and the benefits that you may derive from participation in the Plan and the Program do not establish any rights between you and your Employer, Amgen-Mexico, and do not form part of the employment conditions and/or benefits provided by Amgen-Mexico and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of your employment.

You further understand that your participation in the Plan and the Program is as a result of a unilateral and discretionary decision of Amgen Inc.; therefore, Amgen Inc. reserves the absolute right to amend and/or discontinue your participation in the Plan at any time without any liability to you.

Finally, you hereby declare that you do not reserve to yourself any action or right to bring any claim against Amgen Inc. for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and you therefore grant a full and broad release to Amgen Inc., its Affiliates, stockholders, officers, agents or legal representatives with respect to any claim that may arise.

Spanish Translation

Reconocimiento del Otorgamiento. Al aceptar cualquier Otorgamiento de Acciones bajo el presente documento, usted reconoce que ha recibido una copia del Plan y del Programa, que ha revisado el Plan y el Programa, así como también el Apéndice en su totalidad, además que comprende y está de acuerdo con todas las disposiciones tanto del Plan, del Programa y del Otorgamiento, incluyendo este Apéndice. Asimismo, usted reconoce que ha leído y manifiesta específicamente y expresamente la conformidad con los términos y condiciones establecidos en la Sección IX del Acuerdo del Otorgamiento, en los que se establece y describe claramente que:

(1) Su participación en el Plan y en el Programa de ninguna manera constituye un derecho adquirido.

(2) Su participación en Plan y en el Programa son ofrecidos por Amgen Inc. de forma completamente discrecional.

(3) Su participación en el Plan y en el Programa es voluntaria.

(4) Amgen Inc. y sus Afiliados no son responsables de ninguna disminución en el valor de las Acciones Comunes emitidas mediante el Plan.

Reconocimiento de la Ley Laboral y Declaración de Política. Al aceptar cualquier Otorgamiento bajo el presente, usted reconoce expresamente que Amgen Inc., con oficinas registradas localizadas en One Amgen Center Drive, Thousand Oaks, California 91320, U.S.A., es la única responsable de la administración del Plan y que su participación en el mismo y la adquisición de Acciones Comunes no constituyen de ninguna manera una relación laboral entre usted y Amgen Inc., debido a que su participación en el Plan es únicamente una relación comercial y que su único empleador es Amgen Mexico S.A. de C.V. ("Amgen-Mexico"). Derivado de lo anterior, usted reconoce expresamente que el Plan y el Programa y los beneficios a su favor que pudieran derivar de la participación en el mismo, no establecen ningún derecho entre usted y su empleador, Amgen – México, y no forman parte de las condiciones laborales y/o los beneficios otorgados por Amgen – México, y cualquier modificación del Plan o la terminación del mismo no constituirá un cambio o desmejora de los términos y condiciones de su trabajo.

Asimismo, usted entiende que su participación en el Plan y en el Programa es resultado de la decisión unilateral y discrecional de Amgen Inc., por lo tanto, Amgen Inc. se reserva el derecho absoluto de modificar y/o descontinuar su participación en el Plan en cualquier momento y sin ninguna responsabilidad para usted.

Finalmente, usted manifiesta que no se reserva ninguna acción o derecho que origine una demanda en contra de Amgen Inc., por cualquier compensación o daños y perjuicios, en relación con cualquier disposición del Plan o de los beneficios derivados del mismo, y en consecuencia usted exime amplia y completamente a Amgen Inc. de toda responsabilidad, como así también a sus Afiliadas, accionistas, directores, agentes o representantes legales con respecto a cualquier demanda que pudiera surgir.

NOTIFICATIONS

Securities Law Information. The Performance Units and the Shares offered under the Plan have not been registered with the National Register of Securities maintained by the Mexican National Banking and Securities Commission and cannot be offered or sold publicly in Mexico. In addition, the Plan, the Agreement and any other document relating to the Performance Units may not be publicly distributed in Mexico. These materials are addressed to you only because of your existing relationship with the Company and your Employer and these materials should not be

reproduced or copied in any form. The offer contained in these materials does not constitute a public offering of securities but rather constitutes a private placement of securities addressed specifically to individuals who are present employees of Amgen-Mexico made in accordance with the provisions of the Mexican Securities Market Law, and any rights under such offering shall not be assigned or transferred.

NETHERLANDS

NOTIFICATIONS

Securities Law Information.

Attention! This investment falls outside AFM supervision.
No prospectus required for this activity.

NORWAY

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Norwegian residents may be subject to foreign asset reporting as part of their ordinary tax return. Norwegian banks, financial institutions, limited companies etc. must report certain information to the Tax Administration. Such information may then be pre-completed in a Norwegian resident's tax return. However, if the resident has traded, or is the owner of, financial instruments (*e.g.*, Shares) not pre-completed in the tax return, the Norwegian resident must enter this information in Form RF-1159, which is an appendix to the tax return.

Exchange Control Information. In general, Norwegian residents should not be subject to any foreign exchange requirements in connection with their acquisition or sale of Shares under the Plan, except normal reporting requirements to the Norwegian Currency Registry. If any transfer of funds into or out of Norway is made through a Norwegian bank, the bank will make the registration.

POLAND

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Polish residents holding foreign securities (including Shares) and maintaining accounts abroad must file reports with the National Bank of Poland if the aggregate value of Shares and cash held in such foreign accounts exceeds PLN 7,000,000. If required, the reports are due on a quarterly basis by the 20th day following the end of each quarter and must be filed on special forms available on the website of the National Bank of Poland.

Exchange Control Information. In addition, Polish residents are required to transfer funds through a bank account in Poland if the transferred amount in any single transaction exceeds a specified threshold (currently €15,000 (or PLN 15,000 if such transfer of funds is associated with the business activity of a consultant)). You must store all documents connected with any foreign exchange transactions you engage in for a period of five (5) years from the end of the year when such transactions were made. Penalties may apply for failure to comply with exchange control requirements.

PORTUGAL

TERMS AND CONDITIONS

Consent to Receive Information in English. You hereby expressly declare that you have full knowledge of the English language and have read, understood and fully accepted and agreed with the terms and conditions established in the Plan, the Program and Agreement.

Conhecimento da Lingua. *Por meio do presente, eu declaro expressamente que tem pleno conhecimento da língua inglesa e que li, compreendi e livremente aceitei e concordei com os termos e condições estabelecidas no Plano, no Programa e no Acordo.*

ROMANIA

NOTIFICATIONS

Exchange Control Information. Certain transfers of funds may need to be reported to the National Office for Prevention and Control of Money Laundering on specific forms by the relevant bank or financial institution. If you deposit proceeds from the sale of Shares or the receipt of Dividends or Dividend Equivalents in a bank account in Romania, you may be required to provide the Romanian bank assisting with the transaction with appropriate documentation explaining the source of the income. You should consult with a legal advisor to determine whether you will be required to submit such documentation to the Romanian bank.

RUSSIA

TERMS AND CONDITIONS

Exchange Control Requirements. You may be required to repatriate certain cash amounts received with respect to the Award to Russia (*e.g.*, cash Dividends, sale proceeds) as soon as you intend to use those cash amounts for any purpose, including reinvestment. If the repatriation requirement applies, such funds must initially be credited to you through a foreign currency account at an authorized bank in Russia. After the funds are initially received in Russia, they may be further remitted to foreign banks in accordance with Russian exchange control laws.

Under the Directive N 5371-U of the Russian Central Bank (the "CBR"), the repatriation requirement may not apply in certain cases with respect to cash amounts received in an account that is considered by the CBR to be a foreign brokerage account. Statutory exceptions to the repatriation requirement also may apply.

You should consult with your personal legal advisor to determine the applicability of the repatriation requirement to any cash received in connection with your participation in the Plan and to ensure compliance with any applicable exchange control requirements.

Securities Law Requirements. The Award granted hereunder, the Agreement, including this Appendix, the Program, the Plan and all other materials you may receive regarding your participation in the Plan and the Program or the Award granted hereunder do not constitute advertising or an offering of securities in Russia. The issuance of Shares in respect of the Award has not and will not be registered in Russia; therefore, such Shares may not be offered or placed in public circulation in Russia.

In no event will Shares acquired under the Plan and the Program be delivered to you in Russia; all Shares will be maintained on your behalf in the United States.

You are not permitted to sell any Shares acquired under the Plan and the Program directly to a Russian legal entity or resident.

Labor Law Acknowledgement. You acknowledge that if you continue to hold Shares acquired under the Plan and the Program after an involuntary termination of your employment, you will not be eligible to receive unemployment benefits in Russia.

Data Privacy Notice. The following provision supplements Section XV of the Agreement:

You understand and agree that you must complete and return a Consent to Processing of Personal Data (the "Consent") form to the Company. Further, you understand and agree that if you do not complete and return a Consent form to the Company, the Company will not be able to administer or maintain the Performance Units. Therefore, you understand that refusing to complete a Consent form or withdrawing your consent may affect your ability to participate in the Plan.

NOTIFICATIONS

Foreign Asset/Account Reporting Information. Russian residents are required to file the following reports or notifications with the Russian tax authorities, if applicable: (i) annual cash flow reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); (ii) financial asset (including Shares) reporting for an offshore brokerage account (due by June 1 each year for the previous year, with the first reporting due by June 1, 2022 for calendar year 2021); and (ii) a one-time notification within one (1) month of opening, closing, or changing details of an offshore brokerage account. You are encouraged to contact your personal tax advisor before remitting your proceeds from participation in the Plan to Russia to ensure compliance with applicable requirements.

Anti-Corruption Legislation Information. Individuals holding public office in Russia, as well as their spouses and dependent children, may be prohibited from opening or maintaining a foreign brokerage or bank account and holding any securities, whether acquired directly or indirectly, in a foreign company (including Shares acquired under the Plan and the Program). You should consult with your personal legal advisor to determine whether this restriction applies to your circumstances.

SINGAPORE

TERMS AND CONDITIONS

Restriction on Sale and Transferability. You hereby agree that any Shares acquired pursuant to the Performance Units will not be offered for sale in Singapore prior to the six (6)-month anniversary of the Grant Date, unless such sale or offer is made pursuant to one or more exemptions under Part XIII Division 1 Subdivision (4) (other than section 280) of the Securities and Futures Act (Chap. 289, 2006 Ed.) ("SFA"), or pursuant to, and in accordance with the conditions of, any other applicable provisions of the SFA.

NOTIFICATIONS

Securities Law Information. The grant of the Performance Units is being made pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the SFA, on which basis it is exempt from the prospectus and registration requirements under the SFA, and is not made with a view to the Performance Units being subsequently offered for sale to any other party. The Plan has not been, and will not be, lodged or registered as a prospectus with the Monetary Authority of Singapore.

Director Notification Requirement. Directors (including alternate, substitute, associate and shadow directors) of a Singapore Affiliate are subject to certain notification requirements under the Singapore Companies Act , regardless of whether they are resident or employed in Singapore. Directors of a Singapore Affiliate must notify the Singapore Affiliate in writing of an interest (*e.g.*, Performance Units, Shares, etc.) in the Company or any related company within two (2) business days of (i) its acquisition or disposal, (ii) any change in a previously disclosed interest (*e.g.*, when the Shares are sold), or (iii) becoming a director.

SLOVAK REPUBLIC

There are no country-specific provisions.

SLOVENIA

There are no country-specific provisions.

SPAIN

TERMS AND CONDITIONS

Labor Law Acknowledgement. The following provision supplements Section IX of the Agreement:

By accepting the Award granted hereunder, you consent to participation in the Plan and the Program and acknowledge that you have received a copy of the Plan and the Program.

You understand that the Company has unilaterally, gratuitously and in its sole discretion decided to grant the Award under the Plan and the Program to individuals who may be members of the Board or Employees of the Company or its Affiliates throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that the Awards granted will not economically or otherwise bind the Company or any of its Affiliates on an ongoing basis, other than as expressly set forth in the applicable Agreement, including this Appendix. Consequently, you understand that the Award granted hereunder is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any of its Affiliates) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Further, you understand and freely accept that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant of the Award since the future value of the Award and any Shares that may be issued in respect of such Award is unknown and unpredictable. In addition, you understand that the Award granted hereunder would not be made but for the assumptions and conditions referred to above; thus, you understand, acknowledge and freely accept that, should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the grant of the Award or right to the Award shall be null and void.

Further, the vesting of the Performance Units is expressly conditioned your continued and active rendering of service, such that if your employment terminates for any reason whatsoever, the Performance Units may cease vesting immediately, in whole or in part, effective on the date of your termination of employment (unless otherwise specifically provided in Section I of the Agreement). This will be the case, for example, even if (1) you are considered to be unfairly dismissed without good cause (*i.e.*, subject to a "despido improcedente"); (2) you are dismissed for disciplinary or objective reasons or due to a collective dismissal; (3) you terminate service due to a change of work location, duties or any other employment or contractual condition; (4) you terminate service due to a unilateral breach of contract by the Company or an Affiliate; or

(5) your employment terminates for any other reason whatsoever. Consequently, upon termination of your employment for any of the above reasons, you may automatically lose any rights to Performance Units that were not vested on the date of your termination of employment, as described in the Plan and the Agreement.

You acknowledge that you have read and specifically accept the conditions referred to in Section I of the Agreement.

NOTIFICATIONS

Securities Law Information. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory. The Agreement (including this Appendix) has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

Exchange Control Information. If you acquire Shares under the Plan, you must declare the acquisition to the *Direccion General de Comercio e Inversiones* ("DGCI"). If you acquire the Shares through the use of a Spanish financial institution, that institution will automatically make the declaration to the DGCI for you; otherwise, you will be required to make the declaration by filing a D-6 form. You must declare ownership of any Shares with the DGCI each January while the Shares are owned and must also report, in January, any sale of Shares that occurred in the previous year for which the report is being made, unless the sale proceeds exceed the applicable threshold, in which case the report is due within one (1) month of the sale.

Foreign Asset/Account Reporting Information. You are required to declare electronically to the Bank of Spain any securities accounts (including brokerage accounts held abroad), as well as the Shares held in such accounts if the value of the transactions during the prior tax year or the balances in such accounts as of December 31 of the prior tax year exceed €1,000,000.

To the extent that you hold Shares and/or have bank accounts outside of Spain with a value in excess of €50,000 (for each type of asset) as of December 31 each year, you will be required to report information on such assets in your tax return (tax form 720) for such year. After such Shares and/or accounts are initially reported, the reporting obligation will apply for subsequent years only if the value of any previously-reported Shares or accounts increases by more than €20,000 or if you sell or otherwise dispose of previously-reported Shares or accounts. If the value of such Shares and/or accounts as of December 31 does not exceed €50,000, a summarized form of declaration may be presented.

SWEDEN

TERMS AND CONDITIONS

Authorization to Withhold. This provision supplements Section III of the Agreement:

Without limiting the Company's and the Employer's authority to satisfy their withholding obligations for Tax Obligations as set forth in the Agreement, in accepting the Performance Units, you authorize the Company to withhold Shares or to sell Shares otherwise issuable to you upon vesting or settlement to satisfy Tax Obligations, regardless of whether the Company and/or Employer have an obligation to withhold such Tax Obligations, provided that such withholding would not, in the Company's determination, result in adverse accounting consequences to the Company

SWITZERLAND

NOTIFICATIONS

Securities Law Information. Neither this document nor any other materials relating to the Performance Units (i) constitutes a prospectus according to articles 35 et seq. of the Swiss Federal Act on Financial Services ("FinSA"), (ii) may be publicly distributed or otherwise made publicly available to any person other than an employee of the Company or one of its Subsidiaries in Switzerland or (iii) has been or will be filed with, approved or supervised by any Swiss reviewing body according to article 51 of FinSA or any Swiss regulatory authority, including the Swiss Financial Market Supervisory Authority.

TAIWAN

NOTIFICATIONS

Exchange Control Information. You may acquire and remit foreign currency (including proceeds from the sale of Shares or the receipt of Dividends or Dividend Equivalents) up to US$5,000,000 per year without justification. If the transaction amount is TWD500,000 or more in a single transaction, you must submit a Foreign Exchange Transaction Form. If the transaction amount is US$500,000 or more in a single transaction, you must also provide supporting documentation to the satisfaction of the remitting bank.

THAILAND

NOTIFICATIONS

Exchange Control Information. If proceeds from the sale of Shares or the receipt of any Dividends or Dividend Equivalents exceed US$1,000,000, you must (i) immediately repatriate such funds to Thailand and (ii) report the inward remittance to the Bank of Thailand on a Foreign Exchange Transaction Form. In addition, within three hundred and sixty (360) days of repatriation, you must either convert any funds repatriated to Thailand to Thai Baht or deposit the funds in a foreign exchange account with a Thai commercial bank. Any such commercial bank must be duly authorized by the Bank of Thailand to engage in the purchase, exchange and withdrawal of foreign currency.

TURKEY

NOTIFICATIONS

Securities Law Information. The Performance Units are made available only to employees of the Company and its Affiliates, and the offer of participation in the Plan is a private offering. The grant of the Award and the issuance of Shares at vesting takes place outside of Turkey.

Exchange Control Information. Any activity related to investments in foreign securities (*e.g.*, the sale of Shares under the Plan, the receipt of cash Dividends or Dividend Equivalents) must be conducted through a bank or financial intermediary institution licensed by the Turkish Capital Markets Board and should be reported to the Turkish Capital Markets Board by the bank or intermediary assisting with the transaction. You should contact a personal legal advisor for further information regarding these requirements.

UNITED ARAB EMIRATES

NOTIFICATIONS

Securities Law Information. Performance Units under the Plan are available only to Participants under the Program and are for the purpose of providing equity incentives. The Plan, the Program and the Agreement are intended for distribution only to such Participants and must not be delivered to, or relied on by, any other person. You should conduct your own due diligence on the Performance Units offered pursuant to this Agreement. If you do not understand the contents of the Plan and/or the Agreement, you should consult an authorized financial adviser. The Emirates Securities and Commodities Authority and the Dubai Financial Services Authority have no responsibility for reviewing or verifying any documents in connection with the Plan. Further, the Ministry of the Economy and the Dubai Department of Economic Development have not approved the Plan or the Agreement nor taken steps to verify the information set out therein, and have no responsibility for such documents.

UNITED KINGDOM

TERMS AND CONDITIONS

Tax Withholding. This provision supplements Section V of the Agreement:

Without limitation to Section V of the Agreement, you agree that you are liable for all Tax Obligations and hereby covenant to pay all such Tax Obligations as and when requested by the Company or your Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). You also agree to indemnify and keep indemnified the Company and your Employer against any taxes that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on your behalf.

Notwithstanding the foregoing, if you are an executive officer or director (as within the meaning of Section 13(k) of the Exchange Act, as amended, from time to time), you understand that you may not be able to indemnify the Company or your Employer for the amount of income tax not collected from or paid by you, as it may be considered a loan. In the event that you are an executive officer or director and income tax is not collected from you within ninety (90) days after the end of the tax year in which the Taxable Event occurs, the amount of any uncollected income tax may constitute an additional benefit to you on which additional income tax and national insurance contributions ("NICs") may be payable. You acknowledge that you are responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for paying your Employer for the amount of any NICs due on this additional benefit, which the Company or your Employer may obtain from you by any of the means set forth in Section V of the Agreement.

If the maximum applicable withholding rate is used, any over-withheld amount may be credited to you by the Company or your Employer (with no entitlement to the Common Stock equivalent) or if not so credited, you may seek a refund from the local tax authorities.

Joint Election. If you are a resident of the United Kingdom between the Grant Date and the vesting of the Performance Units, as a condition of the Award, you agree to accept any liability for secondary Class 1 National Insurance Contributions (the "Employer NICs") which may be payable by the Company or your Employer with respect to the earning and/or payment of the Performance Units and issuance of Shares in respect of the Performance Units, the assignment or release of the Performance Units for consideration or the receipt of any other benefit in connection with the Performance Units.

Without limitation to the foregoing, you agree to make an election (the "Election"), in the form specified and/or approved for such election by HMRC, that the liability for your Employer NICs

payments on any such gains shall be transferred to you to the fullest extent permitted by law. You further agree to execute such other elections as may be required between you and any successor to the Company and/or your Employer. You hereby authorize the Company and your Employer to withhold such Employer NICs by any of the means set forth in Section V of the Agreement.

Failure by you to enter into an Election, withdrawal of approval of the Election by HMRC or a joint revocation of the Election by you and the Company or your Employer, as applicable, shall be grounds for the forfeiture and cancellation of the Performance Units, without any liability to the Company or your Employer.

UNITED STATES

TERMS AND CONDITIONS

Nature of Grant. The following provision replaces Section IX(j) of the Award Agreement:

(j) in the event of termination of your employment (whether or not in breach of local labor laws), your right to receive Performance Units and receive Shares under the Plan and the Program, if any, will terminate effective as of the date that you are no longer actively employed; *provided*, *however*, that such right will be extended by any notice period mandated by law (*e.g*., the Worker Adjustment and Retraining Notification Act ("WARN Act") notice period or similar periods pursuant to local law) and any paid administrative leave (as applicable), unless the Company shall provide you with written notice otherwise before the commencement of such notice period or leave. In such event, payment of the Performance Units shall be made in accordance with Section IV; *provided*, *further*, *however*, that notwithstanding the effect of any such extension, subject to Section 4.2 of the Program, in no event will the Performance Units be paid later than the 90th day following the last day of the Performance Period.

EXHIBIT 10.15

THIRD AMENDMENT TO THE
AMGEN INC. SUPPLEMENTAL RETIREMENT PLAN
AS AMENDED AND RESTATED EFFECTIVE OCTOBER 16, 2013

The Amgen Inc. Supplemental Retirement Plan, as Amended and Restated Effective October 16, 2013 (the "Plan"), is hereby amended, effective October 20, 2021, as follows:

1. Section 2.27 is amended by adding the following at the end thereof:

   If you were employed by Five Prime Therapeutics, Inc. or any affiliate of Five Prime Therapeutics, Inc. (collectively "Five Prime") immediately preceding the Closing Date (as defined in the Agreement and Plan of Merger by and among Amgen Inc., Franklin Acquisition Sub, Inc. and Five Prime Therapeutics, Inc., Dated as of March 4, 2021) and effective as of the Closing Date, your employment continues with Five Prime or you transition to employment with the Company, then for purposes of calculating your Years of Service under the Plan, you will receive credit for your years of service with Five Prime and with Five Prime-recognized predecessors prior to the Closing Date.

   If you were employed by Teneobio, Inc. or any affiliate of Teneobio, Inc. (collectively "Teneobio") immediately preceding the Closing Date (as defined in the Agreement and Plan of Merger by and among Amgen Inc., Tuxedo Merger Sub, Inc., Teneobio, Inc. and Fortis Advisors LLC, Dated as of July 27, 2021) and effective as of the Closing Date, your employment continues with Teneobio or you transition to employment with the Company, then for purposes of calculating your Years of Service under the Plan, you will receive credit for your years of service with Teneobio and with Teneobio-recognized predecessors prior to the Closing Date.

To record this Third Amendment to the Plan as set forth herein, the Company has caused its authorized officer to execute this document this 25th day of October, 2021.

AMGEN INC.

By: /s/ Lori A. Johnston

Name: Lori A. Johnston

Title: Executive Vice President, Human Resources

EXHIBIT 10.23

THIRD AMENDMENT TO THE
AMGEN NONQUALIFIED DEFERRED COMPENSATION PLAN
AS AMENDED AND RESTATED EFFECTIVE OCTOBER 16, 2013

The Amgen Nonqualified Deferred Compensation Plan, as Amended and Restated Effective October 16, 2013 (the "Plan"), is hereby amended, effective January 1, 2022, as follows:

1. Section 3.3 ("Delayed Commencement Election") is amended by adding the following at the end thereof:

   The opportunity to delay the effective date of deferral elections as described in this Section 3.3 applies to Plan Years beginning prior to January 1, 2022. In no event may a Participant delay the effective date of his or her deferral elections for Plan Years beginning on or after January 1, 2022.

2. Section 4.1 ("Short-Term Payout") is amended by adding the following at the end thereof:

   The ability to irrevocably elect a Short-Term Payout for Annual Deferral Amounts as described in this Article 4 applies to Plan Years beginning prior to January 1, 2022. In no event may a Participant elect a Short-Term Payout for Annual Deferral Amounts for Plan Years beginning on or after January 1, 2022.

To record this Third Amendment to the Plan as set forth herein, the Company has caused its authorized officer to execute this document this 25th day of October, 2021.

AMGEN INC.

By: /s/ Lori A. Johnston

Name: Lori A. Johnston

Title: Executive Vice President, Human Resources

AIRCRAFT TIME SHARING AGREEMENT

This Agreement is made and entered into as of December 3, 2021 by and between Amgen Inc. (together with its subsidiaries and affiliates, "Lessor"), and Robert A. Bradway ("Lessee").

WITNESSETH:

WHEREAS, Lessor is the operator and/or registered owner of undivided interests in aircraft bearing the Manufacturer's Serial Number(s) and the United States Federal Aviation Administration ("FAA") Registration Number(s) listed on Schedule A hereto, as amended from time to time (collectively, the "Aircraft"); and

WHEREAS, from time to time, in connection with use of the Aircraft for Lessor's business purposes, Lessee may desire to use the Aircraft for personal usage incidental to business travel; and

WHEREAS, the parties intend for Lessee to reimburse Lessor for certain costs associated with such personal usage incidental to business travel on a non-exclusive time sharing basis in accordance with FAR § 91.501;

NOW THEREFORE, in consideration of the mutual covenants herein set forth, the parties agree as follows:

1. Provision of Aircraft and Crew. Subject to Aircraft availability, Lessor agrees to allow Lessee's personal usage of the Aircraft incidental to business travel on a time sharing basis in accordance with the provisions of FAR §§ 91.501(b)(6), (b)(10), (c)(1) and (d). Lessor shall provide, at its sole expense, fully qualified flight crew for all flight operations under this Agreement. If Lessor is no longer the operator of any of the Aircraft, Schedule A shall be deemed amended to delete any reference to such Aircraft and this Agreement shall be terminated as to such Aircraft but shall remain in full force and effect with respect to each of the other Aircraft, if any. No such termination shall affect any of the rights and obligations of the parties accrued or incurred prior to such termination. If Lessor becomes the operator of any aircraft not listed on Schedule A hereto, Schedule A shall be deemed amended to include such Aircraft, and this Agreement shall remain in full force and effect with respect to such Aircraft and each of the other Aircraft, if any.

2. Term. The term of this Agreement (the "Term") shall commence on the date hereof and shall continue until terminated by either party on written notice to the other party. This Agreement shall terminate immediately in the event that Lessee is no longer an employee or director of Lessor. Notwithstanding the foregoing, any provisions directly or indirectly related to Lessee's payment obligations for flights completed prior to the date of termination shall survive the termination of this Agreement.

3. Reimbursement of Expenses. For each flight conducted under this Agreement involving personal usage incidental to business travel, Lessee shall pay Lessor an amount determined by Lessor for the expenses attributable to such personal usage incidental to business travel in an amount not to exceed that permitted by FAR §91.501(d). The invoice to Lessee shall not exceed the aggregate cost of:

(a) Fuel, oil, lubricants, and other additives;

(b) Travel expenses of the crew, including food, lodging, and ground transportation;

(c) Hangar and tie-down costs away from the Aircraft's base of operation;

(d) Insurance obtained for the specific flight;

(e) Landing fees, airport taxes, and similar assessments;

(f) Customs, foreign permit, and similar fees directly related to the flight;

(g) In-flight food and beverages;

(h) Passenger ground transportation;

(i) Flight planning and weather contract services; and

(j) An additional charge equal to one hundred percent (100%) of the expenses listed in subsection (a) above.

4. Invoicing and Payment. All payments to be made to Lessor by Lessee hereunder shall be paid in the manner set forth in this Section 4. Lessor will pay, or cause to be paid, all expenses related to the operation of the Aircraft hereunder in the ordinary course. As soon as practicable after the relevant flight, Lessor shall provide or cause to be provided to Lessee an invoice detailing all amounts payable by Lessee pursuant to Section 3 of this Agreement. Lessee shall pay all amounts due under the invoice not later than 60 days after receipt thereof unless otherwise specified in such invoice.

5. Flight Requests. Lessee will provide the designated representatives of Lessor with flight requests for Lessee's personal usage incidental to business travel pursuant to this Agreement as far in advance of the relevant flight as possible and in accordance with all policies established by Lessor. Flight requests shall be in a form, whether oral or written, mutually convenient to the parties. Lessor shall have sole and exclusive authority over the scheduling of the Aircraft. Lessor shall not be liable to Lessee or any other person for loss, injury, or damage occasioned by the delay or failure to furnish the Aircraft and crew pursuant to this Agreement for any reason.

Any flights or personal usage incidental to business travel scheduled under this Agreement are subject to cancellation by either party without incurring liability to the other party. In the event of a cancellation, the canceling party shall provide the maximum notice reasonably practicable.

6. Operational Authority and Control. Lessor shall be responsible for the physical and technical operation of the Aircraft and the safe performance of all flights under this Agreement, and shall retain full authority and control, including exclusive operational control and exclusive possession, command and control of the Aircraft for all flights under this Agreement. Lessor shall furnish at its expense a fully qualified flight crew with appropriate credentials to conduct each flight undertaken under this Agreement. In accordance with applicable FARs, the qualified flight crew provided by Lessor will exercise all required and/or appropriate duties and responsibilities in regard to the safety of each flight conducted hereunder. The pilot-in-command shall have absolute discretion in all matters concerning the preparation of the Aircraft for flight and the flight itself, the load carried and its distribution, the decision whether or not a flight shall

be undertaken or personal usage incidental to business travel shall be permitted, the route to be flown, the place where landings shall be made, and all other matters relating to operation of the Aircraft. Lessee specifically agrees that the flight crew shall have final and complete authority to delay or cancel any flight or any personal usage incidental to business travel for any reason or condition that in the sole judgment of the pilot-in-command could compromise the safety of the flight, and to take any other action that in the sole judgment of the pilot-in-command is necessitated by considerations of safety. No such action of the pilot-in-command shall create or support any liability to Lessee or any other person for loss, injury, damage or delay. Lessor's operation of the Aircraft hereunder shall be strictly within the guidelines and policies established by Lessor and FAR Part 91.

7. Aircraft Maintenance. Lessor shall, at its own expense, cause the Aircraft to be inspected, maintained, serviced, repaired, overhauled, and tested in accordance with FAR Part 91 so that the Aircraft will remain in good operating condition and in a condition consistent with its airworthiness certification and shall take such requirements into account in scheduling the Aircraft hereunder. Performance of maintenance, preventive maintenance or inspection shall not be delayed or postponed for the purpose of scheduling the Aircraft unless such maintenance or inspection can safely be conducted at a later time in compliance with applicable laws, regulations and requirements, and such delay or postponement is consistent with the sound discretion of the pilot-in-command. In the event that any non-standard maintenance is required during the term and will interfere with Lessee's requested or scheduled personal usage incidental to business travel, Lessor, or Lessor's pilot-in-command, shall notify Lessee of the maintenance required, the effect on the ability to comply with Lessee's requested or scheduled personal usage incidental to business travel and the manner in which the parties will proceed with the performance of such maintenance and conduct of such flight(s). In no event shall Lessor be liable to Lessee or any other person for loss, injury or damage occasioned by the delay or failure to furnish the Aircraft under this Agreement, whether or not maintenance-related.

8. Insurance. Lessor, at its expense, will maintain or cause to be maintained in full force and effect throughout the Term of this Agreement (i) comprehensive aircraft and liability insurance against bodily injury and property damage claims, including, without limitation, contractual liability, in respect of the Aircraft in such amount as is customarily maintained by prudent operators of similar aircraft; and (ii) hull insurance for the full replacement cost of the Aircraft.

Lessor shall use reasonable commercial efforts to provide such additional insurance for specific flights under this Agreement as Lessee may request in writing. Lessee acknowledges that any trips scheduled to the European Union may require Lessor to purchase additional insurance to comply with applicable regulations.

9. Use of Aircraft. Lessee warrants that:

(i) Lessee will use the Aircraft under this Agreement for and only for his or her own account, including the carriage of guests, and will not use the Aircraft for the purpose of providing transportation of passengers or cargo for compensation or hire or for common carriage;

(ii) Lessee will not permit any lien, security interest or other charge or encumbrance to attach against the Aircraft as a result of his or her actions or inactions, and shall not attempt to convey, mortgage, assign, lease or in any way alienate the Aircraft or Lessor's rights hereunder or create any kind of lien or security interest involving the Aircraft or do anything or take any action that might mature into such a lien; and

(iii) During the Term of this Agreement, Lessee will abide by and conform to all such laws, governmental and airport orders, rules, and regulations as shall from time to time be in effect relating in any way to the operation or use of the Aircraft by a lessee under a time sharing arrangement and all applicable policies of Lessor.

10. Limitation of Liability. NEITHER LESSOR (NOR ITS AFFILIATES) MAKES, HAS MADE OR SHALL BE DEEMED TO MAKE OR HAVE MADE ANY WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, WITH RESPECT TO ANY AIRCRAFT TO BE USED HEREUNDER OR ANY ENGINE OR COMPONENT THEREOF INCLUDING, WITHOUT LIMITATION, ANY WARRANTY AS TO DESIGN, COMPLIANCE WITH SPECIFICATIONS, QUALITY OF MATERIALS OR WORKMANSHIP, MERCHANTABILITY, FITNESS FOR ANY PURPOSE, USE OR OPERATION, AIRWORTHINESS, SAFETY, PATENT, TRADEMARK OR COPYRIGHT INFRINGEMENT OR TITLE.

IN NO EVENT SHALL LESSOR OR ITS AFFILIATES BE LIABLE FOR OR HAVE ANY DUTY OF INDEMNIFICATION, CONTRIBUTION OR REIMBURSEMENT TO LESSEE, LESSEE'S EMPLOYEES, AGENTS OR GUESTS FOR ANY LOSS, CLAIM, DAMAGE OR EXPENSE OF ANY KIND UNLESS SUCH LOSS, CLAIM, DAMAGE OR EXPENSE IS DETERMINED BY A COURT OF COMPETENT JURISDICTION IN A NON-APPEALABLE JUDGMENT TO BE SOLELY DUE TO LESSOR'S BAD FAITH OR WILLFUL MISCONDUCT. The provisions of this Section 10 shall survive the termination or expiration of this Agreement.

11. Notices and Communications. All notices and other communications under this Agreement shall be in writing (except as permitted in Section 5) and shall be given (and shall be deemed to have been duly given upon receipt or refusal to accept receipt) by personal delivery, by facsimile (with a simultaneous confirmation copy sent by first class mail properly addressed and postage prepaid), by email, or by a reputable overnight courier service, addressed as follows:

If to Lessor:

Address: One Amgen Center Drive
Thousand Oaks, California 91320-1799
Attn: Corporate Secretary
Fax: (805) 499-6751
Email: Amgen_Governance_and_Securities_Law@amgen.com

If to Lessee:

Address: One Amgen Center Drive
Thousand Oaks, California 91320-1799
Attn: Robert A. Bradway
Fax: (805) 499-6751
Email: Amgen_Governance_and_Securities_Law@amgen.com

or to such other person or address as either party may from time to time designate in writing to the other party. Notices shall be effective upon receipt.

12. Entire Agreement. This Agreement constitutes the entire understanding between the parties with respect to its subject matter, and there are no representations, warranties, rights, obligations, liabilities, conditions, covenants, or agreements relating to such subject matter that are not expressly set forth herein. There are no third-party beneficiaries of this Agreement.

13. Further Acts. Lessor and Lessee shall from time to time perform such other and further acts and execute such other and further instruments as may be required by law or may be reasonably necessary (i) to carry out the intent and purpose of this Agreement, and (ii) to establish, maintain and protect the respective rights and remedies of the other party.

14. Successors and Assigns. Lessee shall not have the right to assign, transfer or pledge this Agreement and any such attempted assignment, transfer or pledge shall be null and void. This Agreement shall be binding on the parties hereto and their respective heirs, executors, administrators, successors and assigns, and shall inure to the benefit of the parties hereto, and, except as otherwise provided herein, their respective heirs, executors, administrators, other legal representatives, successors and permitted assigns.

15. Taxes. Lessee shall be responsible for paying, and Lessor shall be responsible for collecting from Lessee and paying over to the appropriate authorities, all applicable Federal excise taxes imposed under Internal Revenue Code §4261 and all sales, use and other excise taxes imposed by any authority in connection with the use of the Aircraft by Lessee hereunder.

16. Governing Law and Consent to Jurisdiction. This Agreement shall be governed by the laws of the State of New York without regard to its choice of law principles. The parties hereby consent and agree to submit to the exclusive jurisdiction and venue of any state or federal court in New York, New York in any proceedings hereunder, and each hereby waives any objection to any such proceedings based on improper venue or forum non-conveniens or similar principles. The parties hereto hereby further consent and agree to the exercise of such personal jurisdiction over them by such courts with respect to any such proceedings, waive any objection to the assertion or exercise of such jurisdiction and consent to process being served in any such proceedings in the manner provided for the giving of notices hereunder.

17. Severability. If any provision of this Agreement is held to be illegal, invalid or unenforceable, the legality, validity and enforceability of the remaining provisions shall not be affected or impaired.

18. Amendment or Modification. This Agreement may be amended, modified or terminated only in writing duly executed by the parties hereto.

19. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which shall constitute one and the same Agreement, binding on all the parties notwithstanding that all the parties are not signatories to the same

counterpart. Each party may transmit its signature by facsimile, and any faxed counterpart of this Agreement shall have the same force and effect as a manually-executed original.

20. Truth-in-Leasing Compliance. Lessor, on behalf of Lessee, shall (i) deliver a copy of this Agreement to the Aircraft Registration Branch, Technical Section, of the FAA in Oklahoma City within 24 hours of its execution; (ii) notify the appropriate Flight Standards District Office at least 48 hours prior to the first flight under this Agreement of the registration number of the Aircraft, and the location of the airport of departure and departure time for such flight; and (iii) carry a copy of this Agreement onboard the Aircraft at all times when the Aircraft is being operated under this Agreement.

21. TRUTH IN LEASING STATEMENT PURSUANT TO SECTION 91.23 OF THE FEDERAL AVIATION REGULATIONS:

(a) LESSOR CERTIFIES THAT EACH OF THE AIRCRAFT HAS BEEN INSPECTED AND MAINTAINED DURING THE 12-MONTH PERIOD PRECEDING THE DATE OF THIS AGREEMENT (OR SUCH SHORTER PERIOD AS LESSOR SHALL HAVE POSSESSED THE AIRCRAFT) IN ACCORDANCE WITH THE PROVISIONS OF PART 91 OF THE FEDERAL AVIATION REGULATIONS. EACH OF THE AIRCRAFT WILL BE MAINTAINED AND INSPECTED IN COMPLIANCE WITH THE MAINTENANCE AND INSPECTION REQUIREMENTS FOR ALL OPERATIONS TO BE CONDUCTED UNDER THIS AGREEMENT.

(B) LESSOR AGREES, CERTIFIES AND ACKNOWLEDGES, AS EVIDENCED BY ITS SIGNATURE BELOW, THAT WHENEVER ANY OF THE AIRCRAFT IS OPERATED UNDER THIS AGREEMENT, LESSOR SHALL BE KNOWN AS, CONSIDERED, AND SHALL IN FACT BE THE OPERATOR OF THE AIRCRAFT, AND THAT LESSOR UNDERSTANDS ITS RESPONSIBILITIES FOR COMPLIANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

(C) THE PARTIES UNDERSTAND THAT AN EXPLANATION OF FACTORS AND PERTINENT FEDERAL AVIATION REGULATIONS BEARING ON OPERATIONAL CONTROL CAN BE OBTAINED FROM THE NEAREST FAA FLIGHT STANDARDS DISTRICT OFFICE.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed on the day and year first above written. The persons signing below warrant their authority to sign.

LESSOR: Amgen Inc.		LESSEE: Robert A. Bradway
By:	/s/ Jonathan P. Graham	/s/ Robert A. Bradway
	Name: Jonathan P. Graham	
	Title: Executive Vice President, General Counsel & Secretary	

A legible copy of this Agreement shall be kept in the Aircraft for all operations conducted hereunder.

List of Schedules Omitted from the Aircraft Time Sharing Agreement
Referenced in Exhibit 10.25 Above

Pursuant to Regulation S-K, Item 601(b)(2), the Schedule to the Aircraft Time Sharing Agreement referenced in Exhibit 10.25 above, as listed below, have not been filed. The Registrant agrees to furnish supplementally a copy of any omitted Schedule to the Securities and Exchange Commission (the "Commission") upon request; provided, however, that the Registrant may request confidential treatment of omitted items.

Schedule A – United States Federal Aviation Administration Registration Numbers

CERTAIN IDENTIFIED INFORMATION HAS BEEN EXCLUDED FROM THE EXHIBIT BECAUSE IT BOTH (I) IS NOT MATERIAL AND (II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED. SUCH EXCLUDED INFORMATION HAS BEEN MARKED WITH "[***]".

AMENDMENT NO. 8
TO THE
COLLABORATION AGREEMENT

This Amendment No. 8 to the Collaboration Agreement (this "**Amendment**") is entered into as of the 19th day of November, 2021 (the "**Amendment Effective Date**") by and between **Amgen Inc.**, a Delaware corporation with a place of business at One Amgen Center Drive, Thousand Oaks, California 91320 ("**Amgen**"), and **AstraZeneca Collaboration Ventures, LLC**, a Delaware limited liability company with a place of business at 1800 Concord Pike, Wilmington, Delaware 19850 ("**Partner**"). Amgen and Partner are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**".

WHEREAS, Amgen and Partner entered into that certain Collaboration Agreement, dated as of March 30, 2012, as amended by Amendment No.1 to the Collaboration Agreement, dated October 1, 2014, as further amended by Amendment No.2 to the Collaboration Agreement and Release, dated May 2, 2016, as further amended by Amendment No.3 to the Collaboration Agreement, dated May 27, 2016, as further amended by Amendment No.4 to the Collaboration Agreement, dated October 2, 2016, and as further amended by Amendment No.5 to the Collaboration Agreement, dated January 31, 2018, and as further amended by Amendment No. 6 to the Collaboration Agreement, dated May 15, 2020 and as further amended by Amendment No. 7 to the Collaboration Agreement, dated December 17, 2020 (collectively, the "**Agreement**");

WHEREAS, the Parties have been [***], and the Parties have agreed to include AZD8630 under the Collaboration Agreement, and in connection with the foregoing, Amgen and Partner wish to amend certain portions of the Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the Parties hereto agree to amend the Agreement as follows:

ARTICLE 1 - AMENDMENT

Capitalized terms used in this Amendment and not otherwise defined herein shall have the meanings ascribed to such terms in the Agreement.

1.1 **Acknowledgement.** The Parties hereby acknowledge and agree that (a) notwithstanding Sections 9.4 and 7.2.8.2 of the Agreement, [***], (b) in accordance with Section 9.3.3 (Inclusion) of the Agreement, all Development Costs and General Costs for AZD8630 and all Net Revenues for AZD8630 shall be shared on a [***] basis, and (c) Partner shall be the Development Lead/Designated Regulatory Party, the Manufacturing Lead and the Commercial Lead for AZD8630. The Parties further acknowledge that either Party shall be permitted to conduct non clinical research and development on a Distracting Product pursuant to Section 9.4, and the Parties shall be permitted to use Amgen Intellectual Property, Partner Intellectual Property and Program Intellectual Property in such nonclinical research and development. The Parties acknowledge that [***].

1.2 **Amendment to Certain Schedules.** The Parties hereby agree that the following schedules to the Agreement are hereby deleted in their entirety and replaced with the schedules set forth in Appendix I attached hereto:

- Development/Commercial Lead Schedule;
- Products Schedule; and
- Stage 1 Clinical Trial Schedule.

1.3 **Amendment to Definition of "General Costs".** The Parties hereby agree that, following the Amendment Effective Date, Section 1.65.7 of the Agreement shall be deleted in its entirety and replaced with the following:

"1.65.7 all costs incurred in connection with Prosecution and Maintenance of Amgen Intellectual Property, Partner Intellectual Property and Program Intellectual Property in accordance with Section 10.6 (Prosecution and Maintenance) within or materially related to the Collaboration Scope;"

1.4 **Manufacturing Lead.** The Parties hereby agree that, notwithstanding the provisions of Section 4.1 (Allocation of Manufacturing Responsibility) of the Agreement to the contrary, Partner shall be the initial Manufacturing Lead for AZD8630, and the provisions of Section 4.1 will apply mutatis mutandis.

1.5 **Distribution Lead/Amendment to Section 4.4 (Distribution).** From and after the Amendment Effective Date, Section 4.4 (Distribution) is hereby amended to add the following language immediately after the third sentence in Section 4.4:

"Notwithstanding the foregoing, the Parties agree that, for the commercialization of AZD8630, Partner will be the Distribution Party in all countries, and will be entitled to book sales of AZD8630 worldwide. The allocation of roles and responsibilities for the commercialization of AZD8630 will be as set forth in Section 5.4."

1.6 **Amendment to Section 5.4 (All Sales by Distribution Party).** From and after the Amendment Effective Date, Section 5.4 (All Sales by Distribution Party) is hereby amended to add the following language immediately after the fifth sentence in Section 5.4:

"Notwithstanding the foregoing, with respect to AZD8630 the Parties agree that a commercialization structure will be agreed by the Parties at least [***] years prior to anticipated first commercial launch of AZD8630 that is generally consistent with the roles and responsibilities as agreed by the Parties in the commercialization framework for Tezepelumab in asthma that was ratified by the JSC in May 2020, *provided*, that [***].

1.7 **Amendment to Section 7.2.8.2.** From and after the Amendment Effective Date, Section 7.2.8.2 is hereby amended to add the following language immediately after the first sentence and the Inventorship Margin table:

"Notwithstanding the foregoing, for AZD8630 no Inventorship Margin is applicable."

1.8 **Amendment to Section 10.6.3.** From and after the Amendment Effective Date, Section 10.6.3 is hereby amended to add the following language immediately after the third sentence in Section 10.6.3:

"Notwithstanding the foregoing, solely with respect to AZD8630, subject to the provisions of Section 2.10 (Patent Coordinators), Partner will have the first right (but not the obligation) to control, through outside counsel, and have final decision making authority (after consultation with Amgen in accordance with the terms and conditions of this Agreement) with respect to the Prosecution and Maintenance of the Patents and Product Trademarks within the Program Intellectual Property (the *"Program Patents and Trademarks"*), and with respect to preparation and filing for any Patent Extensions. If Partner desires to abandon the prosecution of a Program Patent or Trademark, then it will inform Amgen thereof in writing with sufficient advance notice to reasonably enable Amgen to assume the filing or prosecution of such Program Patent or Trademark (but in no event later than [***] days prior to the next deadline for any action that may be taken with respect such Program Patent or Trademark with the U.S. Patent and Trademark Office or any non-U.S. patent office) at Amgen's non-reimbursable cost."

1.9 **Amendment to Section 10.8.** From and after the Amendment Effective Date, Section 10.8 is hereby amended to delete all language following the third sentence and add the following language immediately after the third sentence in Section 10.8:

"Notwithstanding the foregoing, solely with respect to AZD8630, Partner will have the first right (but not the obligation) to enforce the Program Intellectual Property against any Third Party that is developing, manufacturing, selling, or importing a product or service that competes with AZD8630; *provided*, that Amgen will have the right to approve in writing any settlement of any claim, suit or action involving its intellectual property that admits the invalidity or unenforceability of its intellectual property or imposes on Amgen restrictions or obligations. If Partner fails to bring any such action or proceeding within forty-five (45) days (or twenty-five (25) days in the case of an action brought under the Biologics Price Competition and Innovation Act of 2009 (or any amendment or successor statute thereto) or within the time frame of any other relevant regulatory or statutory framework that may govern) of a request by Amgen to do so (or, if sooner, five (5) days before the time limit, if any, set forth in the relevant laws and regulations for the filing of such actions), or earlier notifies Amgen in writing of its intent not to bring such action or proceeding, then Amgen will have the right (but not the obligation) to bring any such action or proceeding by counsel of its own choice; *provided*, that Partner will have the right to approve in writing any settlement of any claim, suit or action involving its intellectual property that admits the invalidity or unenforceability of its intellectual property or imposes on Partner restrictions or obligations. The non-enforcing Party will reasonably assist the enforcing Party with respect to any such enforcement in the Collaborative Territory, including, in the event that it is determined that the non-enforcing Party is an indispensable Party to such action, by being named as a Party in such action, and cooperate in any such action at the enforcing Party´s request. Without limiting the foregoing, the enforcing Party will keep the non-enforcing Party advised of all material communications, actual and prospective filings or submissions regarding such action, and will provide the non-enforcing Party copies of and an opportunity to review and comment on any such material communications, filings and submissions (*provided*, that the enforcing Party will have the right to redact any manufacturing information and any information relating to any product other than Products from any such materials).

Solely with respect to AD8630, all Recoveries will be retained by or paid to Partner (whether Partner is the enforcing Party or not), but to the extent such Recoveries were obtained with respect to AZD8630 or a product that competes directly with AZD8630, the same shall be included in the Net Revenues for the period in which such Recovery is made. With respect to all Products other than AZD8630, all Recoveries will be retained by or paid to Amgen (whether Amgen is the enforcing Party or not), but to the extent such Recoveries were obtained with respect to a Product or product that competes directly with a Product, the same shall be included in Net Revenues for the period in which such Recovery is made."

1.10 **Amendment to Section 11.2 (Authorized Disclosure)**. From and after the Amendment Effective Date, Section 11.2 (Authorized Disclosure) is hereby amended to (x) delete the word "and" immediately prior to subclause (v) and (y) add the following words immediately after the words "to the extent mutually agreed by the parties" in subclause (v):

" and (vi) to such Party's actual or potential acquirers, investment bankers or other financial advisors, or actual or potential investors, lenders or other financial partners, in each case under appropriate confidentiality provisions substantially equivalent to those of this Agreement; *provided* that, with respect to any potential acquirers, actual or potential investors, lenders or financial partners of such Party that are biopharmaceutical companies such Party shall only be permitted to share a copy of this Agreement and related financial information; provided further, that, prior to any such disclosure, each such disclosee is bound by written obligations of confidentiality, non-disclosure, and non-use at least as restrictive as the obligations set forth in this Article XII to maintain the confidentiality thereof and not to use or disclose such Confidential Information except as expressly permitted by this Agreement."

1.11 **Addition of a Section 11.7 (Data Privacy)**. From and after the Amendment Effective Date, a new Section 11.7 is hereby added as follows:

11.7 **Data Privacy**. The Parties shall comply with the requirements listed in the Data Privacy Schedule when Personal Data (as defined in said schedule) related to a Product is transferred, acquired or Processed (as defined in said schedule) by Amgen or Partner.

1.12 **Amendment to Section 14.6.3.** From and after the Amendment Effective Date, the phrase "10.5 (License Grant by Partner) (only with respect to the third sentence thereof)" contained in the first sentence of 14.6.3 shall be amended to read as follows:

"10.5 (License Grant by Partner (only with respect to the third sentence thereof, and for AZD8630 only with respect to the transition period referenced in clause (vii) of Section 14.6.1.3 (Transition))."

ARTICLE 2 – REFERENCE TO AND EFFECT ON THE AGREEMENT

2.1 **Reference to Agreement.** Upon and after the effectiveness of this Amendment, each reference in the Agreement to "this Agreement", "hereunder", "hereof" or words of like import referring to the Agreement shall mean and be a reference to the Agreement as modified and amended hereby.

2.2 **Effectiveness of Amendment.** Upon execution and delivery of this Amendment by both Parties, the amendments set forth above in sections 1.2 - 1.12 shall be effective as of the Amendment Effective Date. Except as specifically amended above, the Agreement is and shall continue to be in full force and effect and is hereby in all respects ratified and confirmed and shall constitute the legal, valid, binding and enforceable obligations of the Parties.

2.3 **No Waiver.** The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of either Party under the Agreement, nor constitute a waiver of any provision of the Agreement.

ARTICLE 3 – MISCELLANEOUS

3.1 **Governing Law.** This Amendment will be governed by, and enforced and construed in accordance with, the laws of the State of New York without regard to its conflicts of law provisions. Each of the Parties hereby irrevocably and unconditionally consents to submit to the exclusive jurisdiction of the state and federal courts of the State of New York for any matter arising out of or relating to this Amendment and the transactions contemplated hereby, and agrees not to commence any litigation relating thereto except in such courts. Each of the Parties hereby irrevocably and unconditionally waives any objection to the laying of venue of any matter arising out of this Amendment or the transactions contemplated hereby in the state and federal courts of the State of New York and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such matter brought in any such court has been brought in an inconvenient forum. The Parties agree that a final judgment in any such matter will be conclusive and may be enforced in other jurisdictions by suits on the judgment or in any other manner provided by law. Any proceeding brought by either Party under this Amendment will be exclusively conducted in the English language. The United Nations Convention for the International Sale of Goods will not apply to the transactions contemplated herein.

3.2 **Headings.** The heading for each article and section in this Amendment has been inserted for convenience of reference only and is not intended to limit or expand on the meaning of the language contained in the particular article or section.

3.3 **Counterparts.** This Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Signature page follows]

IN WITNESS THEREOF, duly authorized representatives of the Parties hereto have executed this Amendment as of the date first set forth above.

ASTRAZENECA COLLABORATION VENTURES, LLC		**AMGEN INC.**	
By:	/s/ Richard J. Kenny	By:	/s/ Murdo Gordon
Name:	Richard J. Kenny	Name:	Murdo Gordon
Title:	Assistant Secretary	Title:	EVP Global Commercial Operations

Appendix I
Schedules

Schedule
Development/Commercial Lead

Amgen	Partner
AMG827	AMG139
AMG557	AMG157
AMG570	AMG181
	AZD8630

AMG827 Respiratory-

1 Specifically with regard to AMG827 at the global level, the Parties will work closely through the JPT on the commercial strategy for the Respiratory market for AMG827 with Amgen taking the primary responsibility for [***].

2 The Parties will [***].

3 The Parties will cooperate to ensure that [***] is made available to the JPT at both the global and regional level.

4 This arrangement will be noted in the press release and other approved communications as [***] or with words of similar import.

AMG570-

The Parties hereby agree that Amgen shall be the initial Development Lead and Commercial Lead for AMG570. The Parties shall [***] provided that, in the event that the Parties are unable to [***] if it elects to do so.

Schedule “Data Privacy” Omitted from Amendment No. 8 to the Collaboration Agreement

Pursuant to Regulation S-K, Item 601(a)(5), Schedule “Data Privacy” to Amendment No. 8 to the Collaboration Agreement, as listed below, has not been filed. The Registrant agrees to furnish supplementally a copy of any omitted schedule to the Securities and Exchange Commission upon request; provided, however, that the Registrant may request confidential treatment of omitted items.

Schedule
Data Privacy

Schedule
Products

Product
AMG 139
AMG 157
AMG 181
AMG 557
AMG 827
AMG 570
AZD8630

Schedule
Stage 1 Clinical Trial

Product	Stage 1 Clinical Trial
AMG139	[***]
AMG157	[***]
AMG181	[***]
AMG557	[***]
AMG827	[***]
AMG570	[***]
AZD8630	[***]

AMGEN INC.

The following is a list of subsidiaries of the Company as of December 31, 2021, omitting some subsidiaries which, considered in the aggregate, would not constitute a significant subsidiary.

SUBSIDIARY **(Name under which subsidiary does business)**	**STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION**
Amgen (Europe) GmbH	Switzerland
Amgen Canada Inc.	Canada
Amgen Fremont Inc.	Delaware
Amgen Global Finance B.V.	Netherlands
Amgen GmbH Germany	Germany
Amgen Ilaç Ticaret Limited Şirketi	Turkey
Amgen K-A, Inc.	Delaware
Amgen Manufacturing, Limited	Bermuda
Amgen Research (Munich) GmbH	Germany
Amgen Rockville, Inc.	Delaware
Amgen S.A.S.	France
Amgen S.p.A.	Italy
Amgen SF, LLC	Delaware
Amgen Singapore Manufacturing Pte. Ltd.	Singapore
Amgen Technology (Ireland) Unlimited Company	Ireland
Amgen Technology, Limited	Bermuda
Amgen USA Inc.	Delaware
Amgen Worldwide Holdings B.V.	Netherlands
Amgen, S.A.	Spain
BioVex, Inc.	Delaware
deCODE Genetics ehf	Iceland
Five Prime Therapeutics Inc.	Delaware
Gensenta İlaç Sanayi ve Ticaret Anonim Şirketi	Turkey
Immunex Corporation	Washington
Immunex Rhode Island Corporation	Delaware
KAI Pharmaceuticals, Inc.	Delaware
Ilypsa, Inc.	Delaware
Onyx Pharmaceuticals, Inc.	Delaware
Onyx Therapeutics, Inc.	Delaware
Saga Investments Coöperatief U.A.	Netherlands
TeneoBio, Inc.	Delaware

CERTIFICATIONS

I, Robert A. Bradway, Chairman of the Board, Chief Executive Officer and President of Amgen Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-K of Amgen Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

   (d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 16, 2022

/s/ ROBERT A. BRADWAY
Robert A. Bradway
Chairman of the Board,
Chief Executive Officer and President

CERTIFICATIONS

I, Peter H. Griffith, Executive Vice President and Chief Financial Officer of Amgen Inc., certify that:

1. I have reviewed this Quarterly Report on Form 10-K of Amgen Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and

   (d) Disclosed in this quarterly report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 16, 2022

/s/ PETER H. GRIFFITH

Peter H. Griffith
Executive Vice President and Chief Financial Officer

Exhibit 32

Certification of Chief Executive Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Amgen Inc. (the "Company") hereby certifies that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 16, 2022

/s/ ROBERT A. BRADWAY

Robert A. Bradway
Chairman of the Board,
Chief Executive Officer and President

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 ("Section 906"), or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Amgen Inc. and will be retained by Amgen Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Certification of Chief Financial Officer

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Amgen Inc. (the "Company") hereby certifies that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended December 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 16, 2022

/s/ PETER H. GRIFFITH

Peter H. Griffith
Executive Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 ("Section 906"), or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to Amgen Inc. and will be retained by Amgen Inc. and furnished to the Securities and Exchange Commission or its staff upon request.