AMGEN INC
Form 10-Q
October 26, 2017
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-Q
(Mark One)
þ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2017
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)
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 þ No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes þ No ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting 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. (Check one):

Large accelerated filer þ	Accelerated filer ¨	Non-accelerated filer ¨ (Do not check if a smaller reporting company)

Smaller reporting company ¨ Emerging growth company ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ¨ No þ
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.¨
As of October 17, 2017, the registrant had 725,910,575 shares of common stock, $0.0001 par value, outstanding.

AMGEN INC.
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PART I — FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS
AMGEN INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(In millions, except per share data)
(Unaudited)

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Revenues:				
Product sales	$5,453	$5,516	$16,226	$16,229
Other revenues	320	295	821	797
Total revenues	5,773	5,811	17,047	17,026
Operating expenses:				
Cost of sales	990	1,027	3,010	3,095
Research and development	877	990	2,519	2,762
Selling, general and administrative	1,170	1,244	3,443	3,739
Other	297	23	347	121
Total operating expenses	3,334	3,284	9,319	9,717
Operating income	2,439	2,527	7,728	7,309
Interest expense, net	325	325	972	932
Interest and other income, net	267	216	627	503
Income before income taxes	2,381	2,418	7,383	6,880
Provision for income taxes	360	401	1,140	1,093
Net income	$2,021	$2,017	$6,243	$5,787
Earnings per share:				
Basic	$2.78	$2.70	$8.52	$7.70
Diluted	$2.76	$2.68	$8.46	$7.63
Shares used in calculation of earnings per share:				
Basic	728	747	733	752
Diluted	733	753	738	758
Dividends paid per share	$1.15	$1.00	$3.45	$3.00

See accompanying notes.

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

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Net income	$2,021	$2,017	$6,243	$5,787
Other comprehensive income (loss), net of reclassification adjustments and taxes:				
Foreign currency translation gains	41	9	100	25
Effective portion of cash flow hedges	(50)	(16)	(324)	(201)
Net unrealized gains (losses) on available-for-sale securities	9	(27)	247	515
Other	6	1	5	2
Other comprehensive income (loss), net of taxes	6	(33)	28	341
Comprehensive income	$2,027	$1,984	$6,271	$6,128

See accompanying notes.

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

	September 30, 2017 (Unaudited)	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$ 3,000	$ 3,241
Marketable securities	38,351	34,844
Trade receivables, net	3,404	3,165
Inventories	2,927	2,745
Other current assets	2,070	2,015
Total current assets	49,752	46,010
Property, plant and equipment, net	4,914	4,961
Intangible assets, net	8,873	10,279
Goodwill	14,776	14,751
Other noncurrent assets	2,016	1,625
Total assets	$ 80,331	$ 77,626
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 879	$ 917
Accrued liabilities	5,315	5,884
Short-term borrowings and current portion of long-term debt	1,999	4,403
Total current liabilities	8,193	11,204
Long-term debt	33,777	30,193
Long-term deferred tax liabilities	2,131	2,436
Long-term tax liabilities	2,733	2,419
Other noncurrent liabilities	1,268	1,499
Contingencies and commitments		
Stockholders' equity:		
Common stock and additional paid-in capital; $0.0001 par value; 2,750.0 shares authorized; outstanding — 726.6 shares in 2017 and 738.2 shares in 2016	30,898	30,784
Retained earnings (accumulated deficit)	1,774	(438)
Accumulated other comprehensive loss	(443)	(471)
Total stockholders' equity	32,229	29,875
Total liabilities and stockholders' equity	$ 80,331	$ 77,626

See accompanying notes.

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

	Nine months ended September 30,	
	2017	2016
Cash flows from operating activities:		
Net income	$6,243	$5,787
Depreciation and amortization	1,506	1,546
Share-based compensation expense	244	222
Deferred income taxes	(379)	80
Other items, net	381	93
Changes in operating assets and liabilities:		
Trade receivables, net	(229)	(192)
Inventories	(54)	(125)
Other assets	(110)	(335)
Accounts payable	(50)	(147)
Accrued income taxes, net	48	(140)
Other liabilities	565	465
Net cash provided by operating activities	8,165	7,254
Cash flows from investing activities:		
Purchases of property, plant and equipment	(511)	(511)
Purchases of marketable securities	(26,661)	(22,682)
Proceeds from sales of marketable securities	18,580	14,072
Proceeds from maturities of marketable securities	4,765	1,932
Other	(119)	(247)
Net cash used in investing activities	(3,946)	(7,436)
Cash flows from financing activities:		
Net proceeds from issuance of debt	3,485	6,713
Repayment of debt	(4,405)	(2,725)
Net change in commercial paper	1,499	—
Repurchases of common stock	(2,371)	(1,982)
Dividends paid	(2,531)	(2,251)
Other	(137)	(232)
Net cash used in financing activities	(4,460)	(477)
Decrease in cash and cash equivalents	(241)	(659)
Cash and cash equivalents at beginning of period	3,241	4,144
Cash and cash equivalents at end of period	$3,000	$3,485

See accompanying notes.

AMGEN INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
September 30, 2017
(Unaudited)

1. Summary of significant accounting policies

Business

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

Basis of presentation

The financial information for the three and nine months ended September 30, 2017 and 2016, is unaudited but includes all adjustments (consisting of only normal, recurring adjustments unless otherwise indicated), which Amgen considers necessary for a fair presentation of its condensed consolidated results of operations for those periods. Interim results are not necessarily indicative of results for the full fiscal year.

The condensed consolidated financial statements should be read in conjunction with our consolidated financial statements and the notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2016, and with our condensed consolidated financial statements and the notes thereto contained in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2017 and June 30, 2017.

Principles of consolidation

The condensed consolidated financial statements include the accounts of Amgen as well as its majority-owned subsidiaries. We do not have any significant interests in any variable interest entities. All material intercompany transactions and balances have been eliminated in consolidation.

Use of estimates

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

Property, plant and equipment, net

Property, plant and equipment is recorded at historical cost, net of accumulated depreciation and amortization of $7.5 billion as of September 30, 2017 and December 31, 2016.

Recent accounting pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued a new accounting standard that amends the guidance for the recognition of revenue from contracts with customers to transfer goods and services. The FASB has subsequently issued additional, clarifying standards to address issues arising from implementation of the new revenue recognition standard. The new revenue recognition standard and clarifying standards are effective for interim and annual periods beginning on January 1, 2018. The new standards are required to be adopted using either a full-retrospective or a modified-retrospective approach. We expect to adopt this standard by using the modified-retrospective approach beginning in 2018. We have completed our impact assessment and do not currently anticipate a material impact on Total revenues in our Consolidated Statements of Income. We are implementing changes to our accounting policies, business processes, internal controls and disclosures to support the new accounting, however these changes are not expected to be significant.

In January 2016, the FASB issued a new accounting standard that amends the accounting and disclosures of financial instruments, including a provision requiring that equity investments (except for investments accounted for under the equity method of accounting) be measured at fair value, with changes in fair value recognized in current earnings. The new standard is effective for interim and annual periods beginning on January 1, 2018. With the exception of equity investments currently being accounted for at cost, adjustments are applied using a modified-retrospective approach by reflecting adjustments through a cumulative-effect impact on retained earnings as of the beginning of the fiscal year of adoption. The new standard will be applied prospectively to investments currently accounted for at cost. The impact that this new standard will have on our consolidated financial statements will depend on the fair value of available-for-sale equity securities in our portfolio in the future. See Note 6, Available-for-sale investments, for the fair value of equity securities as of September 30, 2017.

In February 2016, the FASB issued a new accounting standard that amends the guidance for the accounting and disclosure of leases. This new standard requires that lessees recognize the assets and liabilities that arise from leases on the balance sheet, including leases classified as operating leases under current GAAP, and disclose qualitative and quantitative information about leasing arrangements. The new standard requires a modified-retrospective approach to adoption and is effective for interim and annual periods beginning on January 1, 2019, but may be adopted earlier. We expect to adopt this standard beginning in 2019. We do not expect that this standard will have a material impact on our Consolidated Statements of Income, but we do expect that upon adoption, this standard will have a material impact on our assets and liabilities on our Consolidated Balance Sheets. The primary effect of adoption will be the requirement to record right-of-use assets and corresponding lease obligations for current operating leases. In addition, the standard will require that we update our systems, processes and controls we use to track, record and account for our lease portfolio.

In June 2016, the FASB issued a new accounting standard that amends the guidance for measuring and recording credit losses on financial assets measured at amortized cost by replacing the "incurred loss" model with an "expected loss" model. Accordingly, these financial assets will be presented at the net amount expected to be collected. This new standard also requires that credit losses related to available-for-sale debt securities be recorded as an allowance through net income rather than reducing the carrying amount under the current, other-than-temporary-impairment model. The new standard is effective for interim and annual periods beginning on January 1, 2020, but may be adopted earlier, beginning on January 1, 2019. With certain exceptions, adjustments are to be applied using a modified-retrospective approach by reflecting adjustments through a cumulative-effect impact on retained earnings as of the beginning of the fiscal year of adoption. We are currently evaluating the impact that this new standard will have on our consolidated financial statements.

In October 2016, the FASB issued a new accounting standard that amends the income tax accounting guidance for intra-entity transfers of assets other than inventory. The new standard requires that entities recognize the income tax consequences of an intercompany transfer of an asset, other than inventory, in the period the transfer occurs. The current exception to defer the recognition of any tax impact on intercompany transfers of inventory until the inventory is sold to a third party remains unaffected. The new standard is effective for interim and annual periods beginning on January 1, 2018, but may be adopted earlier. We expect to adopt this standard beginning in 2018. The standard would be applied prospectively to any transaction occurring on or after the adoption date. We have completed our impact assessment and do not currently anticipate a material impact on our consolidated financial statements.

In January 2017, the FASB issued a new accounting standard that changes the definition of a business to assist entities with the evaluation of when a set of assets acquired or disposed of should be considered a business. The new standard requires that an entity evaluate whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets; if so, the set of assets would not be considered a business. The new standard also requires that a business include at least one substantive process and narrows the definition of outputs. The new standard will be applied prospectively and is effective for interim and annual periods beginning on January 1, 2018, but may be adopted earlier. We expect to adopt this standard beginning in 2018. Adoption of this new standard may result in more transactions being accounted for as asset acquisitions versus business combinations; however, the impact on our consolidated financial statements will depend on the facts and circumstances of future transactions.

2. Restructuring

In 2014, we initiated a restructuring plan to invest in both continuing innovation and the launch of our new pipeline molecules while improving our cost structure. As part of the plan, we closed facilities in Washington State and Colorado and are reducing the number of buildings we occupy at our headquarters in Thousand Oaks, California, as well as at other locations.

We continue to estimate that we will incur $800 million to $900 million of pre-tax charges in connection with our restructuring, including (i) separation and other headcount-related costs of $535 million to $585 million with respect to staff reductions and (ii) asset-related charges of $265 million to $315 million that consist primarily of asset impairments, accelerated depreciation and other related costs resulting from the consolidation of our worldwide facilities. Through September 30, 2017, we incurred a total of $532 million of separation and other headcount-related costs and $239 million of net asset-related charges.

The amounts related to the restructuring recorded in the Condensed Consolidated Statements of Income during the three and nine months ended September 30, 2017 and 2016, were not significant. As of September 30, 2017, the total restructuring liability was not significant.

3. Income taxes

The effective tax rates for the three and nine months ended September 30, 2017, were 15.1% and 15.4%, respectively, compared with 16.6% and 15.9%, respectively, for the corresponding periods of the prior year. The effective rates differ from the federal statutory rates primarily as a result of indefinitely invested earnings of our foreign operations. We do not provide for U.S. income taxes on undistributed earnings of our foreign operations that are intended to be invested indefinitely outside the United States.

The decrease in our effective tax rate for the three months ended September 30, 2017, was due primarily to favorable tax impacts of changes in the jurisdictional mix of income and expenses, as well as discrete benefits associated with the impairment of our AMG 899 (formerly TA-8995) asset and the related release of contingent consideration liabilities connected with the acquisition of Dezima Pharma B.V. (Dezima) (see Note 8, Goodwill and other intangible assets and Note 11, Fair value measurement), offset partially by adjustments to certain federal tax credits and deductions.

The decrease in our effective tax rate for the nine months ended September 30, 2017, was due primarily to favorable tax impacts of changes in the jurisdictional mix of income and expenses, as well as discrete benefits associated with the effective settlement of certain state and federal tax matters, offset partially by lower tax benefits from share-based compensation payments and adjustments to certain federal tax credits and deductions.

The U.S. territory of Puerto Rico imposes an excise tax on the gross intercompany purchase price of goods and services from our manufacturer in Puerto Rico. The rate is 4% and 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, the excise tax results in foreign tax credits that are generally recognized in our provision for income taxes when the excise tax is incurred.

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 audited by the tax authorities in those jurisdictions. Significant disputes may arise with authorities involving issues of 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 the interpretation of the relevant facts. As previously disclosed, we received a Revenue Agent Report (RAR) from the Internal Revenue Service (IRS) for the years 2010, 2011 and 2012. The RAR proposes to make significant adjustments that relate primarily to the allocation of profits between certain of our entities in the United States and the U.S. territory of Puerto Rico. We are in discussions with the IRS examination team and understand that the RAR may be modified. We disagree with the proposed adjustments and are pursuing resolution through the IRS administrative appeals process, which we believe will likely not be concluded within the next 12 months. Final resolution of the IRS audit could have a material impact on our results of operations and cash flows if not resolved favorably, however, we believe our income tax reserves are appropriately provided for all open tax years. We are no longer subject to U.S. federal income tax examinations for years ended on or before December 31, 2009. In addition, we are currently under examination by a number of other state and foreign tax jurisdictions.

During the three and nine months ended September 30, 2017, the gross amounts of our unrecognized tax benefits (UTBs) increased approximately $120 million and $345 million, respectively, as a result of tax positions taken during the current year. Substantially all of the UTBs as of September 30, 2017, if recognized, would affect our effective tax rate.

4. Earnings per share

The computation of basic earnings per share (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 include primarily shares that may be issued under our stock option, restricted stock and performance unit award programs, as determined using the treasury stock method (collectively, dilutive securities).

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

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Income (Numerator):				
Net income for basic and diluted EPS	$2,021	$2,017	$6,243	$5,787
Shares (Denominator):				
Weighted-average shares for basic EPS	728	747	733	752
Effect of dilutive securities	5	6	5	6
Weighted-average shares for diluted EPS	733	753	738	758
Basic EPS	$2.78	$2.70	$8.52	$7.70
Diluted EPS	$2.76	$2.68	$8.46	$7.63

For the three and nine months ended September 30, 2017 and 2016, the number of anti-dilutive employee share-based awards excluded from the computation of diluted EPS was not significant.

5. 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 research and development (R&D), manufacture and/or commercialization of products and/or product candidates. These collaborations generally provide for non-refundable up-front license fees, development and commercial performance milestone payments, cost sharing, royalty payments and/or profit sharing. Our collaborative arrangements are performed with no guarantee of either technological or commercial success, and each is unique in nature. The following describes a significant arrangement that had a material change since the filing of our Annual Report on Form 10-K for the year ended December 31, 2016.

Novartis Pharma AG

In April 2017, we expanded our existing migraine collaboration with Novartis Pharma AG (Novartis), a wholly owned subsidiary of Novartis AG. In the United States, Amgen and Novartis will jointly develop and collaborate on the commercialization of Aimovig™ (erenumab). Amgen, as the principal, will recognize product sales of Aimovig™ in the United States, will share U.S. commercialization costs with Novartis and will pay 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. Novartis will pay Amgen double-digit royalties on net sales of the products in the Novartis exclusive territories. Novartis will fund a portion of global R&D expenses. Novartis will also make payments to Amgen that could collectively exceed $400 million if certain regulatory events occur and commercial thresholds are achieved. Amgen will manufacture and supply Aimovig™ worldwide.

The migraine collaboration will continue for the commercial life of the products unless terminated in accordance with its terms.

During the three months ended September 30, 2017 and 2016, costs recovered from Novartis for the migraine products were $29 million and $6 million, respectively. During the nine months ended September 30, 2017 and 2016, costs recovered from Novartis for the migraine products were $86 million and $26 million, respectively. Costs recovered are included primarily in Research and development expense in the Condensed Consolidated Statements of Income. During the three months ended September 30, 2017, we received a milestone payment of $60 million from

Novartis, which was recorded in Other revenues in the Condensed Consolidated Statements of Income.

6. Available-for-sale investments

The amortized cost, gross unrealized gains, gross unrealized losses and fair values of available-for-sale investments by type of security were as follows (in millions):

Type of security as of September 30, 2017	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
U.S. Treasury securities	$ 8,029	$ 6	$ (17)	$ 8,018
Other government-related debt securities:				
U.S.	225	—	(1)	224
Foreign and other	2,634	41	(4)	2,671
Corporate debt securities:				
Financial	10,198	63	(7)	10,254
Industrial	9,829	94	(17)	9,906
Other	1,251	12	(2)	1,261
Residential mortgage-backed securities	2,212	2	(10)	2,204
Other mortgage- and asset-backed securities	2,071	—	(4)	2,067
Money market mutual funds	2,455	—	—	2,455
Other short-term interest-bearing securities	1,746	—	—	1,746
Total interest-bearing securities	40,650	218	(62)	40,806
Equity securities	129	27	(13)	143
Total available-for-sale investments	$ 40,779	$ 245	$ (75)	$ 40,949

Type of security as of December 31, 2016	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
U.S. Treasury securities	$ 6,681	$ 1	$ (68)	$ 6,614
Other government-related debt securities:				
U.S.	302	—	(3)	299
Foreign and other	1,784	9	(34)	1,759
Corporate debt securities:				
Financial	8,476	21	(37)	8,460
Industrial	8,793	59	(63)	8,789
Other	1,079	5	(7)	1,077
Residential mortgage-backed securities	1,968	1	(29)	1,940
Other mortgage- and asset-backed securities	1,731	1	(13)	1,719
Money market mutual funds	2,782	—	—	2,782
Other short-term interest-bearing securities	4,188	—	—	4,188
Total interest-bearing securities	37,784	97	(254)	37,627
Equity securities	127	31	(4)	154
Total available-for-sale investments	$ 37,911	$ 128	$ (258)	$ 37,781

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

Classification in the Condensed Consolidated Balance Sheets	September 30, 2017	December 31, 2016
Cash and cash equivalents	$ 2,455	$ 2,783
Marketable securities	38,351	34,844
Other noncurrent assets	143	154
Total available-for-sale investments	$ 40,949	$ 37,781

Cash and cash equivalents in the above table excludes bank account cash of $545 million and $458 million as of September 30, 2017 and December 31, 2016, respectively.

The fair values of available-for-sale interest-bearing security investments by contractual maturity, except for mortgage- and asset-backed securities that do not have a single maturity date, were as follows (in millions):

Contractual maturity	September 30, 2017	December 31, 2016
Maturing in one year or less	$ 6,478	$ 8,393
Maturing after one year through three years	12,912	10,404
Maturing after three years through five years	13,830	12,157
Maturing after five years through ten years	3,252	2,974
Maturing after ten years	63	40
Mortgage- and asset-backed securities	4,271	3,659
Total interest-bearing securities	$ 40,806	$ 37,627

For the three months ended September 30, 2017 and 2016, realized gains totaled $38 million and $215 million, respectively, and realized losses totaled $12 million and $192 million, respectively. For the nine months ended September 30, 2017 and 2016, realized gains totaled $113 million and $283 million, respectively, and realized losses totaled $183 million and $313 million, respectively. The cost of securities sold is based on the specific identification method.

Information on the fair values and gross unrealized losses of available-for-sale investments in an unrealized loss position aggregated by type and length of time that the securities have been in a continuous loss position was as follows (in millions):

	Less than 12 months		12 months or more	
Type of security as of September 30, 2017	Fair value	Unrealized losses	Fair value	Unrealized losses
U.S. Treasury securities	$6,242	$ (17)	$5	$ —
Other government-related debt securities:				
U.S.	118	(1)	12	—
Foreign and other	515	(2)	65	(2)
Corporate debt securities:				
Financial	1,997	(6)	151	(1)
Industrial	2,434	(14)	276	(3)
Other	326	(2)	26	—
Residential mortgage-backed securities	1,723	(8)	94	(2)
Other mortgage- and asset-backed securities	1,074	(4)	38	—
Equity securities	13	(13)	—	—
Total	$14,442	$ (67)	$667	$ (8)

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Type of security as of December 31, 2016	Less than 12 months		12 months or more	
	Fair value	Unrealized losses	Fair value	Unrealized losses
U.S. Treasury securities	$5,774	$ (68)	$—	$ —
Other government-related debt securities:				
U.S.	201	(3)	—	—
Foreign and other	1,192	(34)	17	—
Corporate debt securities:				
Financial	3,975	(37)	44	—
Industrial	3,913	(61)	149	(2)
Other	486	(7)	7	—
Residential mortgage-backed securities	1,631	(26)	158	(3)
Other mortgage- and asset-backed securities	1,087	(10)	118	(3)
Equity securities	22	(4)	—	—
Total	$18,281	$ (250)	$493	$ (8)

The primary objective of our investment portfolio is to enhance overall returns in an efficient manner while maintaining 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.

We review our available-for-sale investments for other-than-temporary declines in fair value below our cost basis each quarter and whenever events or changes in circumstances indicate that the cost basis of an asset may not be recoverable. The evaluation is based on a number of factors, including the length of time and the extent to which the fair value has been below our cost basis and adverse conditions related specifically to the security, including any changes to the credit rating of the security, and the intent to sell, or whether we will more likely than not be required to sell, the security before recovery of its amortized cost basis. Our assessment of whether a security is other-than-temporarily impaired could change in the future based on new developments or changes in assumptions related to that particular security. As of September 30, 2017 and December 31, 2016, we believe the cost bases for our available-for-sale investments were recoverable in all material respects.

7. Inventories

Inventories consisted of the following (in millions):

	September 30, 2017	December 31, 2016
Raw materials	$ 318	$ 225
Work in process	1,597	1,608
Finished goods	1,012	912
Total inventories	$ 2,927	$ 2,745

8. Goodwill and other intangible assets

Goodwill

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

	Nine months ended September 30,	
	2017	2016
Beginning balance	$14,751	$14,787
Goodwill related to acquisitions of businesses	—	2
Currency translation adjustments	25	13
Ending balance	$14,776	$14,802

Identifiable intangible assets

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

	September 30, 2017			December 31, 2016		
	Gross carrying amount	Accumulated amortization	Intangible assets, net	Gross carrying amount	Accumulated amortization	Intangible assets, net
Finite-lived intangible assets:						
Developed product technology rights	$12,585	$ (6,624)	$ 5,961	$12,534	$ (5,947)	$ 6,587
Licensing rights	3,275	(1,525)	1,750	3,275	(1,300)	1,975
Marketing-related rights	1,326	(895)	431	1,333	(793)	540
Research and development technology rights	1,158	(783)	375	1,122	(704)	418
Total finite-lived intangible assets	18,344	(9,827)	8,517	18,264	(8,744)	9,520
Indefinite-lived intangible assets:						
In-process research and development	356	—	356	759	—	759
Total identifiable intangible assets	$18,700	$ (9,827)	$ 8,873	$19,023	$ (8,744)	$ 10,279

Developed product technology rights consist of rights related to marketed products acquired in business combinations. Licensing rights consist primarily of contractual rights acquired in business combinations to receive future milestones, royalties 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 intangible assets consist primarily of rights related to the sale and distribution of marketed products. R&D technology rights consist of technology used in R&D with alternative future uses.

In-process research and development (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. During the three months ended September 30, 2017, we decided to discontinue the internal development of AMG 899 acquired in the acquisition of Dezima in 2015, resulting in an impairment charge of $400 million, which was recognized in Other operating expenses in the Condensed Consolidated Statements of Income and included in Other items, net in the Condensed Consolidated Statement of Cash Flows. See Note 11, Fair value measurement, for the impact on the related contingent consideration liabilities. As of September 30, 2017, the primary IPR&D project is oprozomib, acquired in the acquisition of Onyx Pharmaceuticals, Inc. in 2013.

All IPR&D projects have major risks and uncertainties associated with the timely and successful completion of 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, impact the revenues a product can generate. Consequently, the eventual realized value, if any, of the 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 amount may not be recoverable and upon the establishment of technological feasibility or regulatory approval.

During the three months ended September 30, 2017 and 2016, we recognized amortization charges associated with our finite-lived intangible assets of $308 million and $371 million, respectively. During both the nine months ended September 30, 2017 and 2016, we recognized amortization charges associated with our finite-lived intangible assets of $1.1 billion. The total estimated amortization charges for our finite-lived intangible assets for the remaining three months ending December 31, 2017, and the years ending December 31, 2018, 2019, 2020, 2021 and 2022, are $0.3 billion, $1.2 billion, $1.1 billion, $1.1 billion, $0.9 billion and $0.9 billion, respectively.

9. Financing arrangements

The carrying values and fixed contractual coupon rates of our borrowings were as follows (in millions):

	September 30, 2017	December 31, 2016
Commercial paper	$ 1,500	$ —
Short-term loan	—	605
2.125% notes due 2017 (2.125% 2017 Notes)	—	1,250
Floating Rate Notes due 2017	—	600
1.25% notes due 2017 (1.25% 2017 Notes)	—	850
5.85% notes due 2017 (5.85% 2017 Notes)	—	1,100
6.15% notes due 2018 (6.15% 2018 Notes)	500	500
4.375% €550 million notes due 2018 (4.375% 2018 euro Notes)	647	577
5.70% notes due 2019 (5.70% 2019 Notes)	1,000	1,000
1.90% notes due 2019 (1.90% 2019 Notes)	700	—
Floating Rate Notes due 2019	550	250
2.20% notes due 2019 (2.20% 2019 Notes)	1,400	1,400
2.125% €675 million notes due 2019 (2.125% 2019 euro Notes)	797	710
4.50% notes due 2020 (4.50% 2020 Notes)	300	300
2.125% notes due 2020 (2.125% 2020 Notes)	750	750
Floating Rate Notes due 2020	300	—
2.20% notes due 2020 (2.20% 2020 Notes)	700	—

3.45% notes due 2020 (3.45% 2020 Notes)	900	900
4.10% notes due 2021 (4.10% 2021 Notes)	1,000	1,000
1.85% notes due 2021 (1.85% 2021 Notes)	750	750
3.875% notes due 2021 (3.875% 2021 Notes)	1,750	1,750
1.25% €1,250 million notes due 2022 (1.25% 2022 euro Notes)	1,478	1,315
2.70% notes due 2022 (2.70% 2022 Notes)	500	500
2.65% notes due 2022 (2.65% 2022 Notes)	1,500	—
3.625% notes due 2022 (3.625% 2022 Notes)	750	750
0.41% CHF700 million bonds due 2023 (0.41% 2023 Swiss franc Bonds)	723	687
2.25% notes due 2023 (2.25% 2023 Notes)	750	750
3.625% notes due 2024 (3.625% 2024 Notes)	1,400	1,400
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)	886	789
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)	636	586
	938	864

4.00% £700 million notes due 2029 (4.00% 2029 pound sterling Notes)					
6.375% notes due 2037 (6.375% 2037 Notes)	552			552	
6.90% notes due 2038 (6.90% 2038 Notes)	291			291	
6.40% notes due 2039 (6.40% 2039 Notes)	466			466	
5.75% notes due 2040 (5.75% 2040 Notes)	412			412	
4.95% notes due 2041 (4.95% 2041 Notes)	600			600	
5.15% notes due 2041 (5.15% 2041 Notes)	974			974	
5.65% notes due 2042 (5.65% 2042 Notes)	487			487	
5.375% notes due 2043 (5.375% 2043 Notes)	261			261	
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	
4.663% notes due 2051 (4.663% 2051 Notes)	3,541			3,541	
Other notes due 2097	100			100	
Unamortized bond discounts, premiums and issuance costs, net	(928	)		(936	)
Total carrying value of debt	35,776			34,596	
Less current portion	(1,999	)		(4,403	)
Total noncurrent debt	$ 33,777			$ 30,193	

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

Debt repayments

During the nine months ended September 30, 2017, we repaid the $605 million short-term loan, the $1.25 billion aggregate principal amount of the 2.125% 2017 Notes, the $600 million aggregate principal amount of the Floating Rate Notes due 2017, the $850 million aggregate principal amount of the 1.25% 2017 Notes and the $1.1 billion aggregate principal amount of the 5.85% 2017 Notes.

Debt issuances

In May 2017, we issued a $3.5 billion principal amount of notes, consisting of the Floating Rate Notes due 2019, the 1.90% 2019 Notes, the Floating Rate Notes due 2020, the 2.20% 2020 Notes and the 2.65% 2022 Notes. In the event of a change-of-control triggering event, as defined in the terms of the notes, we may be required to purchase all or a portion of these debt securities at a price equal to 101% of the principal amount of the notes plus accrued and unpaid interest. All of the aforementioned fixed-rate notes may be redeemed at any time, in whole or in part, at the principal amount of the notes being redeemed plus accrued and unpaid interest and, except for the 2.65% 2022 Notes, a make-whole amount, which is defined by the terms of the notes. The 2.65% 2022 Notes may be redeemed without payment of the make-whole amount if redemption occurs on or after one month prior to maturity.

During the nine months ended September 30, 2017, we issued commercial paper under our commercial paper program. As of September 30, 2017, the weighted-average effective borrowing rate on outstanding commercial paper was 1.3%.

10. Stockholders' equity

Stock repurchase program

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

	2017		2016	
	Shares	Dollars	Shares*	Dollars
First quarter	3.4	$ 555	4.7	$ 690
Second quarter	6.2	1,006	3.9	591
Third quarter	4.4	769	4.4	747
Total stock repurchases	14.0	$ 2,330	12.9	$ 2,028

* Shares do not foot due to rounding.

As of September 30, 2017, $1.7 billion remained available under our stock repurchase program. In October 2017, our Board of Directors authorized an increase that resulted in a total of $5.0 billion available under the stock repurchase program.

Dividends

In July 2017, March 2017 and December 2016, the Board of Directors declared quarterly cash dividends of $1.15 per share of common stock, which were paid in September 2017, June 2017 and March 2017, respectively. In October 2017, the Board of Directors declared a quarterly cash dividend of $1.15 per share of common stock, which will be paid on December 8, 2017.

Accumulated other comprehensive income (loss)

The components of Accumulated other comprehensive income (loss) (AOCI) were as follows (in millions):

	Foreign currency translation	Cash flow hedges	Available-for-sale securities	Other	AOCI
Balance as of December 31, 2016	$ (610)	$ 282	$ (138)	$ (5)	$ (471)
Foreign currency translation adjustments	21	—	—	—	21
Unrealized gains	—	17	116	—	133
Reclassification adjustments to income	—	(131)	49	—	(82)
Income taxes	3	41	(7)	—	37
Balance as of March 31, 2017	(586)	209	20	(5)	(362)
Foreign currency translation adjustments	37	—	—	—	37
Unrealized gains	—	17	73	—	90
Reclassification adjustments to income	—	(330)	47	—	(283)
Other	—	—	—	(1)	(1)
Income taxes	(2)	112	(40)	—	70
Balance as of June 30, 2017	(551)	8	100	(6)	(449)
Foreign currency translation adjustments	38	—	—	—	38
Unrealized gains	—	65	41	—	106
Reclassification adjustments to income	—	(140)	(26)	—	(166)
Other	—	—	—	6	6
Income taxes	3	25	(6)	—	22
Balance as of September 30, 2017	$ (510)	$ (42)	$ 109	$ —	$ (443)

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

	Amounts reclassified out of AOCI Three months ended September 30,		
Components of AOCI	2017	2016	Line item affected in the Condensed Consolidated Statements of Income
Cash flow hedges:			
Foreign currency contract (losses) gains	$ (2)	$ 67	Product sales
Cross-currency swap contract gains (losses)	143	(1)	Interest and other income, net
Forward interest rate contract losses	(1)	(1)	Interest expense, net
	140	65	Income before income taxes
	(49)	(27)	Provision for income taxes
	$ 91	$ 38	Net income
Available-for-sale securities:			
Net realized gains	$ 26	$ 23	Interest and other income, net
	(5)	(8)	Provision for income taxes
	$ 21	$ 15	Net income

Components of AOCI	Amounts reclassified out of AOCI Nine months ended September 30, 2017	2016	Line item affected in the Condensed Consolidated Statements of Income
Cash flow hedges:			
Foreign currency contract gains	$88	$242	Product sales
Cross-currency swap contract gains (losses)	514	(143)	Interest and other income, net
Forward interest rate contract losses	(1)	(1)	Interest expense, net
	601	98	Income before income taxes
	(213)	(39)	Provision for income taxes
	$388	$59	Net income
Available-for-sale securities:			
Net realized losses	$(70)	$(30)	Interest and other income, net
	(7)	—	Provision for income taxes
	$(77)	$(30)	Net income

11. Fair value measurement

To estimate the fair value of our financial assets and liabilities, we use valuation approaches within a hierarchy that 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 September 30, 2017, 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 investments:				
U.S. Treasury securities	$ 8,018	$ —	$ —	$8,018
Other government-related debt securities:				
U.S.	—	224	—	224
Foreign and other	—	2,671	—	2,671
Corporate debt securities:				
Financial	—	10,254	—	10,254
Industrial	—	9,906	—	9,906
Other	—	1,261	—	1,261
Residential mortgage-backed securities	—	2,204	—	2,204
Other mortgage- and asset-backed securities	—	2,067	—	2,067
Money market mutual funds	2,455	—	—	2,455
Other short-term interest-bearing securities	—	1,746	—	1,746
Equity securities	143	—	—	143
Derivatives:				
Foreign currency contracts	—	7	—	7
Cross-currency swap contracts	—	224	—	224
Interest rate swap contracts	—	40	—	40
Forward interest rate contracts	—	10	—	10
Total assets	$ 10,616	$ 30,614	$ —	$41,230
Liabilities:				
Derivatives:				
Foreign currency contracts	$ —	$ 179	$ —	$179
Cross-currency swap contracts	—	308	—	308
Interest rate swap contracts	—	5	—	5
Contingent consideration obligations in connection with business combinations	—	—	68	68
Total liabilities	$ —	$ 492	$ 68	$560

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Fair value measurement as of December 31, 2016, 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 investments:				
U.S. Treasury securities	$ 6,614	$ —	$ —	$6,614
Other government-related debt securities:				
U.S.	—	299	—	299
Foreign and other	—	1,759	—	1,759
Corporate debt securities:				
Financial	—	8,460	—	8,460
Industrial	—	8,789	—	8,789
Other	—	1,077	—	1,077
Residential mortgage-backed securities	—	1,940	—	1,940
Other mortgage- and asset-backed securities	—	1,719	—	1,719
Money market mutual funds	2,782	—	—	2,782
Other short-term interest-bearing securities	—	4,188	—	4,188
Equity securities	154	—	—	154
Derivatives:				
Foreign currency contracts	—	203	—	203
Interest rate swap contracts	—	41	—	41
Total assets	$ 9,550	$ 28,475	$ —	$38,025
Liabilities:				
Derivatives:				
Foreign currency contracts	$ —	$ 4	$ —	$4
Cross-currency swap contracts	—	523	—	523
Interest rate swap contracts	—	7	—	7
Contingent consideration obligations in connection with business combinations	—	—	179	179
Total liabilities	$ —	$ 534	$ 179	$713

The fair values of our U.S. Treasury securities, money market mutual funds and equity securities are based on quoted market prices in active markets with no valuation adjustment.

Most of our other government-related and corporate debt securities are investment grade and have maturity dates of five years or less from the balance sheet date. Our other government-related debt securities portfolio is composed of securities with weighted-average credit ratings of A- or equivalent by Moody’s Investors Service, Inc. (Moody’s), and BBB+ or equivalent by Standard & Poor’s Financial Services LLC (S&P) or Fitch Ratings Inc. (Fitch); and our corporate debt securities portfolio has a weighted-average credit rating of A- or equivalent by Fitch, and BBB + or equivalent by S&P or Moody’s. We estimate the fair values of these securities by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income- and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. The inputs include reported trades of and broker/dealer quotes on the same or similar securities; issuer credit spreads; benchmark securities; and other observable inputs.

Our residential mortgage-, other mortgage- and asset-backed securities portfolio is composed entirely of senior tranches, with credit ratings of AAA by S&P, Moody’s or Fitch. We estimate the fair values of these securities by taking into consideration valuations obtained from third-party pricing services. The pricing services utilize industry standard valuation models, including both income- and market-based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. The inputs include reported trades of and broker/dealer quotes on the same or similar securities; issuer credit spreads; benchmark securities; prepayment/default projections based on historical data; and other observable inputs.

We value our other short-term interest-bearing securities at amortized cost, which approximates fair value given their near-term maturity dates.

All of our foreign currency forward and option derivatives 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 or Moody's. We estimate the fair values of these contracts by taking into consideration valuations obtained from a third-party valuation service that utilizes an income-based industry standard valuation model for which all significant inputs are observable, either directly or indirectly. The inputs include foreign currency exchange rates, London Interbank Offered Rates (LIBOR), swap rates and obligor credit default swap rates. In addition, inputs for our foreign currency option contracts include implied volatility measures. The inputs, when applicable, are at commonly quoted intervals. See Note 12, Derivative instruments.

Our cross-currency swap contracts are with counterparties that have minimum credit ratings of A- or equivalent by S&P or Moody's. We estimate the fair values of these contracts by taking into consideration valuations obtained from a third-party valuation service that utilizes an income-based industry standard valuation model for which all significant inputs are observable either directly or indirectly. The inputs include foreign currency exchange rates, LIBOR, swap rates, obligor credit default swap rates and cross-currency basis swap spreads. See Note 12, Derivative instruments.

Our interest rate swap contracts are with counterparties that have minimum credit ratings of A- or equivalent by S&P or Moody's. 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. The inputs included LIBOR, swap rates and obligor credit default swap rates.

Contingent consideration obligations

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

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

	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Beginning balance	$182	$171	$179	$188
Net changes in valuation	(114)	5	(111)	(12)
Ending balance	$68	$176	$68	$176

As a result of our acquisition of Dezima in October 2015, we are obligated to pay its former shareholders up to $1.25 billion of additional consideration contingent upon achieving certain development and sales-related milestones and low single-digit royalties on net product sales above a certain threshold for AMG 899. The estimated fair value of the contingent consideration obligations had an aggregate value of $110 million at acquisition. During the three months ended September 30, 2017, we decided to discontinue the internal development of AMG 899, resulting in the release of the contingent consideration liabilities. The remeasurement of these liabilities of $116 million was recognized in Other operating expenses in the Condensed Consolidated Statements of Income and included in Other items, net in the Condensed Consolidated Statement of Cash Flows. See Note 8, Goodwill and other intangible assets, for the impact on the related IPR&D asset.

As a result of our acquisition of BioVex Group, Inc. in 2011, we are obligated to pay its former shareholders up to $325 million of additional consideration contingent upon the achievement of certain sales thresholds related to IMLYGIC® (talimogene laherparepvec) within specified periods of time.

During the nine months ended September 30, 2017 and 2016, there were no transfers of assets or liabilities between fair value measurement levels, and, except with respect to an IPR&D asset discussed in Note 8, Goodwill and other intangible assets, to the condensed consolidated financial statements, there were no material remeasurements of the fair values of assets and liabilities that are not measured at fair value on a recurring basis.

Summary of the fair values of other financial instruments

Cash equivalents

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

Borrowings

We estimated the fair value of our borrowings (Level 2) by taking into consideration indicative prices obtained from a third-party financial institution that utilizes industry standard valuation models, including both income- and market-based approaches, for which all significant inputs are observable either directly or indirectly. These inputs include reported trades of and broker/dealer quotes on the same or similar securities; credit spreads; benchmark yields; foreign currency exchange rates, as applicable; and other observable inputs. As of September 30, 2017 and December 31, 2016, the aggregate fair values of our borrowings were $39.0 billion and $36.5 billion, respectively, and the carrying values were $35.8 billion and $34.6 billion, respectively.

12. Derivative instruments

The Company is exposed to foreign currency exchange rate and interest rate risks related to its business operations. To reduce our risks related to such exposures, we utilize or have utilized 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, associated primarily 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 offset partially 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 on our international product sales, we enter into foreign currency forward and option contracts to hedge a portion of our projected international product sales primarily over a three-year time horizon, with, at any given point in time, a higher percentage of nearer-term projected product sales being hedged than in successive periods.

As of September 30, 2017 and December 31, 2016, we had open foreign currency forward contracts with notional amounts of $4.0 billion and $3.4 billion, respectively, and open foreign currency option contracts with notional amounts of $131 million and $608 million, respectively. We have designated these foreign currency forward and foreign currency option contracts, which are primarily euro based, as cash flow hedges; and accordingly, we report the effective portions of the unrealized gains and losses on these contracts in AOCI in the Condensed Consolidated Balance Sheets, and we reclassify them to earnings in the same periods during which the hedged transactions affect earnings.

To hedge our exposure to foreign currency exchange rate risk associated with certain of our long-term debt denominated in foreign currencies, we enter into cross-currency swap contracts. Under the terms of such contracts, we paid euros, pounds sterling and Swiss francs and received U.S. dollars for the notional amounts at the inception of the contracts; and based on these notional amounts, we exchange interest payments at fixed rates over the lives of the contracts by paying U.S. dollars and receiving euros, pounds sterling and Swiss francs. In addition, we will pay U.S. dollars to and receive euros, pounds sterling and Swiss francs from the counterparties at the maturities of the contracts for these same notional amounts. The terms of these contracts correspond to the related hedged debt, 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, and accordingly, the effective portions of the unrealized gains and losses on these contracts are reported in AOCI in the Condensed Consolidated Balance Sheets and reclassified to earnings in the same periods during which the hedged debt affects earnings.

The notional amounts and interest rates of our cross-currency swaps as of September 30, 2017, were as follows (notional amounts in millions):

Hedged notes	Foreign currency			U.S. dollars	
	Notional amount		Interest rate	Notional amount	Interest rate
2.125% 2019 euro Notes	€	675	2.125%	$864	2.6 %
1.25% 2022 euro Notes	€	1,250	1.25 %	$1,388	3.2 %
0.41% 2023 Swiss franc Bonds	CHF	700	0.41 %	$704	3.4 %
2.00% 2026 euro Notes	€	750	2.00 %	$833	3.9 %
5.50% 2026 pound sterling Notes	£	475	5.50 %	$747	6.0 %
4.00% 2029 pound sterling Notes	£	700	4.00 %	$1,111	4.5 %

In connection with anticipated issuances of long-term fixed-rate debt, we entered into forward interest rate contracts during the three months ended June 30, 2017. The forward interest rate contracts hedged the variability in cash flows due to changes in the applicable Treasury rate between the time we entered into these contracts and the time the related debt was issued in May 2017. During the three months ended September 30, 2017, we entered into additional forward interest rate contracts with an aggregate notional amount of $550 million in connection with the anticipated issuance of additional long-term fixed-rate debt. Gains and losses on forward interest rate contracts, which are designated as cash flow hedges, were recognized in AOCI in the Condensed Consolidated Balance Sheets and are amortized into earnings over the lives of the associated debt issuances.

The effective portions of the unrealized gain (loss) recognized in other comprehensive income for our derivative instruments designated as cash flow hedges were as follows (in millions):

	Three months ended September 30,		Nine months ended September 30,	
Derivatives in cash flow hedging relationships	2017	2016	2017	2016
Foreign currency contracts	$(110)	$(26)	$(360)	$(88)
Cross-currency swap contracts	165	67	446	(128)
Forward interest rate contracts	10	(6)	13	(10)
Total	$65	$35	$99	$(226)

The locations in the Condensed Consolidated Statements of Income and the effective portions of the gain (loss) reclassified out of AOCI and into earnings for our derivative instruments designated as cash flow hedges were as follows (in millions):

		Three months ended September 30,		Nine months ended September 30,	
Derivatives in cash flow hedging relationships	Statements of Income location	2017	2016	2017	2016
Foreign currency contracts	Product sales	$(2)	$67	$88	$242
Cross-currency swap contracts	Interest and other income, net	143	(1)	514	(143)
Forward interest rate contracts	Interest expense, net	(1)	(1)	(1)	(1)
Total		$140	$65	$601	$98

No portions of our cash flow hedge contracts are excluded from the assessment of hedge effectiveness, and the gains and losses of the ineffective portions of these hedging instruments were not material for the three and nine months ended September 30, 2017 and 2016. As of September 30, 2017, the amounts expected to be reclassified out of AOCI and into earnings during the next 12 months are approximately $172 million of net losses on our foreign currency and cross-currency swap contracts and approximately $1 million of losses on forward interest rate contracts.

Fair value hedges

To achieve the desired mix of fixed and floating interest rates on our long-term debt, we entered into interest rate swap contracts that qualified and are designated as fair value hedges. The terms of these interest rate swap contracts correspond to the related hedged debt instruments and effectively convert a fixed interest rate coupon to a floating LIBOR-based coupon over the lives of the respective notes. As of December 31, 2016, we had interest rate swap agreements with aggregate notional amounts of $6.65 billion that hedge certain of our long-term debt issuances. The contracts have rates that range from three-month LIBOR plus 0.4% to three-month LIBOR plus 2.0%. During the nine months ended September 30, 2017, we entered into interest rate swap contracts with an aggregate notional amount of $3.65 billion with respect to our 3.625% 2024 Notes, 3.125% 2025 Notes and 2.60% 2026 Notes. The contracts have rates that range from three-month LIBOR plus 0.3% to three-month LIBOR plus 1.4%. In addition, during the nine months ended September 30, 2017, interest rate swap contracts that had an aggregate notional amount of $850 million matured. These contracts had rates of three-month LIBOR plus 0.4%.

For derivative instruments that qualify and are designated as fair value hedges, we recognize in current earnings the unrealized gain or loss on the derivative resulting from a change in fair value during the period, as well as the offsetting unrealized loss or gain of the hedged item resulting from a change in fair value during the period attributable to the hedged risk. For the three and nine months ended September 30, 2017, we included unrealized losses of $17 million and unrealized gains of $1 million, respectively, on our interest rate swap agreements in the same line item, Interest expense, net, in the Condensed Consolidated Statements of Income, as the offsetting unrealized gains of $17 million and unrealized losses of $1 million, respectively, on the related hedged debt. For the three and nine months ended September 30, 2016, we included unrealized losses of $61 million and unrealized gains of $137 million, respectively, on our interest rate swap agreements in the same line item, Interest expense, net, in the Condensed Consolidated Statements of Income, as the offsetting unrealized gains of $61 million and unrealized losses of $137 million, respectively, on the related hedged debt.

Derivatives not designated as hedges

To reduce our exposure to foreign currency fluctuations of certain assets and liabilities denominated in foreign currencies, we enter into foreign currency forward contracts that are not designated as hedging transactions. These exposures are hedged on a month-to-month basis. As of September 30, 2017 and December 31, 2016, the total notional amounts of these foreign currency forward contracts were $779 million and $666 million, respectively.

The location in the Condensed Consolidated Statements of Income and the amounts of gain (loss) recognized in earnings for our derivative instruments not designated as hedging instruments were as follows (in millions):

		Three months ended September 30,		Nine months ended September 30,	
Derivatives not designated as hedging instruments	Statements of Income location	2017	2016	2017	2016
Foreign currency contracts	Interest and other income, net	$ (2)	$ 1	$ 12	$ (33)

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

	Derivative assets		Derivative liabilities	
September 30, 2017	Balance Sheet location	Fair value	Balance Sheet location	Fair value
Derivatives designated as hedging instruments:				
Foreign currency contracts	Other current assets/ Other noncurrent assets	$ 7	Accrued liabilities/ Other noncurrent liabilities	$ 179
Cross-currency swap contracts	Other noncurrent assets	224	Accrued liabilities/ Other noncurrent liabilities	308
Interest rate swap contracts	Other noncurrent assets	40	Accrued liabilities/ Other noncurrent liabilities	5
Forward interest rate contracts	Other current assets	10	Accrued liabilities	—
Total derivatives designated as hedging instruments		281		492
Derivatives not designated as hedging instruments:				
Foreign currency contracts	Other current assets	—	Accrued liabilities	—
Total derivatives not designated as hedging instruments		—		—

Total derivatives	$ 281	$ 492

December 31, 2016	Derivative assets Balance Sheet location	Fair value	Derivative liabilities Balance Sheet location	Fair value
Derivatives designated as hedging instruments:				
Foreign currency contracts	Other current assets/ Other noncurrent assets	$ 203	Accrued liabilities/ Other noncurrent liabilities	$ 4
Cross-currency swap contracts	Other noncurrent assets	—	Accrued liabilities/ Other noncurrent liabilities	523
Interest rate swap contracts	Other noncurrent assets	41	Accrued liabilities/ Other noncurrent liabilities	7
Total derivatives designated as hedging instruments		244		534
Derivatives not designated as hedging instruments:				
Foreign currency contracts	Other current assets	—	Accrued liabilities	—
Total derivatives not designated as hedging instruments		—		—
Total derivatives		$ 244		$ 534

Our derivative contracts that were in liability positions as of September 30, 2017, 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 the 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 for the nine months ended September 30, 2017 and 2016, are included within Net cash provided by operating activities in the Condensed Consolidated Statements of Cash Flows.

13. Contingencies and commitments

Contingencies

In the ordinary course of business, we are involved in various legal proceedings, government investigations and other matters that are complex in nature and have outcomes that are difficult to predict. See our Annual Report on Form 10-K for the year ended December 31, 2016, 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 Note; in Note 18, Contingencies and commitments, to the consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2016; and in Notes 12 and 13, Contingencies and commitments, to the condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2017 and June 30, 2017, respectively.

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 range from cases brought by a single plaintiff to a class action with thousands of putative class members. These legal proceedings, as well as other matters, involve various aspects of our business and a variety of claims—including but not limited to patent infringement, marketing, pricing and trade practices and securities law—some of which present novel factual allegations and/or unique legal theories. In each of the matters described in this filing, in Note 18, Contingencies and commitments, to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2016, or in Notes 12 or 13, Contingencies and commitments, to our condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2017 and June 30, 2017, respectively, plaintiffs 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 faced by us often extend for several years). As a result, none of the matters pending against us described in this filing, in Note 18, Contingencies and commitments, to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2016, or in Notes 12 or 13, Contingencies and commitments, to our condensed consolidated financial statements in our Quarterly Reports on Form 10-Q for the periods ended March 31, 2017 and June 30, 2017, respectively, have progressed sufficiently through discovery and/or 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:

PCSK9 Antibody Patent Litigation

U.S. Patent Litigation—Sanofi/Regeneron

On October 5, 2017, the U.S. Court of Appeals for the Federal Circuit (the Federal Circuit Court) reversed-in-part the judgment of the U.S. District Court for Delaware (the Delaware District Court) and remanded for a new trial two of defendants' patent validity defenses (failure to meet the law's requirements for patentability 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 U.S. Patent No. 8,829,165 and claim 7 of U.S. Patent No. 8,859,741 and patent validity on the defendants' third patent validity defense (finding that the claimed inventions were not obvious to a person of ordinary skill in the field of the patents). The Federal Circuit Court also vacated and remanded for further consideration by the Delaware District Court the permanent injunction granted by the Delaware District Court prohibiting the infringing manufacture, use, sale, offer for sale or import of alirocumab in the United States.

Sensipar® (cinacalcet) Litigation

Sensipar® Abbreviated New Drug Application (ANDA) Patent Litigation

As previously disclosed, Amgen has filed 18 separate lawsuits against defendants for infringement of our U.S. Patent No. 9,375,405 (the '405 Patent), and 15 of these 18 lawsuits have been consolidated by the Delaware District Court. Amgen filed and the court signed stipulated dismissals of the lawsuits against defendants Apotex Inc. and Apotex Corp. (collectively, Apotex), on September 11, 2017, and against defendants Micro Labs Ltd. and Micro Labs USA, Inc., on September 20, 2017. On September 21, 2017, the Delaware District Court signed a consent judgment filed by Amgen and Breckenridge Pharmaceutical, Inc. (Breckenridge) stipulating to entry of judgment of infringement and validity of the '405 Patent and an injunction prohibiting the manufacture, use, sale, offer to sell, importation of, or distribution into the United States of the Breckenridge cinacalcet product during the term of the '405 Patent unless specifically authorized pursuant to the confidential settlement agreement. In addition, during September 2017, defendants Macleods Pharmaceuticals Ltd. and Macleods Pharma USA, Inc. filed motions for judgment on the pleadings and to dismiss the complaint pending against them and Amgen filed oppositions to such motions.

Sensipar® Pediatric Exclusivity Litigation

As previously disclosed, Amgen filed a lawsuit in the U.S. District Court for the District of Columbia seeking effectively to reverse the U.S. Food and Drug Administration's (FDA's) May 22, 2017 rejection of Amgen's request for pediatric exclusivity for cinacalcet hydrochloride (Sensipar®/ Mimpara®). On August 10, 2017, the court entered an expedited scheduling order for Amgen and the FDA to file cross-motions for summary judgment and a hearing on such motions is set for December 15, 2017. Amgen filed its motion for summary judgment on October 18, 2017.

KYPROLIS® (carfilzomib) ANDA Patent Litigation

As previously disclosed, the Delaware District Court consolidated ten separate lawsuits filed by our subsidiary Onyx Therapeutics, Inc. (Onyx Therapeutics) against defendants for infringement of certain of our patents. On August 17, 2017, Onyx Therapeutics filed an additional lawsuit in the Delaware District Court against InnoPharma, Inc. for infringement of U.S. Patent Nos. 7,232,818 (the '818 Patent); 7,491,704 (the '704 Patent); 8,129,346 (the '346 Patent); 8,207,125 (the '125 Patent); 8,207,126 (the '126 Patent); and 8,207,127 (the '127 Patent). Onyx Therapeutics filed two additional lawsuits in the Delaware District Court against Apotex, on August 24, 2017, and Qilu Pharma, Inc. and Qilu Pharmaceutical Co. Ltd. (collectively Qilu), on August 30, 2017, for infringement of the '818, '704, '346, '125, '126, '127 Patents and U.S. Patent Nos. 7,417,042 and 8,207,297. In each lawsuit, Onyx Therapeutics seeks an order of the Delaware District Court making any FDA approval of the defendant's ANDA effective no earlier than the expiration of the applicable patents. On September 14, 2017, the Delaware District Court consolidated these three additional lawsuits for purposes of discovery into the existing consolidated case. Responses to these new complaints have been filed by InnoPharma, Inc., Apotex and Qilu alleging invalidity and, in certain instances, non-infringement of the patents. On September 20, 2017, by joint stipulation of the parties, Teva Pharmaceutical Industries Ltd. was dismissed from one of the previously-filed lawsuits, leaving Teva Pharmaceuticals USA, Inc. as the remaining defendant in that litigation.

Amgen Biosimilars Litigation

AMJEVITA™ (adalimumab-atto) Patent Litigation

On September 27, 2017, Amgen and AbbVie Inc. and AbbVie Biotechnology Ltd. (collectively, AbbVie), entered into a global settlement and license agreement. Under the terms of the agreement, AbbVie will grant patent licenses for the use and sale of Amgen's AMJEVITA™/AMGEVITA™ (a biosimilar to AbbVie's HUMIRA® &#32