

QIAGEN N.V.
Venlo, The Netherlands

Interim Financial Report

June 30, 2018

(unaudited)

QIAGEN N.V.
CONDENSED FINANCIAL REPORT PERIOD ENDED JUNE 30, 2018
TABLE OF CONTENTS

	<u>Page</u>
<u>Condensed Consolidated Balance Sheets</u>	<u>F-1</u>
<u>Condensed Consolidated Statements of (Loss) Income</u>	<u>F-3</u>
<u>Condensed Consolidated Statements of Comprehensive (Loss) Income</u>	<u>F-4</u>
<u>Condensed Consolidated Statements of Cash Flows</u>	<u>F-5</u>
<u>Condensed Consolidated Statements of Changes in Equity</u>	<u>F-6</u>
<u>Selected Explanatory Notes to the Condensed Consolidated Financial Statements</u>	<u>F-7</u>
<u>Responsibility Statement of the Management Board</u>	<u>F-33</u>
<u>Interim Management Report</u>	<u>F-34</u>
<u>Principal Risks and Uncertainties</u>	<u>F-40</u>

QIAGEN N.V.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)

	Note	June 30, 2018	December 31, 2017
		(unaudited)	
Assets			
Current assets:			
Cash and cash equivalents		\$ 674,413	\$ 657,714
Current available-for-sale financial assets	(5)	225,774	359,198
Trade accounts receivable		314,668	329,138
Income taxes receivable		43,230	39,509
Inventories	(11)	158,235	155,927
Fair value of derivative financial instruments	(7)	153,371	7,480
Other current assets		97,314	74,654
Total current assets		1,667,005	1,623,620
Non-current assets:			
Property, plant and equipment		320,082	324,011
Goodwill	(6)	2,126,930	2,038,180
Other intangible assets	(6)	768,845	703,014
Equity accounted investments	(5)	10,862	18,462
Non-current available-for-sale financial assets	(5)	66,691	36,813
Deferred tax assets		69,968	67,985
Fair value of derivative financial instruments	(7)	279,352	224,398
Other non-current assets		65,448	48,629
Total non-current assets		3,708,178	3,461,492
Total assets		\$ 5,375,183	\$ 5,085,112

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

QIAGEN N.V.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	Note	June 30, 2018	December 31, 2017
		(unaudited)	
Liabilities and equity			
Current liabilities:			
Current financial debts	(9)	\$ 420,993	\$ —
Trade and other accounts payable		60,942	59,205
Provisions		4,858	4,853
Income tax payable		23,497	22,632
Fair value of derivative financial instruments	(7)	165,544	2,424
Other current liabilities	(4, 5)	274,080	230,243
Total current liabilities		949,914	319,357
Non-current liabilities:			
Non-current financial debts	(9)	1,344,630	1,757,402
Deferred tax liabilities		101,366	85,053
Fair value of derivative financial instruments	(7)	669,082	412,536
Other non-current liabilities	(5)	97,664	84,354
Total non-current liabilities		2,212,742	2,339,345
Equity:			
Preference shares, 0.01 EUR par value, authorized—450,000 shares, no shares issued and outstanding		—	—
Financing preference shares, 0.01 EUR par value, authorized—40,000 shares, no shares issued and outstanding		—	—
Common Shares, 0.01 EUR par value, authorized—410,000 shares, issued— 230,829 shares in 2018 and in 2017	(12)	2,702	2,702
Share premium	(12)	1,710,563	1,687,564
Retained earnings		891,588	1,071,393
Reserves		(275,620)	(216,262)
Less treasury shares at cost— 3,793 and 4,272 shares in 2018 and in 2017, respectively	(12)	(116,706)	(118,987)
Total equity		2,212,527	2,426,410
Total liabilities and equity		\$ 5,375,183	\$ 5,085,112

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

QIAGEN N.V.

CONDENSED CONSOLIDATED STATEMENTS OF (LOSS) INCOME
(in thousands, except per share data)

	Note	Six months ended June 30,	
		2018	2017
		(unaudited)	
Net sales	(13)	\$ 720,764	\$ 656,696
Cost of sales		(245,089)	(241,550)
Gross profit		<u>475,675</u>	<u>415,146</u>
Operating expenses:			
Other operating income		21,604	4,001
Research and development expense		(76,486)	(67,071)
Sales and marketing expense		(218,163)	(207,012)
General and administrative, restructuring, integration and other expense, net		(87,314)	(88,324)
Other operating expense		(10,511)	(3,941)
Total operating expenses		<u>(370,870)</u>	<u>(362,347)</u>
Income from operations		<u>104,805</u>	<u>52,799</u>
Financial income		9,778	3,628
Financial expense		(30,855)	(20,743)
Foreign currency losses, net		(6,585)	(2,811)
Gain from investments in associates		2,033	1,953
Other financial expense, net	(5, 7)	(204,262)	(17,803)
Total financial expense:		<u>(229,891)</u>	<u>(35,776)</u>
(Loss) income before income taxes		<u>(125,086)</u>	<u>17,023</u>
Income taxes		(21,899)	(1,030)
Net (loss) income		<u>\$ (146,985)</u>	<u>\$ 15,993</u>
Basic earnings per common share		\$ (0.65)	\$ 0.07
Diluted earnings per common share		\$ (0.65)	\$ 0.07
Weighted average shares outstanding (in thousands)			
Basic		227,096	228,968
Diluted		227,096	233,781

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

QIAGEN N.V.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(in thousands)

	Note	Six Months Ended	
		June 30,	
		2018	2017
		(unaudited)	
Net (loss) income		\$ (146,985)	\$ 15,993
Other comprehensive (loss) income to be reclassified to profit or loss in subsequent periods:			
Foreign currency translation adjustments, before tax		(66,802)	94,498
Gains (losses) on cash flow hedges, before tax	(7)	2,369	(13,841)
Reclassification adjustments on cash flow hedges, before tax	(7)	(6,030)	15,678
Net investment hedge	(7)	8,538	(6,228)
Net change in fair value of available-for-sale financial assets, before tax		—	(38)
Other comprehensive (loss) income, before tax		(61,925)	90,069
Income tax relating to components of other comprehensive income (loss)		1,624	(584)
Total other comprehensive (loss) income, after tax		(60,301)	89,485
Comprehensive (loss) income		<u>\$ (207,286)</u>	<u>\$ 105,478</u>

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

QIAGEN N.V.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Note	Six months ended June 30,	
		2018	2017
(unaudited)			
Net (loss) income		\$ (146,985)	\$ 15,993
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization		111,294	116,604
Non-cash impairments	(5)	10,644	3,122
Amortization of debt discount and issuance costs	(9)	16,950	10,432
Deferred income taxes		3,317	(5,544)
Share based compensation	(15)	19,273	19,058
(Gain) loss on available for sale financial instruments		(3,007)	1,055
Other non-cash items, including fair value changes in derivatives		191,341	14,090
Changes in operating assets and liabilities:			
Accounts receivable		1,087	13,480
Inventories		(19,344)	(18,750)
Other current assets		2	(7,259)
Other non-current assets		(30,718)	(1,676)
Accounts payable		(7)	(4,404)
Provisions and other current liabilities		22,158	4,586
Other non-current liabilities		(239)	(438)
Income taxes		13,426	2,818
Interest paid		(12,182)	(9,173)
Interest received		7,816	3,338
Income taxes paid, net of refunds		(15,920)	(20,049)
Net cash provided by operating activities		168,906	137,283
Purchases of property, plant and equipment		(16,847)	(9,050)
Purchases of intangible assets	(6)	(49,561)	(46,973)
Development expenses	(6)	(2,668)	(7,767)
Proceeds from sale of equipment		7	42
Purchases of available-for-sale assets	(5)	(176,289)	(36,209)
Proceeds from available-for-sale assets	(5)	311,700	65,234
Purchase of investments		(15,625)	(584)
Cash paid for acquisitions, net of cash acquired	(3)	(172,831)	(49,678)
Cash paid for collateral asset		(17,362)	(2,296)
Other investing activities		16,337	—
Net cash used in investing activities		(123,139)	(87,281)
Capital repayment	(12)	—	(243,945)
Proceeds from non-current debt, net of issuance costs	(9)	—	300,155
Principal payments on finance leases		(657)	(674)
Proceeds from issuance of common shares		1,286	2,999
Purchase of treasury shares	(12)	(20,782)	—
Other financing activities		(5,219)	(10,187)
Net cash (used in) provided by financing activities		(25,372)	48,348
Effect of exchange rate changes on cash and cash equivalents		(3,696)	5,311
Net increase in cash and cash equivalents		16,699	103,661
Cash and cash equivalents, beginning of period		657,714	439,180
Cash and cash equivalents, end of period		<u>\$ 674,413</u>	<u>\$ 542,841</u>

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

QIAGEN N.V.
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
(in thousands)

(unaudited)	Note	Common Shares								Treasury Shares		Total equity
		Shares	Amount	Share premium	Retained earnings	Hedge reserves	Available-for-sale reserve	Pension reserve	Foreign currency translation	Shares	Amount	
BALANCE AT JANUARY 1, 2017		239,707	\$ 2,812	\$1,897,399	\$1,059,927	\$ (7,600)	\$ (156)	\$ (1,498)	\$ (321,053)	(5,147)	\$ (120,006)	\$ 2,509,825
Net income		—	—	—	15,993	—	—	—	—	—	—	15,993
Other comprehensive income (loss)	(7)	—	—	—	—	(4,850)	(168)	—	94,503	—	—	89,485
Total comprehensive income		—	—	—	15,993	(4,850)	(168)	—	94,503	—	—	105,478
Capital repayment	(12)	(8,878)	(110)	(244,319)	—	—	—	—	—	191	—	(244,429)
Tax benefit of employee stock plans		—	—	2,778	—	—	—	—	—	—	—	2,778
Share-based payments	(15)	—	—	19,058	—	—	—	—	—	—	—	19,058
Employee stock plans		—	—	—	(53,302)	—	—	—	—	2,361	56,301	2,999
BALANCE AT JUNE 30, 2017		<u>230,829</u>	<u>\$ 2,702</u>	<u>\$1,674,916</u>	<u>\$1,022,618</u>	<u>\$ (12,450)</u>	<u>\$ (324)</u>	<u>\$ (1,498)</u>	<u>\$ (226,550)</u>	<u>(2,595)</u>	<u>\$ (63,705)</u>	<u>\$ 2,395,709</u>
BALANCE AT JANUARY 1, 2018		<u>230,829</u>	<u>\$ 2,702</u>	<u>\$1,687,564</u>	<u>\$1,071,393</u>	<u>\$ (30,487)</u>	<u>\$ (942)</u>	<u>\$ (878)</u>	<u>\$ (183,955)</u>	<u>(4,272)</u>	<u>\$ (118,987)</u>	<u>\$ 2,426,410</u>
Balance at January 1, 2018, as previously reported		<u>230,829</u>	<u>\$ 2,702</u>	<u>\$1,687,564</u>	<u>\$1,071,393</u>	<u>\$ (30,487)</u>	<u>\$ (942)</u>	<u>\$ (878)</u>	<u>\$ (183,955)</u>	<u>(4,272)</u>	<u>\$ (118,987)</u>	<u>\$ 2,426,410</u>
IFRS 9 impact of change in accounting policy	(2)	—	—	—	(942)	—	942	—	—	—	—	—
IFRS 15 impact of change in accounting policy	(13)	—	—	—	(1,306)	—	—	—	—	—	—	(1,306)
Adjusted balance at January 1, 2018		<u>230,829</u>	<u>\$ 2,702</u>	<u>\$1,687,564</u>	<u>\$1,069,145</u>	<u>\$ (30,487)</u>	<u>\$ —</u>	<u>\$ (878)</u>	<u>\$ (183,955)</u>	<u>(4,272)</u>	<u>\$ (118,987)</u>	<u>\$ 2,425,104</u>
Net loss		—	—	—	(146,985)	—	—	—	—	—	—	(146,985)
Other comprehensive income (loss)	(7)	—	—	—	—	5,792	—	—	(66,092)	—	—	(60,300)
Total comprehensive income		—	—	—	(146,985)	5,792	—	—	(66,092)	—	—	(207,285)
Purchase of treasury shares	(12)	—	—	—	—	—	—	—	—	(819)	(29,577)	(29,577)
Tax benefit of employee stock plans		—	—	3,726	—	—	—	—	—	—	—	3,726
Share-based payments	(15)	—	—	19,273	—	—	—	—	—	—	—	19,273
Employee stock plans		—	—	—	(30,572)	—	—	—	—	1,298	31,858	1,286
BALANCE AT JUNE 30, 2018		<u>230,829</u>	<u>\$ 2,702</u>	<u>\$1,710,563</u>	<u>\$ 891,588</u>	<u>\$ (24,695)</u>	<u>\$ —</u>	<u>\$ (878)</u>	<u>\$ (250,047)</u>	<u>(3,793)</u>	<u>\$ (116,706)</u>	<u>\$ 2,212,527</u>

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

QIAGEN N.V.

Selected explanatory notes to the condensed consolidated financial statements for the six months ended June 30, 2018 (unaudited)

1. Corporate Information

QIAGEN N.V. is a public limited liability company ('naamloze vennootschap') under Dutch law with a registered office at Hulsterweg 82, 5912 PL Venlo, The Netherlands. QIAGEN N.V., a Netherlands holding company, and subsidiaries (we, our or the Company) is a leading global provider of Sample to Insight solutions to transform biological materials into valuable molecular insights. Our sample technologies isolate and process DNA, RNA and proteins from blood, tissue and other materials. Assay technologies make these biomolecules visible and ready for analysis. Bioinformatics software and knowledge bases interpret data to report relevant, actionable insights. Automation solutions tie these together in seamless and cost-effective molecular testing workflows. We provide these workflows to four major customer classes: Molecular Diagnostics (human healthcare), Applied Testing (forensics, veterinary testing and food safety), Pharma (pharmaceutical and biotechnology companies) and Academia (life sciences research). We market our products in more than 130 countries.

2. Basis of Presentation and Accounting Policies

The accompanying condensed consolidated financial statements were prepared in accordance with International Financial Reporting standards (IFRS) for interim financial information under International Accounting Standards (IAS) 34 *Interim Financial Reporting* as endorsed by the European Union (EU). The consolidated financial statements have been prepared on a historical cost basis, except for derivative financial instruments, contingent consideration and available-for-sale financial instruments that have been measured at fair value. In the opinion of management, all adjustments (which include only normal recurring adjustments) necessary for a fair presentation have been included. All amounts are presented in U.S. dollars rounded to the nearest thousand, unless otherwise indicated. These interim condensed consolidated financial statements have not been audited or reviewed.

The results of operations for an interim period are not necessarily indicative of results that may be expected for any other interim period or for the full year. Except for the adoption of new and amended standards and interpretations, these unaudited condensed consolidated financial statements are prepared following the same accounting policies used in and should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report for the year ended December 31, 2017.

On April 27, 2018, we acquired all shares in STAT-Dx Life, S.L. (STAT-Dx), a privately-held company located in Barcelona, Spain, and on April 19, 2018, we acquired all remaining shares of a privately held entity in which we held a minority interest. On January 6, 2017, we acquired OmicSoft Corporation, located in Cary, North Carolina (U.S.). Accordingly, at their respective acquisition dates, all the assets acquired and liabilities assumed were recorded at their respective fair values and our consolidated results of operations include the operating results from the acquired companies from the acquisition dates.

As of June 30, 2018 and December 31, 2017, the fair values of derivative financial instruments in other current assets and other current liabilities have been presented separately on the condensed consolidated balance sheets. Certain prior year amounts related to restructuring costs have been reclassified to conform to the current year presentation. For the six months ended June 30, 2017, \$1.8 million and \$4.4 million costs were reclassified out of research and development and sales and marketing, respectively, to general and administrative, restructuring, integration and other. These reclassifications had no effect on income from operations.

Significant Accounting Policies

The interim condensed consolidated financial statements were prepared based on the same accounting policies as those applied and described in the consolidated financial statements as at December 31, 2017 including the adoption of new standards and interpretations as of January 1, 2018.

Adoption of New and Amended Standards and Interpretations

The new accounting policies adopted in 2018 did not have a material impact to the condensed consolidated financial statements.

- In June 2016, the IASB issued three amendments to IFRS 2, *Share-based Payment*, to eliminate diversity in practice in the classification and measurement of particular share-based payment transactions. The amendments are narrow in scope and address specific areas of classification and measurement and are intended to eliminate diversity in practice in three main areas:
 - The effects of vesting conditions on the measurement of a cash-settled share-based payment transaction;
 - The classification of a share-based payment transaction with net settlement features for withholding tax obligations; and
 - The accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash-settled to equity-settled.

The amendments to IFRS 2 are effective for accounting periods beginning on or after January 1, 2018. Entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. We adopted the amendments on January 1, 2018 without any impact on our financial position, results of operations or cash flows at adoption.

- The IASB completed its process to replace IAS 39, *Financial Instruments: Recognition and Measurement*, with the issuance of the final amendments to IFRS 9. The IASB issued the fourth and final version of IFRS 9, *Financial Instruments*, which we adopted on January 1, 2018 using a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. Accordingly, upon adoption, we recorded a cumulative effect adjustment to decrease opening retained earnings at January 1, 2018 by \$0.9 million as required for our equity investments recorded at fair value. The implementation of the amendments is expected to increase the volatility of net income as gains or losses will be recognized in net income; however, the extent of any volatility will be dependent upon the significance of the equity investments.
- In May 2014, the IASB issued IFRS 15, *Revenue from Contracts with Customers* and the standard is effective for annual periods beginning on or after January 1, 2018. This standard could impact in particular in the areas of allocating revenue to the different performance obligations under one contract and the timing of revenue recognition. We adopted this standard on its effective date, January 1, 2018 using the modified retrospective method, by recognizing the cumulative effect of initially applying IFRS 15 to incomplete contracts as a \$1.3 million adjustment to the opening balance of equity at January 1, 2018. The details of the changes and quantitative impact are discussed in Note 13.

New and amended standards and interpretations not yet adopted:

We have not early adopted the following new and amended standards. We intend to adopt the new and amended standards at their effective dates.

- In January 2016, the IASB published IFRS 16 *Leases*. Under the new guidance, lessees will be required to present right-of-use assets and lease liabilities on the balance sheet. This new lease guidance requires that a lessee recognize the following for leases at the commencement date:
 - A lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and
 - A right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.

IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted for entities that apply IFRS 15, *Revenue from Contracts with Customers*, at or before the date of initial application of IFRS 16. A lessee should apply IFRS 16 to its leases either: (a) retrospectively to each prior reporting period presented applying IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*; or (b) retrospectively with the cumulative effect of initially applying IFRS 16 recognized at the date of initial application. A lessor is not required to make any adjustments on transition for leases in which it is a lessor and should account for those leases applying IFRS 16 from the date of initial application. We expect this standard to increase total assets and total liabilities, however, it has not yet been possible to estimate the amount of right to use assets and lease liabilities that will be recognized on the balance sheet. We have also not yet decided which exemptions will be adopted. We do not plan to early adopt this standard and we anticipate that the adoption of this standard will require changes to our systems and processes. We will continue our assessment and implementation throughout 2018.

Segment Reporting

We operate as one operating segment in accordance with IFRS 8 *Operating Segments*. Our chief operating decision maker (CODM) makes decisions based on the Company as a whole. In addition, we have a common basis of organization and types of products and services which derive revenues and consistent product margins. Accordingly, we operate and make decisions as one operating segment. With revenues derived from our entire product and service offerings, it is not practicable to provide a detail of revenues for each group of similar products and services, as discrete financial information is not available. However, we do provide certain revenue information by customer class in our Management Report to allow better insight into our operations. This information is estimated using certain assumptions to allocate revenue among the customer classes.

Estimates

The preparation of the condensed consolidated financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from these estimates.

In preparing these condensed consolidated financial statements, the significant judgments made by management in applying accounting policies and the key sources of estimating uncertainty were the same as those that applied to the consolidated financial statements for the year ended December 31, 2017.

3. Acquisitions and Divestitures

Acquisitions have been accounted for as business combinations, and the acquired companies' results have been included in the accompanying condensed consolidated statements of (loss) income from their respective dates of acquisition. Our acquisitions have historically been made at prices above the fair value of the acquired net assets, resulting in goodwill, due to expectations of synergies of combining the businesses. These synergies include use of our existing infrastructure, such as sales force, shared service centers, distribution channels and customer relations, to expand sales of the acquired businesses' products; use of the infrastructure of the acquired businesses to cost-effectively expand sales of our products; and elimination of duplicative facilities, functions and staffing.

2018 Acquisitions

On April 27, 2018, we acquired all shares in STAT-Dx Life, S.L. (STAT-Dx), a privately-held company located in Barcelona, Spain, which is developing the next generation of multiplex diagnostics for one-step, fully integrated molecular analysis of common syndromes using a novel system based on real-time PCR technology and proven QIAGEN chemistries.

The cash consideration totaled \$148.8 million. The acquisition included contingent consideration which is recorded as part of the purchase price based on the acquisition date fair value. Under the purchase agreement, potential contingent payments through 2023 total \$44.3 million, of which the fair value of \$36.8 million was recorded as purchase price using a probability-weighted analysis of the future milestones using discount rates between 8.2% and 8.8%. Acquisition related costs of \$2.0 million were incurred during the six-month period ended June 30, 2018 and is included in general and administrative, restructuring, integration and other expenses in the accompanying condensed consolidated statements of (loss) income.

The allocation of the purchase price is preliminary and is not yet finalized. The preliminary allocation of the purchase price is based upon preliminary estimates which used information that was available to management at the time the condensed consolidated financial statements were prepared and these estimates and assumptions are subject to change within the measurement period, up to one year from the acquisition date. Accordingly, the allocation may change. We continue to gather information about the fair value of all assets and liabilities, including intangible assets acquired, and the related deferred taxes. The preliminary purchase price allocation for STAT-Dx is as follows:

(in thousands)	STAT-Dx acquisition
Purchase Price:	
Cash consideration	\$ 148,780
Fair value of contingent consideration	36,751
	<u>\$ 185,531</u>
Preliminary Allocation:	
Cash and cash equivalents	\$ 7,357
Other current assets	1,432
Inventories	1,868
Income tax receivables	2,213
Trade and other accounts payable	(1,412)
Other current liabilities	(560)
Fixed and other non-current assets	6,434
Developed technology	80,100
Goodwill	97,268
Deferred tax liability on fair value of identifiable intangible assets acquired	(9,169)
	<u>\$ 185,531</u>

The weighted average amortization period for the intangible assets is 10.0 years. The goodwill acquired is not deductible for tax purposes.

Revenue and earnings in the reporting periods since the acquisition date have not been significant. No pro forma financial information has been provided herein as the acquisition of STAT-Dx did not have a material impact to net sales, net income or earnings per share on a pro forma basis.

Other 2018 Acquisition

On April 19, 2018, we acquired all remaining shares of a privately held entity in which we held a minority interest. The allocation of the purchase price is preliminary and is based upon preliminary estimates which used information that was available to management at the time the financial statements were prepared and these estimates and assumptions are subject to change within the measurement period, up to one year from the acquisition date. This acquisition was not significant to the overall consolidated financial statements and as of June 30, 2018, the allocation of the purchase price was preliminary. The acquisition did not have a material impact to net sales, net income or earnings per share and therefore no pro forma information has been provided herein.

2017 Acquisition

On January 6, 2017, we acquired OmicSoft Corporation, a leading provider of omics data management solutions located in Cary, North Carolina (U.S.). This acquisition was not significant to the overall consolidated financial statements and as of December 31, 2017, the allocation of the purchase price was final. The acquisition did not have a material impact to net sales, net income or earnings per share and therefore no pro forma information has been provided herein.

Divestitures

2018 Divestitures

In April 2018, we sold a portfolio of veterinary testing products for \$16.4 million and recorded a \$6.6 million gain on the sale to other operating income in the accompanying condensed consolidated statement of (loss) income.

4. Restructuring

2017 Restructuring

During the second half of 2017, we initiated restructuring initiatives to mitigate the negative impacts stemming from the U.S. tax reform as further discussed in Note 10. Total pre-tax costs are expected to be between \$23 million and \$25 million, of which \$21 million was incurred through June 30, 2018. Future pre-tax costs between \$2 million to \$4 million are expected to be incurred in the remainder of 2018 primarily related to personnel and other costs.

Since 2017, we have incurred costs related to this restructuring program that have been recorded as follows:

(in thousands)	Personnel Related	Contract and Other Costs	Inventory Write-offs & Asset Impairments	Total
Cost of sales	\$ —	\$ —	\$ 3,039	\$ 3,039
General and administrative, restructuring, integration and other, net	—	4,583	—	4,583
Total 2017 costs	—	4,583	3,039	7,622
Cost of sales	389	—	—	389
General and administrative, restructuring, integration and other, net	8,604	2,851	1,610	13,065
Total 2018 costs	8,993	2,851	1,610	13,454
Total cumulative costs	\$ 8,993	\$ 7,434	\$ 4,649	\$ 21,076

The following table summarizes the cash components of the restructuring activity.

(in thousands)	Personnel Related	Contract and Other Costs	Total
Costs incurred in 2017	\$ —	\$ 4,583	\$ 4,583
Foreign currency translation adjustment	—	2	2
Liability at December 31, 2017	—	4,585	4,585
Additional costs in 2018	9,395	2,980	12,375
Release of excess accrual	(402)	(129)	(531)
Payments	(4,268)	(5,709)	(9,977)
Foreign currency translation adjustment	(11)	29	18
Liability at June 30, 2018	\$ 4,714	\$ 1,756	\$ 6,470

During the first half of 2018, intangible impairments of \$1.6 million were recorded in connection with this initiative and are included within general and administration, restructuring, integration and other, net in the accompanying consolidated statements of income. As of June 30, 2018 and December 31, 2017, liabilities of \$6.5 million and \$4.6 million, respectively, are included in other current liabilities in the accompanying condensed consolidated balance sheets.

2016 Restructuring

During the second half of 2016, we initiated a series of targeted actions to support faster sales momentum and improve efficiency and accountability. The objective with these actions is to ensure that we grow sustainably and consistently in the coming years. Measures include simplifying our geographic presence with site reductions, focusing resources to shared service centers, and streamlining selected organizational structures. No significant additional costs will be incurred related to this program. Cumulative costs for this program are as follows:

(in thousands)	Personnel Related	Facility Related	Contract and Other Costs	Asset Impairments & Disposals	Total
Cost of sales	\$ 1,222	\$ 205	\$ 43	\$ 11,553	\$ 13,023
General and administrative, restructuring, integration and other, net	17,998	6,960	8,272	22,963	56,193
Other expense	—	—	—	10,946	10,946
Total 2016 costs	19,220	7,165	8,315	45,462	80,162
Cost of sales	1,071	—	238	—	1,309
General and administrative, restructuring, integration and other, net	8,097	350	9,612	—	18,059
Total 2017 costs	9,168	350	9,850	—	19,368
General and administrative, restructuring, integration and other, net	300	(838)	(90)	—	(628)
Total 2018 costs (releases)	300	(838)	(90)	—	(628)
Total cumulative costs	\$ 28,688	\$ 6,677	\$ 18,075	\$ 45,462	\$ 98,902

Personnel Related expenses during 2017 and 2016 includes reductions in costs of \$0.7 million and \$2.0 million, respectively, as a result of forfeitures of share-based compensation in connection with terminations. During the year ended December 31, 2016, Asset Impairments and Disposals include \$31.4 million for intangible asset impairments, \$2.0 million for fixed asset abandonments, and \$1.1 million primarily in connection with the write-off of prepaid contract costs. The total \$10.9 million of expense includes \$8.3 million associated with an impairment of an equity method investment and a disposal of goodwill of \$2.6 million included in gain (loss) from equity accounted investments and other operating expenses, respectively, in the consolidated statements of income for the year ended December 31, 2016.

The following table summarizes the cash components of the restructuring activity.

(in thousands)	Personnel Related	Facility Related	Contract and Other Costs	Total
Liability at December 31, 2016	\$ 18,480	\$ 7,882	\$ 5,943	\$ 32,305
Additional costs in 2017	12,985	1,798	9,883	24,666
Release of excess accrual	(3,083)	(1,448)	(30)	(4,561)
Payments	(25,586)	(7,478)	(14,887)	(47,951)
Facility deferred rent reclassified to restructuring liability	—	241	—	241
Foreign currency translation adjustment	1,126	57	157	1,340
Liability at December 31, 2017	\$ 3,922	\$ 1,052	\$ 1,066	\$ 6,040
Additional costs in 2018	372	—	—	372
Release of excess accrual	(72)	(838)	(90)	(1,000)
Payments	(2,506)	(214)	(88)	(2,808)
Foreign currency translation adjustment	(8)	—	(34)	(42)
Liability at June 30, 2018	\$ 1,708	\$ —	\$ 854	\$ 2,562

At June 30, 2018, \$2.6 million of the liability is included in other current liabilities in the accompanying consolidated balance sheet. At December 31, 2017, \$5.2 million of the liability is included in other current liabilities and \$0.8 million is included in other non-current liabilities in the accompanying consolidated balance sheet.

5. Available for Sale Financial Assets and Investment in Associates

Unquoted Debt Securities

At June 30, 2018 and December 31, 2017, we had \$224.7 million and \$359.2 million, respectively, of loan receivables and commercial paper due from corporates and financial institutions. These loan receivables and commercial paper are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are carried at fair market value, which is equal to the cost. At June 30, 2018, these loans consist of \$189.7 million and €30.0 million (\$35.0 million) which mature at various dates through October 2020. At December 31, 2017, these loans consist of \$308.2 million and €42.5 million (\$51.0 million as of December 31, 2017) which mature at various dates through December 2018. All instruments that have an original tenor of more than 12 months can be redeemed on at least a quarterly basis and are therefore classified as current available-for-sale financial assets in the accompanying condensed consolidated balance sheets. Interest income is determined using the effective interest rate method.

For the six-months ended June 30, 2018 proceeds from sales of current available-for-sale investments totaled \$311.7 million, purchases of current available-for-sale investments totaled \$176.3 million and realized gains totaled of \$3.0 million.

Quoted Equity Securities

At June 30, 2018 and December 31, 2017, we held 833,333 shares in HTG Molecular Diagnostics, Inc., a publicly traded company. The investment has a cost basis of \$2.0 million with fair values of \$2.7 million and \$1.7 million as of June 30, 2018 and December 31, 2017, respectively. During the six months ended June 30, 2018, the fair market value of these shares increased \$1.0 million and was recognized in other operating income. The total unrealized gain as of June 30, 2018 totaled \$0.7 million as compared to the total unrealized loss of \$0.3 million as of December 31, 2017. These marketable securities are included in non-current available for sale financial assets in the accompanying condensed consolidated balance sheets.

At June 30, 2018 and December 31, 2017, we held 204,000 shares and 320,424 shares, respectively of Curetis N.V., a publicly traded company. The investment had a cost basis of \$1.4 million and \$2.3 million as of June 30, 2018 and December 31, 2017, respectively, with fair values of \$1.1 million and \$1.5 million as of June 30, 2018 and December 31, 2017, respectively. The total unrealized losses were \$0.3 million and \$0.8 million as of June 30, 2018 and December 31, 2017, respectively. During the six months ended June 30, 2018, the fair market value of these shares increased \$0.2 million and was recognized in other operating income. During the six months ended June 30, 2018, we sold 116,424 shares of Curetis N.V. and recognized a gain of \$0.3 million in other operating income in the accompanying condensed consolidated statement of (loss) income in connection with the sale of these shares. At June 30, 2018 and December 30, 2017 this investment is included in current available-for-sale financial assets and non-current available for sale financial instruments, respectively, in the accompanying condensed consolidated balance sheets.

Unquoted Equity Securities

At June 30, 2018 and December 31, 2017, we had a total of cost-method investments in non-publicly traded companies with carrying amounts of \$64.0 million and \$33.6 million, respectively, which are included in non-current available-for-sale financial assets in the condensed consolidated balance sheets.

During the first half of 2018, we made an additional investment in a non-publicly traded company of \$9.3 million. This equity interest acquired was considered similar to an existing equity interest in the company and as a result, the existing equity interest in the company was adjusted by \$11.7 million during the six months ended June 30, 2018 and a corresponding gain was recorded in other operating income in the accompanying condensed consolidated statements of (loss) income. Also during the first half of 2018, we acquired all remaining shares of a privately held entity in which we held a minority interest as discussed in Note 3. The value of the minority interest investment was revalued in connection with the acquisition by \$7.9 million and a corresponding gain was recorded in general and administrative, restructuring, integration and other expense, net in the accompanying condensed consolidated statement of (loss) income.

During the first six months of 2018, we converted a note receivable from a non-publicly traded company, considered a related party, into an equity interest in that company. This note held a balance of \$11.4 million

including principal balance and accrued interest at conversion. As a result of an orderly transaction for a similar investment of the same issuer, this investment was adjusted by \$0.8 million and a corresponding gain was recorded in other operating income in the accompanying condensed consolidated statement of (loss) income for the six-months ended June 30, 2018.

In August 2018, we sold our interest in a non-publicly traded company which had a book value of \$5.4 million. Proceeds from the sale totaled \$10.5 million in cash resulting in a corresponding gain of \$5.1 million.

Investment in Associates

As of June 30, 2018 and December 31, 2017, we had a total of equity-method investments in non-publicly traded companies of \$10.9 million and \$18.5 million, respectively, which are included in equity accounted investments in the accompanying condensed consolidated balance sheets.

During the first half of 2018, we recorded impairments of \$6.1 million in other operating expense in the accompanying condensed consolidated statements of (loss) income, following changes in the investee's circumstances that indicated the carrying value was no longer recoverable. Accordingly, the investments were fully impaired.

During 2017, we acquired a 40% interest in MAQGEN Biotechnology Co., Ltd. for \$4.0 million and contributed an additional \$3.2 million during the six months ended June 30, 2018. We have a commitment to contribute an additional \$4.8 million in future periods. In connection with the 2016 restructuring activities discussed in Note 4, we transferred the research and development activities of our instrumentation business to a new company, Hombrechtikon Systems Engineering AG (HSE), in which we acquired a 19% interest for a total obligation of \$9.8 million as of December 31, 2017 payable over three years. As of June 30, 2018, a \$3.0 million obligation is included in other current liabilities in the accompanying condensed consolidated balance sheets. HSE is accounted for under the equity method as we have significant influence but not control over the associate. As of June 30, 2018, the investment has a carrying value of \$0.9 million, which is included in equity accounted investments in the condensed consolidated balance sheets, representing our maximum exposure to loss.

During the first half of 2017, we sold our interest in an equity-method investee, which had no book value, for \$3.5 million and recorded a corresponding gain in other operating income in the accompanying condensed consolidated statement of (loss) income.

6. Intangible Assets

The changes in intangibles assets in 2018 are summarized as follows:

(in thousands)	Other Intangible Assets	Goodwill
Balance at December 31, 2017	\$ 703,014	\$ 2,038,180
Additions	55,325	—
Acquisitions	115,964	119,182
Amortization/disposals	(89,447)	(5,098)
Impairments	(1,610)	—
Foreign currency translation adjustments	(14,401)	(25,334)
Balance at June 30, 2018	\$ 768,845	\$ 2,126,930

Cash paid for purchases of intangible assets during the six-months ended June 30, 2018 totaled \$49.6 million. Additionally, during the six-months ended June 30, 2018, we capitalized \$2.7 million of development expenses.

The changes in the carrying amount of goodwill for the six-months ended June 30, 2018 resulted from acquisitions and divestitures as discussed in Note 3 and changes in foreign currency translation.

7. Derivatives and Hedging

In the ordinary course of business, we use derivative instruments, including swaps, forwards and/or options, to manage potential losses from foreign currency exposures and interest bearing assets or liabilities. The principal objective of such derivative instruments is to minimize the risks and/or costs associated with our global financial and operating activities. We do not utilize derivative or other financial instruments for trading or other speculative purposes. We recognize all derivatives as either assets or liabilities on the balance sheet on a gross basis, measure those instruments at fair value and recognize the change in fair value in earnings in the period of change, unless the derivative qualifies as an effective hedge that offsets certain exposures. We have agreed with almost all of our counterparties with whom we had entered into cross-currency swaps, interest rate swaps or foreign exchange contracts, to enter into bilateral collateralization contracts under which we will receive or provide cash collateral, as the case may be, for the net position with each of these counterparties. As of June 30, 2018, cash collateral positions consisted of \$3.8 million recorded in other current liabilities and \$39.3 million recorded in other current assets in the accompanying condensed consolidated balance sheet. As of December 31, 2017, we had cash collateral positions consisting of \$3.0 million recorded in other current liabilities and \$21.9 million recorded in other current assets in the accompanying condensed consolidated balance sheet.

In 2017, we entered into a foreign currency non-derivative hedging instrument that is designated and qualifies as net investment hedge. The objective of the hedge is to protect part of the net investment in foreign operations against adverse changes in the exchange rate between the Euro and the functional currency of the U.S. dollar. The non-derivative hedging instrument is the German private corporate bond ("Schuldschein") which was issued in the total amount of \$331.1 million as described in Note 9 "Debt." Of the \$331.1 million, which is held in both U.S. dollars and Euros, €255.0 million is designated as the hedging instrument against a portion of our Euro net investments in our foreign operations. The relative changes in both the hedged item and hedging instrument are calculated by applying the change in spot rate between two assessment dates against the respective notional amount. The effective portion of the hedge is recorded in the cumulative translation adjustment account within other accumulated comprehensive income (loss). Based on the spot rate method, the unrealized loss recorded in equity was \$11.2 million and \$19.8 million as of June 30, 2018 and December 31, 2017, respectively. Since we are using the debt as the hedging instrument, which is also remeasured based on the spot rate method, there is no hedge ineffectiveness related to the net investment hedge as of June 30, 2018 and December 31, 2017.

As of June 30, 2018 and December 31, 2017, we held derivative instruments that are designated and qualify as cash flow hedges, where the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. In 2018 and in 2017, we did not record any hedge ineffectiveness related to any cash-flow hedges in earnings. Based on their valuation as of June 30, 2018, we expect approximately \$13.5 million of derivative losses included in accumulated other comprehensive loss will be reclassified into income during the next 12 months. The cash flows derived from derivatives are classified in the condensed consolidated statements of cash flows in the same category as the condensed consolidated balance sheet account of the underlying item.

As of June 30, 2018 and December 31, 2017, we held derivative instruments that qualify for hedge accounting as fair value hedges. For derivative instruments that are designated and qualify as a fair value hedge, the effective portion of the gain or loss on the derivative is reflected in earnings. This effect on earnings is offset by the change in the fair value of the hedged item attributable to the risk being hedged that is also recorded in earnings. In 2018 and in 2017, there was no ineffectiveness. The cash flows derived from derivatives are classified in the condensed consolidated statements of cash flows in the same category as the condensed consolidated balance sheet account of the underlying item.

Interest Rate Derivatives

We use interest rate derivative contracts to align our portfolio of interest bearing assets and liabilities with our risk management objectives. During 2015, we entered into five cross currency interest rate swaps through 2025 for a total notional amount of €180.0 million which qualify for hedge accounting as cash flow hedges. We determined that no ineffectiveness exists related to these swaps. As of June 30, 2018, the €180.0 million notional swap amount had a fair value of \$26.6 million recorded as a non-current liability in fair value of derivative financial

instruments and a related interest receivable of \$1.3 million which is recorded in other current assets, respectively, in the accompanying condensed consolidated balance sheet. As of December 31, 2017, these swaps had a fair value of \$28.9 million recorded as a non-current liability in fair value of derivative financial instruments and related interest receivable of \$1.2 million recorded in other current assets in the accompanying condensed consolidated balance sheet.

We hold interest rate swaps which effectively fix the fair value of \$200.0 million of our fixed rate private placement debt and qualify for hedge accounting as fair value hedges. We determined that no ineffectiveness exists related to these swaps. As of June 30, 2018, the \$200.0 million notional swap amount had a fair value of \$3.1 million recorded as a non-current liability in fair value of derivative financial instruments and related interest payable of \$0.1 million recorded other current liabilities in the accompanying condensed consolidated balance sheet. As of December 31, 2017, these swaps had a fair value of \$0.9 million recorded as a non-current asset in fair value of derivative financial instruments and accrued and unpaid interest of \$0.3 million recorded in other current assets in the accompanying condensed consolidated balance sheet.

Call Spread Overlay

We entered into Call Options in 2014 which, along with the sale of the Warrants, represent the Call Spread Overlay entered into in connection with the 2019 and 2021 Cash Convertible Notes and which are more fully described in Note 9, "Financial Debts." We used \$105.2 million of the proceeds from the issuance of the 2019 and 2021 Cash Convertible Notes to pay the premium for the Call Options, and simultaneously received \$68.9 million, (net of issuance costs) from the sale of the Warrants, for a net cash outlay of \$36.3 million for the Call Spread Overlay.

During 2017, we used \$73.6 million of the proceeds from the issuance of the 2023 Cash Convertible Notes to pay the premium for the Call Option, and simultaneously received \$45.4 million from the sale of the Warrants, for a net cash outlay of \$28.3 million for the Call Spread Overlay. Issuance costs in connection with the Warrant and the Call Option were \$0.3 million and \$0.1 million respectively.

In both transactions, the Call Options are intended to address the equity price risk inherent in the cash conversion feature of each instrument by offsetting cash payments in excess of the principal amount due upon any conversion of the Cash Convertible Notes.

Aside from the initial payment of a premium of \$105.2 million (2019 and 2021 Notes) and \$73.6 million (2023 Notes) for the Call Options, we will not be required to make any cash payments under the Call Options. We will, however, be entitled to receive under the terms of the Call Options an amount of cash generally equal to the amount by which the market price per share of our common stock exceeds the exercise price of the Call Options during the relevant valuation period. The exercise price under the Call Options is equal to the conversion price of the Cash Convertible Notes.

The Call Options, for which our common stock are the underlying security, are a derivative asset that requires mark-to-market accounting treatment due to the cash settlement features until the Call Options settle or expire. The Call Options are measured and reported at fair value on a recurring basis, within Level 2 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the Call Options, refer to Note 8, "Financial Instruments and Fair Value Measurements." The fair value of the Call Options at June 30, 2018 was approximately \$430.8 million, of which \$278.7 million was recorded as a non-current asset in fair value of derivative financial instruments and \$152.1 million was recorded as a current asset in fair value of derivative financial instruments. As of December 31, 2017, the fair value of the Call Options was approximately \$223.2 million which was recorded as a non-current asset in fair value of derivative financial instruments in the accompanying condensed consolidated balance sheet.

The Call Options do not qualify for hedge accounting treatment. Therefore, the change in fair value of these instruments is recognized immediately in our condensed consolidated statements of (loss) income in other financial expense, net. For the six-month periods ended June 30, 2018 and June 30, 2017, the change in the fair value of the Call Options resulted in gains of \$207.6 million and \$38.3 million, respectively. Because the terms of the Call Options are substantially similar to those of the Cash Convertible Notes' embedded cash conversion option, discussed below, we expect the effect on earnings from the two derivative instruments to mostly offset each other.

In March 2014, in connection with the issuance of our 2019 Notes and 2021 Notes, we issued Warrants (as described in Note 9) for approximately 25.8 million shares of our common stock (subject to antidilution adjustments under certain circumstances) with an exercise price of \$32.085 per share, subject to customary adjustments. Following the synthetic share repurchase discussed below, the adjusted exercise price is \$32.056. The proceeds, net of issuance costs, from the sale of these Warrants of approximately \$68.9 million are included as additional paid in capital in the accompanying condensed consolidated balance sheets. These Warrants expire as follows: Warrants to purchase 15.2 million shares expire over a period of 50 trading days beginning on December 27, 2018 and Warrants to purchase 10.6 million shares expire over a period of 50 trading days beginning on December 29, 2020.

In September 2017, concurrent with the issuance of our 2023 Notes, we issued Warrants (as described in Note 9) for approximately 9.7 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances) with an exercise price of \$50.9664 per share, subject to customary adjustments. The proceeds from the sale of the Warrants, net of issuance costs, of approximately \$45.3 million are included as additional paid in capital in the accompanying condensed consolidated balance sheets. The Warrants expire over a period of 50 trading days beginning on June 26, 2023.

These Warrants are exercisable only upon expiration. For each Warrant that is exercised, we will deliver to the holder a number of shares of our common stock equal to the amount by which the settlement price exceeds the exercise price, divided by the settlement price, plus cash in lieu of any fractional shares. These Warrants could separately have a dilutive effect on shares of our common stock to the extent that the market value per share of our common stock exceeds the applicable exercise price of the Warrants (as measured under the terms of the Warrants).

The fair value of the Warrants at June 30, 2018 and December 31, 2017 was approximately \$357.8 million and \$159.1 million, respectively, which is recorded as a non-current liability in fair value of derivative financial instruments in the accompanying condensed consolidated balance sheets. For the six months ended June 30, 2018 and June 30, 2017, the change in the fair value of the Warrants resulted in losses of \$198.6 million and \$18.6 million, respectively, recognized in other financial income (expense), net.

Cash Convertible Notes Embedded Cash Conversion Option

The embedded cash conversion option within the Cash Convertible Notes is required to be separated from the Cash Convertible Notes and accounted for separately as a derivative liability, with changes in fair value reported in our condensed consolidated statements of (loss) income in other financial expense, net until the cash conversion option settles or expires. For further discussion of the Cash Convertible Notes, refer to Note 9, "Debt." The initial fair value liability of the embedded cash conversion option for the 2019 and 2021 Notes was \$105.2 million and for the 2023 Notes was \$74.5 million, which simultaneously reduced the carrying value of the Cash Convertible Notes (effectively an original issuance discount). The embedded cash conversion option is measured and reported at fair value on a recurring basis, within Level 2 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the embedded cash conversion option, refer to Note 8, "Financial Instruments and Fair Value Measurements." The fair value of the embedded cash conversion options at June 30, 2018 was approximately \$434.0 million, of which \$152.4 million is recorded as a current liability in fair value of derivative financial instruments and \$281.6 million is recorded as a non-current liability in fair value of derivative financial instruments. As of December 31, 2017, the fair value of the embedded cash conversion options was approximately \$224.3 million which is recorded as a non-current liability in fair value of derivative financial instruments in the accompanying condensed consolidated balance sheet. For the six-month period ended June 30, 2018 and June 30, 2017, the change in the fair value of the embedded cash conversion option resulted in losses of \$209.7 million and \$37.6 million, respectively, recognized in our condensed consolidated statements of (loss) income in other income (expense), net.

Foreign Currency Derivatives

As a globally active enterprise, we are subject to risks associated with fluctuations in foreign currencies in our ordinary operations. This includes foreign currency-denominated receivables, payables, debt, and other balance sheet positions including intercompany items. We manage balance sheet exposure on a group-wide basis using foreign exchange forward contracts, foreign exchange options and cross-currency swaps.

Undesignated Derivative Instruments

We are party to various foreign exchange forward, option and swap arrangements which had, at June 30, 2018, an aggregate notional value of \$446.8 million and fair value of \$1.3 million included as a current asset in fair value of derivative financial instruments and \$13.1 million included as a current liability in fair value of derivative financial instruments, which expire at various dates through September 2018. We were party to various foreign exchange forward and swap arrangements which had, at December 31, 2017, an aggregate notional value of \$587.3 million and fair values of \$7.5 million included as a current asset in fair value of derivative financial instruments and \$2.4 million included as a current liability in fair value of derivative financial instruments, which expired at various dates through December 2017. The transactions have been entered into to offset the effects from short-term balance sheet exposure to foreign currency exchange risk. Changes in the fair value of these arrangements have been recognized in other financial expense, net.

Fair Values of Derivative Instruments

The following table summarizes the fair value amounts of derivative instruments reported in the condensed consolidated balance sheets as of June 30, 2018 and December 31, 2017:

(in thousands)	Derivatives in Asset Positions Fair value		Derivatives in Liability Positions Fair value	
	6/30/2018	12/31/2017	6/30/2018	12/31/2017
Derivative instruments designated as hedges				
Interest rate contracts ⁽¹⁾	\$ 1,317	\$ 1,206	\$ (26,573)	\$ (28,942)
Total derivative instruments designated as hedges	\$ 1,317	\$ 1,206	\$ (26,573)	\$ (28,942)
Undesignated derivative instruments				
Interest rate contracts ⁽¹⁾	\$ —	\$ 1,364	\$ (3,197)	\$ (161)
Call spread overlay	430,794	223,164	(433,990)	(224,286)
Cash conversion options	—	—	(357,781)	(159,147)
Foreign exchange contracts	1,278	7,480	(13,148)	(2,424)
Total derivative instruments	\$ 432,072	\$ 232,008	\$ (808,116)	\$ (386,018)

⁽¹⁾ The fair value amounts for the interest rate contracts include accrued interest.

Gains and Losses on Derivative and Non-Derivative Instruments

The following tables summarize the locations and gains and losses on derivative and non-derivative instruments for the six months ended June 30, 2018 and 2017:

Six months ended June 30, 2018 (in thousands)	Gain/(loss) recognized in equity	Location of gain or loss in income statement	(Gain) loss reclassified from equity into income	Gain (loss) recognized in income
Non-derivative instruments				
Net investment hedge	\$ 8,538	Other financial expense, net	—	n/a
Derivative instruments designated as hedges				
Interest rate contracts	\$ 2,369	Other financial expense, net	\$ (6,030)	n/a
Undesignated derivative instruments				
Warrants	n/a	Other financial expense, net	n/a	\$ (198,634)
Interest rate contracts	n/a	Other financial expense, net	n/a	(3,991)
Call spread overlay	n/a	Other financial expense, net	n/a	(2,072)
Foreign exchange contracts	n/a	Other financial expense, net	n/a	(14,042)
				<u>\$ (218,739)</u>
Six months ended June 30, 2017 (in thousands)				
Non-derivative instruments				
Net investment hedge	\$ (6,228)	Other financial expense, net	—	n/a
Derivative instruments designated as hedges				
Interest rate contracts	\$ (13,841)	Other financial expense, net	\$ 15,678	n/a
Undesignated derivative instruments				
Warrants	n/a	Other financial expense, net	n/a	\$ (18,584)
Interest rate contracts	n/a	Other financial expense, net	n/a	110
Call spread overlay	n/a	Other financial expense, net	n/a	671
Foreign exchange contracts	n/a	Other financial expense, net	n/a	6,534
				<u>\$ (11,269)</u>

The amounts noted in the tables above do not include any adjustments for the impact of deferred income taxes. Gains and losses recognized on foreign exchange contracts are included in financial income (expense), net in the condensed consolidated statements of (loss) income together with the corresponding, offsetting foreign exchange losses and gains on the underlying transactions.

8. Fair Value Measurements

Financial Instruments are measured at fair value according to a three-tier fair value hierarchy which prioritizes the inputs used in measuring fair value as follows:

- *Level 1,* Observable inputs, such as quoted prices in active markets;
- *Level 2,* Inputs, other than the quoted price in active markets, that are observable either directly or indirectly; and
- *Level 3,* Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Our assets and liabilities measured at fair value on a recurring basis consist of available-for-sale financial assets, which are classified in Level 1 and Level 2 of the fair value hierarchy, derivative contracts used to hedge currency and interest rate risk, derivative financial instruments entered into in connection with the Cash Convertible Notes discussed in Note 7, which are classified in Level 2 of the fair value hierarchy, and contingent consideration accruals which are classified in Level 3 of the fair value hierarchy, and are shown in the tables below. There have been no transfers between levels.

In determining fair value for Level 2 instruments, we apply a market approach, using quoted active market prices relevant to the particular instrument under valuation, giving consideration to the credit risk of both the respective counterparty to the contract and the Company. To determine our credit risk we estimated our credit rating by benchmarking the price of outstanding debt to publicly-available comparable data from rated companies. Using the estimated rating, our credit risk was quantified by reference to publicly-traded debt with a corresponding rating. The Level 2 derivative financial instruments include the Call Options asset, the Warrants liability and the embedded conversion option liability. See Note 9, "Financial Debts", and Note 7, "Derivatives and Hedging", for further information. The derivatives are not actively traded and are valued based on an option pricing model that uses observable market data for inputs. Significant market data inputs used to determine fair values as of June 30, 2018 included our common stock price, the risk-free interest rate, and the implied volatility of our common stock. The Call Options asset and the embedded cash conversion option liability were designed with the intent that changes in their fair values would substantially offset, with limited net impact to our earnings. Therefore, the sensitivity of changes in the unobservable inputs to the option pricing model for such instruments is substantially mitigated.

Our Level 3 instruments include contingent consideration liabilities. We value contingent consideration liabilities using unobservable inputs, applying the income approach, such as the discounted cash flow technique, or the probability-weighted scenario method. Contingent consideration arrangements obligate us to pay the sellers of an acquired entity if specified future events occur or conditions are met such as the achievement of technological or revenue milestones. We use various key assumptions, such as the probability of achievement of the milestones (0% to 100%) and the discount rate (between 8.2% and 10.2%), to represent the non-performing risk factors and time value when applying the income approach. We regularly review the fair value of the contingent consideration, and reflect any change in the accrual in the condensed consolidated statements of (loss) income in the line items commensurate with the underlying nature of milestone arrangements.

The following tables presents our hierarchy for our financial assets and liabilities measured at fair value on a recurring basis as of June 30, 2018 and December 31, 2017:

(in thousands)	Level 1	Level 2	Level 3	June 30, 2018
Available-for-sale financial assets, current	\$ 1,089	\$ 224,685	\$ —	\$ 225,774
Available-for-sale financial assets, non-current	2,717	—	—	2,717
Call Option	—	430,794	—	430,794
Foreign exchange contracts	—	1,278	—	1,278
Interest rate contract	—	1,317	—	1,317
Assets	\$ 3,806	\$ 658,074	\$ —	\$ 661,880
Foreign exchange contracts	\$ —	\$ (13,148)	\$ —	\$ (13,148)
Interest rate contracts	—	(29,770)	—	(29,770)
Cash conversion option	—	(433,990)	—	(433,990)
Warrants	—	(357,781)	—	(357,781)
Contingent consideration	—	—	(52,224)	(52,224)
Liabilities	\$ —	\$ (834,689)	\$ (52,224)	\$ (886,913)

(in thousands)	Level 1	Level 2	Level 3	December 31, 2017
Available-for-sale financial assets, current	\$ —	\$ 359,198	\$ —	\$ 359,198
Available-for-sale financial assets, non-current	3,208	—	—	3,208
Call Option	—	223,164	—	223,164
Foreign exchange contracts	—	7,480	—	7,480
Interest rate contract	—	2,570	—	2,570
Assets	\$ 3,208	\$ 592,412	\$ —	\$ 595,620
Foreign exchange contracts	\$ —	\$ (2,424)	\$ —	\$ (2,424)
Interest rate contracts	—	(29,103)	—	(29,103)
Cash conversion option	—	(224,286)	—	(224,286)
Warrants	—	(159,147)	—	(159,147)
Contingent consideration	—	—	(11,539)	(11,539)
Liabilities	\$ —	\$ (414,960)	\$ (11,539)	\$ (426,499)

For financial liabilities with Level 3 inputs, the following table summarizes the activity for the six months ended June 30, 2018.

(in thousands)	Contingent Consideration
Beginning Balance at January 1, 2018	\$ (11,539)
Additions	(52,216)
Payments	11,531
Ending balance at June 30, 2018	\$ (52,224)

As of June 30, 2018, of the total \$52.2 million accrued for contingent consideration, \$27.0 million is included in other non-current liabilities and \$25.2 million is included in other current liabilities in the accompanying condensed consolidated balance sheet. For the six months ended June 30, 2018, cash payments for contingent consideration totaled \$11.5 million, of which \$5.5 million relate to amounts originally accrued at the acquisition date and \$6.0 million relate to amounts in excess of amounts originally accrued and are included in other financing activities and other operating activities, respectively, in the accompanying condensed consolidated statements of cash flows.

The table below presents the carrying values and the estimated fair values of financial instruments not presented in the tables above.

(in thousands)	As of June 30, 2018			As of December 31, 2017		
	Carrying Amount	Level 1	Level 2	Carrying Amount	Level 1	Level 2
Long-term debt including current portion:						
Cash convertible notes	\$ 1,025,060	\$1,381,667	\$ —	\$ 1,008,507	\$ —	\$ 1,269,613
Private placement	399,191	—	386,253	399,083	—	394,669
German private placement	341,372	—	342,223	349,812	—	349,977
	<u>\$ 1,765,623</u>	<u>\$1,381,667</u>	<u>\$ 728,476</u>	<u>\$ 1,757,402</u>	<u>\$ —</u>	<u>\$ 2,014,259</u>

The fair values of the financial instruments presented in the tables above were determined as follows:

Cash Convertible Notes: Fair value is based on an estimation using available over-the-counter market information on the Cash Convertible Notes due in 2019, 2021 and 2023. During 2018, we determined that the quoted prices were from active markets and accordingly moved the fair value from level 2 to level 1 of the fair value hierarchy.

Private Placement: Fair value of the outstanding bonds is based on an estimation using the changes in the U.S. Treasury rates.

German Private Placement: Fair value is based on an estimation using changes in the euro swap rates.

The carrying values of financial instruments, including cash and equivalents, accounts receivable, accounts payable and other current liabilities, approximate their fair values due to their short-term maturities. The estimated fair values may not represent actual values of the financial instruments that could be realized as of the balance sheet date or that will be realized in the future. There were no adjustments in the six-month periods ended June 30, 2018 and 2017 for nonfinancial assets or liabilities required to be measured at fair value on a nonrecurring basis.

9. Financial Debts

Our credit facilities available and undrawn at June 30, 2018 total €426.6 million (approximately \$497.3 million). This includes a €400.0 million syndicated multi-currency revolving credit facility expiring December 2021 of which no amounts were utilized at June 30, 2018 or at December 31, 2017, and four other lines of credit amounting to €26.6 million with no expiration date, none of which were utilized as of June 30, 2018 or at December 31, 2017. The €400.0 million facility can be utilized in Euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.4% to 1.2% above three months EURIBOR, or LIBOR in relation to any loan not in euro, and is offered with interest periods of one, two, three, or six months. The commitment fee is calculated based on 35% of the applicable margin. The revolving facility agreement contains certain financial and non-financial covenants, including but not limited to, restrictions on the encumbrance of assets and the maintenance of certain financial ratios. We were in compliance with these covenants at June 30, 2018. The credit facilities are for general corporate purposes.

At June 30, 2018 or at December 31, 2017, non-current financial debt, net of debt issuance costs of \$10.5 million and \$12.4 million, respectively, consists of the following:

(in thousands)	June 30, 2018	December 31, 2017
0.375% Senior Unsecured Cash Convertible Notes due 2019	\$ 420,993	\$ 414,843
0.875% Senior Unsecured Cash Convertible Notes due 2021	275,077	270,762
0.500% Senior Unsecured Cash Convertible Notes due 2023	328,990	322,902
3.19% Series A Senior Notes due October 2019	72,929	72,903
3.75% Series B Senior Notes due October 2022	299,335	299,259
3.90% Series C Senior Notes due October 2024	26,927	26,921
Schuldschein Private Placement	341,372	349,812
Total non-current financial debts	\$ 1,765,623	\$ 1,757,402
Less: current portion of financial debts	420,993	—
Total non-current financial debts	\$ 1,344,630	\$ 1,757,402

The notes are all unsecured obligations that rank pari passu.

Cash Convertible Notes due 2019, 2021 and 2023

On March 19, 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes of which \$430.0 million is due in 2019 (2019 Notes) and \$300.0 million is due in 2021 (2021 Notes). The aggregate net proceeds of the 2019 Notes and 2021 Notes was \$680.7 million, after payment of the net cost of the Call Spread Overlay described below and transaction costs. Additionally, we used \$372.5 million of the net proceeds to repay other debt.

On September 13, 2017, we issued \$400.0 million aggregate principal amount of Cash Convertible Senior Notes which is due in 2023 (2023 Notes). The net proceeds of the 2023 Notes were \$365.6 million, after payment of the net cost of the call Spread Overlay described below and transaction costs paid through June 30, 2018.

We refer to the 2019 Notes, 2021 Notes and 2023 Notes collectively as the "Cash Convertible Notes." Interest on the Cash Convertible Notes is payable semi-annually in arrears in March and September of each year, at rates of 0.375%, 0.875% and 0.500% per annum for the 2019 Notes, 2021 Notes and 2023 Notes, respectively, commencing on September 19, 2014 for the 2019 Notes and 2021 Notes and March 13, 2018 for the 2023 Notes. The 2019 Notes will mature on March 19, 2019, the 2021 Notes will mature on March 19, 2021 and the 2023 Notes will mature on September 13, 2023 unless repurchased or converted in accordance with their terms prior to such date.

The Cash Convertible Notes are convertible solely into cash in whole, but not in part, at the option of noteholders in the following circumstances: (a) from April 29, 2014 through September 18, 2018 for the 2019 Notes, and September 18, 2020 for the 2021 Notes and from October 24, 2017 through March 13, 2023 for the 2023 Notes (Contingent Conversion Period), under any of the Contingent Conversion Conditions and (b) at any time following the Contingent Conversion Period through the fifth business day immediately preceding the applicable maturity date. For further information on the Contingent Conversion Conditions, refer to Note 15 "Financial Debts" of our 2017 IFRS Annual Report. Upon version, noteholders will receive an amount in cash equal to the Cash Settlement Amount, calculated as described below. The Cash Convertible Notes are not convertible into shares of our common stock or any other securities.

The Contingent Conversion Conditions in the 2019 Notes, 2021 Notes and 2023 Notes have been analyzed under IFRS 9, *Financial Instruments*, and based on our analysis, we determined that each of the embedded features are clearly and closely related to the 2019 Notes, 2021 Notes and 2023 Notes (i.e., host contract). As a result, pursuant to the accounting provisions of IFRS 9, *Financial Instruments*, these features are not required to be bifurcated as separate instruments. As of June 30, 2018, no contingent conversion was triggered.

For the 2023 Notes, the initial conversion rate is 4,829.7279 shares of our common stock per \$200,000 principal amount (reflecting an initial conversion price of approximately \$41.4102 per share of common stock). As adjusted by the synthetic share repurchase discussed in Note 12, the conversion rate for the 2019 Notes and 2021 Notes is 7,063.1647 shares of our common stock per \$200,000 principal amount (reflecting an adjusted conversion price of approximately \$28.32 per share of common stock). Upon conversion, holders are entitled to a cash payment (Cash Settlement Amount) equal to the average of the conversion rate multiplied by the daily volume-weighted average trading price for our common stock over a 50-day period. The conversion rate is subject to adjustment in certain instances but will not be adjusted for any accrued and unpaid interest. In addition, following the occurrence of certain corporate events that may occur prior to the applicable maturity date, we may be required to pay a cash make-whole premium by increasing the conversion rate for any holder who elects to convert Cash Convertible Notes in connection with the occurrence of such a corporate event, but in no event will the Conversion Ratio exceed 6,728.6463 per \$200,000 principal amount of Notes.

We may redeem the 2019 Notes, 2021 Notes or 2023 Notes in their entirety at a price equal to 100% of the principal amount of the applicable Cash Convertible Notes plus accrued interest at any time when 20% or less of the aggregate principal amount of the applicable Cash Convertible Notes originally issued remain outstanding.

Because the Cash Convertible Notes contain an embedded cash conversion option, we have determined that the embedded cash conversion option is a derivative financial instrument, which is required to be separated from the Cash Convertible Notes and accounted for separately as a derivative liability, with changes in fair value reported in our consolidated statements of operations until the cash conversion option transaction settles or expires. The initial fair value liability of the embedded cash conversion option for the 2019 Notes and 2021 Notes was \$105.2 million and for the 2023 Notes was \$74.5 million, which simultaneously reduced the carrying value of the Cash Convertible Notes (effectively an original issuance discount). For further discussion of the derivative financial instruments relating to the Cash Convertible Notes, refer to Note 7, “Derivatives and Hedging.”

As noted above, the reduced carrying value on the Cash Convertible Notes resulted in a debt discount that is amortized to the principal amount through the recognition of non-cash interest expense using the effective interest method over the expected life of the debt, which is five, seven and six years for the 2019 Notes, 2021 Notes and 2023 Notes, respectively. This resulted in our recognition of interest expense on the Cash Convertible Notes at an effective rate approximating what we would have incurred had nonconvertible debt with otherwise similar terms been issued. The effective interest rate of the 2019 Notes, 2021 Notes and 2023 Notes is 2.937%, 3.809% and 3.997%, respectively, which is imputed based on the amortization of the fair value of the embedded cash conversion option over the remaining term of the Cash Convertible Notes. As of June 30, 2018, we expect the 2019 Notes, 2021 Notes and 2023 Notes to be outstanding until their respective maturity dates.

In connection with the issuance of the 2019 Notes and 2021 Notes, we incurred approximately \$13.1 million in transaction costs. We incurred approximately \$6.2 million in transaction costs for the 2023 Notes. Such costs have been allocated to the Cash Convertible Notes and deferred as a non-current asset which are being amortized to interest expense using the effective interest method.

Interest expense related to the Cash Convertible Notes was comprised of the following:

(in thousands)	Six months ended	
	June 30,	
	2018	2017
Coupon interest	\$ 3,119	\$ 4,832
Amortization of original issuance discount	14,889	21,377
Amortization of debt issuance costs	1,664	2,615
Total interest expense related to the Cash Convertible Notes	\$ 19,672	\$ 28,824

Cash Convertible Notes Call Spread Overlay

Concurrent with the issuance of the Cash Convertible Notes, we entered into privately negotiated hedge transactions (Call Options) with, and issued warrants to purchase shares of our common stock (Warrants) to, certain financial institutions. We refer to the Call Options and Warrants collectively as the “Call Spread Overlay”. The Call Options are intended to offset any cash payments payable by us in excess of the principal amount due upon any conversion of the Cash Convertible Notes. During 2014, we used \$105.2 million of the proceeds from the issuance of the 2019 Notes and 2021 Notes to pay for the Call Options, and simultaneously received \$69.4 million from the sale of the Warrants, for a net cash outlay of \$35.8 million for the Call Spread Overlay.

During 2017, we used \$73.6 million of the proceeds from the issuance of the 2023 Notes to pay for the premium for the Call Option, and simultaneously received \$45.4 million from the sale of Warrants, for a net cash outlay of \$28.3 million for the Call Spread Overlay. Issuance costs in connection with the Warrant and the Call Option were \$0.3 million and \$0.1 million respectively.

The Call Options and Warrants are derivative financial instruments and are discussed in Note 7.

Aside from the initial payment of a premium of \$105.2 million (relating to the 2019 Notes and 2021 Notes) and \$73.6 million (relating to the 2023 Notes) for the Call Option, we will not be required to make any cash payments under the Call Options, and will be entitled to receive an amount of cash, generally equal to the amount by which the market price per share of our common stock exceeds the exercise price of the Call Options during the relevant valuation period. The exercise price under the Call Options is initially equal to the conversion price of the Cash Convertible Notes.

The Warrants issued in connection with the 2019 Notes and 2021 Notes cover an aggregate of 25.8 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances) and following the completion of the synthetic share repurchase, have an exercise price of \$32.0558 per share, subject to customary adjustments. These Warrants expire as follows: Warrants to purchase 15.2 million shares expire over a period of 50 trading days beginning on December 27, 2018 and Warrants to purchase 10.6 million shares expire over a period of 50 trading days beginning on December 29, 2020.

Concurrent with the 2023 Notes, we issued Warrants which cover 9.7 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances) and have an initial exercise price of \$50.9664 per share, subject to customary adjustments. The Warrants expire over a period of 50 trading days beginning on June 26, 2023.

The Warrants that were issued with our Cash Convertible Notes discussed above could have a dilutive effect to the extent that the price of our common stock exceeds the applicable strike price of the Warrants. For each Warrant that is exercised, we will deliver to the holder a number of shares of our common stock equal to the amount by which the settlement price exceeds the exercise price, divided by the settlement price, plus cash in lieu of any fractional shares. We will not receive any additional proceeds if the Warrants are exercised. The Warrants are European-style (exercisable only upon expiration).

Private Placement

In 2012, we completed a private placement through the issuance of new senior unsecured notes at a total amount of \$400 million with a weighted average interest rate of 3.66% (settled on October 16, 2012). The notes were issued in three series: (1) \$73 million 7-year term due in 2019 (3.19%); (2) \$300 million 10-year term due in 2022 (3.75%); and (3) \$27 million 12-year term due in 2024 (3.90%). We paid \$2.1 million in debt issuance costs which are being amortized through interest expense over the lifetime of the notes. The note purchase agreement contains certain financial and non-financial covenants, including but not limited to, restrictions on priority indebtedness and the maintenance of certain financial ratios. We were in compliance with these covenants at June 30, 2018. During 2014, we entered into interest rate swaps, which effectively fixed the fair value of \$200.0 million of this debt and qualify for hedge accounting as fair value hedges as described in Note 7 "Derivatives and Hedging."

German Private Placement (Schuldschein)

In 2017, we issued a German private placement bond ("Schuldschein") in several tranches totaling \$331.1 million due in various periods through 2027. The Schuldschein consists of U.S. dollar and Euro denominated tranches. The Euro tranches are designated as a foreign currency non-derivative hedging instrument that qualifies as a net investment hedge as described in Note 7 "Derivatives and Hedging." We paid \$1.2 million in debt issuance costs which are being amortized through interest expense over the lifetime of the notes. A summary of the tranches as of June 30, 2018 is as follows:

Currency	Notional Amount	Interest Rate	Maturity	Carrying Value as of June 30, 2018 (in thousands)
EUR	€11.5 million	Fixed 0.4%	March 2021	\$ 13,376
EUR	€23.0 million	Floating EURIBOR + 0.4%	March 2021	26,753
EUR	€21.5 million	Fixed 0.68%	October 2022	25,001
EUR	€64.5 million	Floating EURIBOR + 0.5%	October 2022	75,004
USD	\$45.0 million	Floating LIBOR + 1.2%	October 2022	44,876
EUR	€25.0 million	Floating EURIBOR + 0.5%	October 2022	29,052
EUR	€64.0 million	Fixed 1.09%	June 2024	74,411
EUR	€31.0 million	Floating EURIBOR + 0.7%	June 2024	36,043
EUR	€14.5 million	Fixed 1.61%	June 2027	\$ 16,856
				<u>\$ 341,372</u>

10. Income Taxes

The interim provision for income taxes is based upon the estimated annual effective tax rates for the year applied to the current period ordinary income before tax plus the tax effect of any discrete items. Our operating subsidiaries are exposed to effective tax rates ranging from zero to more than 34%. Fluctuations in the distribution of pre-tax (loss) income among our operating subsidiaries can lead to fluctuations of the effective tax rate in the

condensed consolidated financial statements. In the six-month periods ended June 30, 2018 and 2017, the effective tax rates were (17.5)% and 6.1%, respectively.

In the first half of 2018 and 2017, tax expense on foreign operations was favorably impacted by lower income tax rates and partial tax exemptions on foreign income primarily derived from operations in Germany, Singapore, Luxembourg, Ireland and Switzerland. These foreign tax benefits are due to a combination of favorable tax laws, rules, rulings, and exemptions in these jurisdictions. In particular, we have pre-tax income in Germany which is statutorily exempt from trade tax on intercompany foreign royalty income. Further, we have intercompany financing arrangements through Luxembourg and Ireland in which the intercompany income is partially exempt.

We conduct business globally and, as a result, file numerous consolidated and separate income tax returns in The Netherlands, Germany, Switzerland and the U.S. federal jurisdiction, as well as in various other state and foreign jurisdictions. In the normal course of business, we are subject to examination by taxing authorities throughout the world. Our subsidiaries are generally no longer subject to income tax examinations by tax authorities for years before 2013. During the first half of 2016, the U.S. tax authority (Internal Revenue Service) concluded its federal audit of our U.S. tax returns for 2011 and 2012 without any adjustments. In February 2016, German tax authorities began the audit of the German tax returns for the 2010 through 2013 tax years. This audit is currently in process and we expect to close the audit later in 2018.

As of June 30, 2018, residual Netherlands income taxes have not been provided on the undistributed earnings of the majority of our foreign subsidiaries as these earnings are considered to be either permanently reinvested or can be repatriated tax free under the Dutch participation exemption.

On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act (H.R.1) (the “2017 Tax Act”). The 2017 Tax Act includes a number of changes to existing U.S. tax laws that impact us, most notably a reduction of the U.S. corporate income tax rate from 35% to 21% effective as of January 1, 2018 and a new net interest expense deduction limitation, which limits the deduction of net interest expense to 30% of the taxpayer’s adjusted taxable income (ATI). The 2017 Tax Act also provides the acceleration of depreciation for certain assets placed into service after September 27, 2017 as well as prospective changes including repeal of the domestic manufacturing deduction beginning in 2018 and capitalization of research and development expenditures beginning in 2022.

11. Inventories

The components of inventories consist of the following as of June 30, 2018 and December 31, 2017:

(in thousands)	June 30, 2018	December 31, 2017
Raw materials	\$ 25,532	\$ 23,717
Work in process	35,902	33,153
Finished goods	96,801	99,057
Total inventories	<u>\$ 158,235</u>	<u>\$ 155,927</u>

12. Equity

Share Repurchase Programs

On April 27, 2016, we announced the launch of our fourth \$100 million share repurchase program which was completed by the end of 2017. During the second half of 2017, 1.9 million QIAGEN shares were repurchased for \$61.0 million (including transaction costs).

On January 31, 2018, we announced our fifth share repurchase program of up to \$200 million of our common shares. During the six months ended June 30, 2018, we repurchased 0.8 million QIAGEN shares for \$29.6 million (including transaction costs) of which \$20.8 million was paid as of June 30, 2018.

The cost of repurchased shares is included in treasury stock and reported as a reduction in total equity when a repurchase occurs. Repurchased shares will be held in treasury in order to satisfy various obligations, which include exchangeable debt instruments, warrants and employee share-based remuneration plans.

Synthetic Share Repurchase Program

In August 2016, we announced our plan to return approximately \$250 million to shareholders through a synthetic share repurchase program that combines a direct capital repayment with a reverse stock split. The synthetic share repurchase was implemented through a series of amendments to our Articles of Association which were approved by our shareholders at an Extraordinary General Meeting (EGM) held on October 26, 2016. The first amendment involved an increase in share capital by an increase in the nominal value per common share from EUR 0.01 to EUR 1.04 and a corresponding reduction in additional paid in capital. The second amendment involved a reduction in stock whereby 27 existing common shares with a nominal value of EUR 1.04 each were consolidated into 26 new common shares with a nominal value of EUR 1.08 each. The third amendment was a reduction of the nominal value per common share from EUR 1.08 to EUR 0.01. As a result of these amendments, which in substance constitute a synthetic share buyback, \$243.9 million was repaid to our shareholders and the outstanding number of common shares was reduced by 8.9 million, or 3.7%. The capital repayment program was completed in January 2017. Expenses incurred related to the capital repayment and share consolidation amounted to \$0.5 million and were charged to equity.

13. Revenue

Accounting Policies

We adopted IFRS 15 *Revenue from Contracts with Customers* with a date of initial application of January 1, 2018. Therefore, the comparative information has not been adjusted and continues to be reported under IAS 18 *Revenue*. As a result, we changed our accounting policy for revenue recognition as detailed below.

We applied IFRS 15 using the modified retrospective method by recognizing the effect of initially applying IFRS 15 as an \$1.3 million adjustment to the opening balance of retained earnings at January 1, 2018 for all contracts not completed at January 1, 2018. The following table presents the impact from the adoption of IFRS 15 on our condensed consolidated balance sheet:

(in thousands)	Balance at December 31, 2017	IFRS 15 Adjustments	Balance at January 1, 2018
Trade accounts receivable	\$ 329,138	\$ 160	\$ 329,298
Other current liabilities	\$ 230,243	\$ 765	\$ 231,008
Non-current deferred tax assets	\$ 67,985	\$ 701	\$ 68,686
Retained earnings	\$ 1,071,393	\$ (1,306)	\$ 1,070,087

The adoption of IFRS 15 resulted in higher revenue of \$2.3 million for the six month period ended June 30, 2018 following the change in the timing of the recognition of milestone payments. The following tables summarizes the impacted line items from our condensed consolidated statements of (loss) income for the six month period ended June 30, 2018:

(in thousands, except per share amounts)	Six months ended June 30, 2018 under previous standard	Effect of IFRS 15	June 30, 2018 As Reported
Net sales	\$ 718,480	\$ 2,284	\$ 720,764
Income taxes	\$ (22,328)	\$ 429	\$ (21,899)
Net income	\$ (148,840)	\$ 1,855	\$ (146,985)
Basic and diluted earnings per common share	\$ (0.66)	\$ 0.01	\$ (0.65)

The impact from the adoption of IFRS 15 on our condensed consolidated balance sheet as of June 30, 2018 and condensed consolidated statement of cash flow for the six months ended June 30, 2018 was not material.

Nature of Goods and Services

Our revenues are reported net of sales and value added taxes and accruals for estimated rebates and returns and are derived primarily from the sale of consumable and instrumentation products, and to a much lesser extent, from the sale of services, intellectual property and technology. Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We enter into contracts that can include various combinations of products and services, which are generally distinct and accounted for as separate performance obligations. The transaction price is allocated to performance obligations based on their relative stand-alone selling prices.

We offer warranties on our products. Certain of our warranties are assurance-type in nature and do not cover anything beyond ensuring that the product is functioning as intended. Based on the guidance in IFRS 15, assurance-type warranties do not represent separate performance obligations. The Company also sells separately-priced service contracts which qualify as service-type warranties and represent separate performance obligations.

We sell our products and services both directly to customers and through distributors generally under agreements with payment terms typically less than 90 days and in most cases not exceeding one year and therefore contracts do not contain a significant financing component.

Consumable and Related Revenue

Consumable Products: In the last three years, revenue from consumable product sales has accounted for approximately 79%-80% of our net sales and revenue is recognized when performance obligations under the terms of a contract with a customer are satisfied. The majority of our contracts have a single performance obligation to transfer a product or multiple performance obligations to transfer multiple products concurrently. Accordingly, we recognize revenue when control of the products has transferred to the customer, which is generally at the time of shipment of products as this is when title and risk of loss have been transferred. In addition, invoicing typically occurs at this time so this is when we have a present right to payment. Revenue is measured as the amount of consideration we expect to receive in exchange for transferring products and is generally based upon a negotiated, formula, list or fixed price.

Related Revenue: Revenues from related products include software-as-a-service (SaaS), licenses, intellectual property and patent sales, royalties and milestone payments and over the last three years has accounted for approximately 7%-8% of our net sales.

SaaS arrangements: Revenue from SaaS arrangements, which allow customers to use hosted software over the contract period without taking possession of the software, is recognized over the duration of the agreement unless the terms of the agreement indicate that revenue should be recognized in a different pattern, for example based on usage.

Licenses: Licenses for on-site software, which allow customers to use the software as it exists when made available, are sold as perpetual licenses or subscriptions. Revenue from on-site licenses are recognized upfront at the point in time at the later of when the software is made available to the customer and the beginning of the license term. When a portion of the transaction price is allocated to a performance obligation to provide support and/or updates, revenue is recognized as the updates/support are provided, generally over the life of the license. Fees from research collaborations include payments for technology transfer and access rights. Royalties from licensees of intellectual property are based on sales of licensed products and revenues are recognized at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Milestone Payments: At the inception of each companion diagnostic co-development arrangement that includes development milestone payments, which represent variable consideration, we evaluate whether the milestones are probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control, such as milestones which are achieved through regulatory approvals, are considered to be constrained and excluded from the transaction price until those approvals are received. Revenue is recognized following the input method as this is considered to best depict the timing of the transfer of control. This involves measuring actual hours incurred to date as a proportion of the total budgeted hours of the project. At the end of each subsequent reporting period, the proportion of completion is trued-up. We also re-evaluate the probability of achievement of development milestones and any related constraint on a periodic basis, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Instruments

Revenue from instrumentation includes the instrumentation equipment, installation, training and other instrumentation services, such as extended warranty services or product maintenance contracts and over the last three years has accounted for approximately 12%-13% of net sales. Revenue from instrumentation equipment is recognized when the customer obtains control of the instrument which is predominantly at the time of delivery or when title has transferred to the customer. Service revenue is recognized over the term of the service period as the customers benefit from the service throughout the service period. Revenue related to services performed on a time-and-materials basis is recognized when performed

Contract Estimates

The majority of our revenue is derived from contracts (i) with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount in which we have the right to invoice as product is delivered. We have elected the practical expedient not to disclose the value of remaining performance obligations associated with these types of contracts.

However, we have certain companion diagnostic co-development contracts to provide research and development activities in which our performance obligations extend over multiple years. As of June 30, 2018, we had \$46.8 million of remaining performance obligations for which the transaction price is not constrained related to these contracts of which we expect to recognize approximately 50% over the next 12 months and the remainder thereafter.

Revenue expected to be recognized in any future year related to remaining performance obligations, excluding revenue pertaining to contracts that have an original expected duration of one year or less, contracts where revenue is recognized as invoiced and contracts with variable consideration related to undelivered performance obligations, is not material.

Contract Balances

The timing of revenue recognition, billings and cash collections can result in billed accounts receivable, unbilled receivables (contract assets), and customer advances and deposits (contract liabilities) in the condensed consolidated balance sheet.

We do not have any material contract assets (unbilled receivables) as of June 30, 2018 or January 1, 2018.

Contract liabilities primarily relate to advances or deposits received from customers before revenue is recognized and is primarily related to instrument service and software subscription revenue. These amounts are recorded as deferred revenue and totaled \$44.5 million and \$49.4 million at June 30, 2018 and December 31, 2017, respectively, and are included in other current liabilities. During the six months ended June 30, 2018, we satisfied the associated performance obligations and recognized revenue of \$32.2 million related to advance customer payments previously received.

Practical Expedients and Accounting Policy Elections

We exclude from net sales any value add, sales and other taxes which we collect concurrent with revenue-producing activities. If we perform shipping and handling activities after the transfer of control to the customer (e.g., when control transfers prior to delivery), they are considered as fulfillment activities, and accordingly, the costs are accrued when the related revenue is recognized. As such, shipping and handling fees billed to customers in a sales transaction are recorded in net sales and shipping and handling costs incurred are recorded in sales and marketing expenses. We recognize the incremental costs of obtaining contracts (commissions) as an expense when incurred for contracts that have a duration of one year or less. There were no deferred contract costs recorded at June 30, 2018. We apply the practical expedient to not disclose information about remaining performance obligations that have original expected duration of one year or less.

Disaggregation of Revenue

We disaggregate our revenue based on product categories and customer class as shown in the table below:

(in thousands)	Six Months Ended June 30, 2018			Six Months Ended June 30, 2017		
	Consumables and related	Instruments	Total	Consumables and related	Instruments	Total
Molecular Diagnostics	\$ 312,817	\$ 35,500	\$ 348,317	\$ 277,121	\$ 32,787	\$ 309,908
Applied Testing	51,231	11,907	63,138	49,994	11,983	61,977
Pharma	130,207	14,900	145,107	119,621	14,083	133,704
Academia	145,553	18,649	164,202	135,210	15,897	151,107
Total	<u>\$ 639,808</u>	<u>\$ 80,956</u>	<u>\$ 720,764</u>	<u>\$ 581,946</u>	<u>\$ 74,750</u>	<u>\$ 656,696</u>

(in thousands)	Six Months Ended June 30,	
	2018	2017
Americas	\$ 338,671	\$ 305,268
Europe, Middle East and Africa	236,156	212,456
Asia Pacific and Rest of World	145,937	138,972
Total	<u>\$ 720,764</u>	<u>\$ 656,696</u>

14. Earnings per Common Share

We present basic and diluted earnings per share. Basic earnings per share is calculated by dividing the net income by the weighted average number of common shares outstanding. Diluted earnings per share reflect the potential dilution that would occur if all “in the money” securities to issue common shares were exercised. Due to the net loss for the six-month period ended June 30, 2018, stock options and restricted stock units representing 4.7 million weighted-shares of common stock and warrants representing 1.4 million weighted-shares of common stock were excluded from the computation of diluted net loss because the impact would have been antidilutive. The following table summarizes the information used to compute earnings per common share:

(in thousands, except per share data)	Six months ended June 30,	
	2018	2017
Net (loss) income	<u>\$ (146,985)</u>	<u>\$ 15,993</u>
Weighted average number of common shares used to compute basic net income per common share	227,096	228,968
Dilutive effect of stock options and restricted stock units	—	4,813
Weighted average number of common shares used to compute diluted net income per common share	<u>227,096</u>	<u>233,781</u>
Outstanding options and awards having no dilutive effect, not included in above calculation	222	94
Outstanding warrants having no dilutive effect, not included in above calculation	<u>34,024</u>	<u>25,800</u>
Basic (loss) earnings per common share	<u>\$ (0.65)</u>	<u>\$ 0.07</u>
Diluted (loss) earnings per common share	<u>\$ (0.65)</u>	<u>\$ 0.07</u>

15. Commitments and Contingencies

Contingent Consideration Commitments

Pursuant to the purchase agreements for certain acquisitions and other contractual arrangements, we could be required to make additional contingent cash payments totaling up to \$69.3 million based on the achievement of certain revenue and operating results milestones as follows: \$5.0 million in the remainder of 2018, \$23.7 million in 2019, \$16.8 million in 2020, \$5.9 million in 2021, \$5.9 million in 2023 and \$5.0 million and \$7.0 million payable in any 12-month period from now through 2028 and 2029, respectively, based on the achievement of certain revenue or other milestones, regulatory approvals or clearances. Of the \$69.3 million total contingent obligation as discussed further in Note 8, we have assessed the fair value at June 30, 2018 to be \$52.2 million, of which \$27.0 million is included in other current liabilities and \$25.2 million is included in other non-current liabilities in the accompanying condensed consolidated balance sheet.

Contingencies

In the ordinary course of business, we provide a warranty to customers that our products are free of defects and will conform to published specifications. Generally, the applicable product warranty period is one year from the date of delivery of the product to the customer or of site acceptance, if required. Additionally, we typically provide limited warranties with respect to our services. From time to time, we also make other warranties to customers, including warranties that our products are manufactured in accordance with applicable laws and not in violation of third-party rights. We provide for estimated warranty costs at the time of the product sale. We believe our warranty reserves of \$3.0 million and 3.1 million as of June 30, 2018 and December 31, 2017, appropriately reflect the estimated cost of such warranty obligations.

Litigation

From time to time, we may be party to legal proceedings incidental to our business. As of June 30, 2018, certain claims, suits or legal proceedings arising out of the normal course of business have been filed or were pending against QIAGEN or our subsidiaries. These matters have arisen in the ordinary course and conduct of business, as well as through acquisition. Although it is not possible to predict the outcome of such litigation, we assess the degree of probability and evaluate the reasonably possible losses that we could incur as a result of these matters. We accrue for any estimated loss when it is probable that a liability has been incurred and the amount of probable loss can be estimated. Litigation accruals totaled \$17.0 million which were recorded to general, administrative, restructuring, integration and other expense, net in the six months ended June 30, 2018. Although it is possible that we may incur a loss in excess of the amount accrued, we are currently unable to estimate the amount of such losses or a range of possible losses. Based on the facts known to QIAGEN and after consultation with legal counsel, management believes that such litigation will not have a material adverse effect on our financial position or results of operations above the amounts accrued. However, the outcome of these matters is ultimately uncertain, thus any settlements or judgments against us in excess of management's expectations could have a material adverse effect on our financial position, results of operations or cash flows.

16. Share-Based Payments

Stock Units

Stock units represent rights to receive our common shares at a future date and include restricted stock units which are subject to time-based vesting only and performance stock units which include performance conditions in addition to time-based vesting. During the six-month periods ended June 30, 2018, we granted 1.3 million stock awards compared to 1.9 million stock awards for the six-month periods ended June 30, 2017.

At June 30, 2018, there was \$85.6 million remaining in unrecognized compensation expense, less estimated forfeitures, related to these awards which will be recognized over a weighted-average period of 2.53 years.

Share-Based Compensation Expense

Total share-based compensation expense for the six months ended June 30, 2018 and 2017 is comprised of the following:

(in thousands)	Six months ended June 30,	
	2018	2017
Cost of sales	\$ 1,548	\$ 1,364
Research and development	2,916	2,449
Sales and marketing	4,569	4,770
General and administrative, restructuring, integration and other, net	10,237	10,475
Share-based compensation expense before taxes	19,270	19,058
Income tax	6,032	7,342
Net share-based compensation expense	\$ 13,238	\$ 11,716

No compensation cost was capitalized in inventory at June 30, 2018 or December 31, 2017 as the amounts were not material.

17. Subsequent Events

In September 2018, we announced a strategic partnership with NeuMoDx Molecular, Inc. to commercialize two new fully integrated systems for automation of PCR (polymerase chain reaction) testing. Under the agreement, QIAGEN will initially distribute the NeuMoDx™ 288 (high-throughput version) and NeuMoDx™ 96 (mid-throughput version) in Europe and other major markets worldwide outside of the United States. NeuMoDx will cover the United States directly. Additionally, the companies are collaborating to implement certain QIAGEN chemistries on the NeuMoDx systems. The two companies have also entered into a merger agreement under which QIAGEN can acquire all NeuMoDx shares not currently owned by QIAGEN at a predetermined price of approximately \$234 million (QIAGEN currently owns about 19.9% of NeuMoDx), subject to the achievement of certain regulatory and operational milestones.

Based on the Company's review, no other events or transactions have occurred subsequent to June 30, 2018 that would have a material impact on the financial statements as presented.

Venlo, September 28, 2018

QIAGEN N.V.

/s/ Peer M. Schatz

Peer M. Schatz

CEO

/s/ Roland Sackers

Roland Sackers

CFO

QIAGEN N.V.

Responsibility statement of the Management Board to the condensed consolidated financial statements for the six months ended June 30, 2018

(unaudited)

The Managing Board of QIAGEN declares that, to the best of their knowledge,

- the condensed consolidated financial statements for the six months ended June 30, 2018 (half-year financial statements) give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the entities included in the consolidation;
- the management report gives a true and fair view of the important events of the past six-month period and their impact on the half-year financial statements, as well as the principal risks and uncertainties for the six-month period to come, and the most important related party transactions as required by provision 5.25d section 2 sub (c) of the Dutch act on financial supervision (*Wet op het financieel toezicht*).

Venlo, September 28, 2018

QIAGEN N.V.

/s/ Peer M. Schatz

Peer M. Schatz

CEO

/s/ Roland Sackers

Roland Sackers

CFO

QIAGEN N.V.

Interim management report for the six months ended June 30, 2018

(unaudited)

This section contains a number of forward-looking statements. These statements are based on current management expectations, and actual results may differ materially. Among the factors that could cause actual results to differ from management's expectations are those described in "Risk Factors" and "Forward-looking and Cautionary Statements" below.

Forward-looking and Cautionary Statements

This report contains forward-looking statements that are subject to risks and uncertainties. These statements can be identified by the use of forward-looking terminology, such as "believe," "hope," "plan," "intend," "seek," "may," "will," "could," "should," "would," "expect," "anticipate," "estimate," "continue" or other similar words. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. We caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, but not limited to, the following: risks associated with our expansion of operations, including the acquisition of new businesses; variability in our operating results from quarter to quarter; management of growth, international operations, and dependence on key personnel; intense competition; technological change; our ability to develop and protect proprietary products and technologies and to enter into and maintain collaborative commercial relationships; our future capital requirements; general economic conditions and capital market fluctuations; and uncertainties as to the extent of future government regulation of our business. As a result, our future success involves a high degree of risk. For further information, refer to the more specific risks and uncertainties discussed on pages 31 to 46 of the 2017 Annual Report.

Results of Operations

Overview

We are a leading global provider of Sample to Insight solutions to transform biological materials into valuable molecular insights. QIAGEN sample technologies isolate and process DNA, RNA and proteins from any biological sample, such as blood or tissue. Assay technologies make these biomolecules visible and ready for analysis, such as identifying the DNA of a virus or a mutation of a gene. Bioinformatics solutions integrate software and cloud-based resources to interpret increasing volumes of biological data and report relevant, actionable insights. Our automation solutions tie these together in seamless and cost-effective molecular testing workflows.

We sell our products - consumables, automated instrumentation systems using those technologies, and bioinformatics to analyze and interpret the data - to four major customer classes:

- **Molecular Diagnostics** - healthcare providers engaged in many aspects of patient care including Prevention, Profiling of diseases, Personalized Healthcare and Point of Need testing
- **Applied Testing** - government or industry customers using molecular technologies in fields such as forensics, veterinary diagnostics and food safety testing
- **Pharma** - pharmaceutical and biotechnology companies using molecular testing to support drug discovery, translational medicine and clinical development efforts
- **Academia** - researchers exploring the secrets of life such as the mechanisms and pathways of diseases, and in some cases translating that research into drug targets or commercial applications

We market products in more than 130 countries, mainly through subsidiaries in markets we believe have the greatest sales potential in Europe, Asia, the Americas and Australia. We also work with specialized independent distributors and importers. As of June 30, 2018, we employed approximately 4,800 people in more than 35 locations worldwide.

Sustaining growth trajectory with Sample to Insight portfolio

QIAGEN is focused on growth opportunities for its Sample to Insight portfolio across the continuum of molecular testing from basic research to clinical healthcare. Among recent developments:

- **QuantiFERON-TB**, QIAGEN's gold-standard blood test for latent tuberculosis (TB) infection, continues to grow rapidly as authorities embrace screening with interferon gamma release assays (IGRAs), such as QuantiFERON-TB Gold Plus (QFT-Plus), as a more accurate and cost-efficient alternative to tuberculin skin tests. The World Health Organization (WHO) recently added IGRAs to its Essential Diagnostics List. Additionally, The United Nations' International Organization for Migration (IOM), which provides healthcare to millions of displaced persons, selected QFT-Plus as its blood test for detection of this bacterial infection. Also in the second quarter of 2018, new guidelines from the American Academy of Pediatrics (AAP) recommended screening at-risk children as young as age two for latent TB infection, lowering the threshold from the previous level at age five. QIAGEN is also enhancing automation to make screening even more efficient and scalable through a new collaboration announced in July 2018 with Hamilton Robotics for pre-analytic workflows as a complement to plans to begin offering kits in Europe to enable the analysis of QFT-Plus on DiaSorin's LIAISON-family of analyzers later this year.
- **QIAstat-Dx** is off to a successful start in Europe and rapidly gaining recognition as the next-generation platform to provide insights into complex disease syndromes. The first two QIAstat-Dx tests are now launched in Europe, delivering sample to insight processing of extensive PCR (polymerase chain reaction) panels to evaluate respiratory and gastrointestinal syndromes. In June, QIAGEN also exhibited the QIAstat-Dx platform at the American Society of Clinical Oncology (ASCO) 2018 Annual Meeting for its potential for rapid interrogation of key oncology targets. Teams are also working as planned toward the U.S. regulatory submission of this system, along with the respiratory and gastrointestinal panel tests, for launch in 2019. A deep menu of additional tests is in development.
- **Next-generation sequencing (NGS)** represents a rapidly growing portfolio at QIAGEN, with a target for more than \$140 million of sales in 2018 compared to more than \$115 million of sales in 2017. At the ASCO 2018 Annual Meeting, scientific studies highlighted QIAGEN's liquid biopsy and tissue biopsy solutions on the GeneReader NGS System. The utility of this System was also expanded to offer the first complete Sample to Insight workflow for a range of hereditary diseases, with customizable target enrichment panels and integrated bioinformatics. Also during the second quarter, researchers at the Mayo Clinic in the U.S. published an important study in the Journal of the American Medical Association on the large-scale use of custom QIAseq panels to demonstrate associations between pancreatic cancer and inherited mutations in six genes.
- In **Personalized Healthcare**, QIAGEN announced a partnership with Freenome, a leader in artificial intelligence solutions for genomics, to accelerate the development of companion diagnostics using NGS technologies in immuno-oncology in collaboration with pharma companies. QIAGEN is also accelerating the commercialization of solutions in this area, rolling out a Day-One Lab Readiness initiative with SRL, Inc., the largest clinical testing laboratory company in Japan to prepare for the introduction of new companion diagnostics simultaneous with new drug approvals in the country.
- **Differentiated technologies** are solutions designed to leverage QIAGEN's global leadership in sample processing and assays. A key area involves developing industry-leading advances for microbiome research, a fast-growing field with promise for improving health and the environment. In the second quarter, QIAGEN launched the *DNeasy PowerSoil Pro Kit* worldwide as the next generation of solutions for extraction of fungal and bacterial DNA from a range of soil samples. QIAGEN also introduced QIAseq 16S/ITS Panels for NGS, along with the UCP Multiplex PCR Kit, to give scientists the most complete, unbiased microbiome profiles available, with the aim of enhancing the scientific understanding of microbial communities.

Six-Month Period Ended June 30, 2018, compared to Six-Month Period Ended June 30, 2017

Net Sales

Net sales grew 10% in the first half of 2018 to \$720.8 million from \$656.7 million in the year-ago period, including approximately four percentage points from positive currency movements against the U.S. dollar. We experienced good volume gains across the consumables and related revenues portfolio and experienced solid placements of the QIASymphony system.

Net sales by product category and customer class

	First six months 2018		
	Sales (In \$ m)	% change	% of sales
Consumables and related revenues	\$640	+10%	89%
Instruments	\$81	+8%	11%
Molecular Diagnostics ⁽¹⁾	\$348	+12%	48%
Applied Testing	\$63	+2%	9%
Pharma	\$145	+9%	20%
Academia	\$164	+9%	23%

(1) Includes companion diagnostic co-development revenues (H1 2018: \$22 million, +71%) and U.S. HPV sales (H1 2018: \$9 million)

In the first half of 2018, Molecular Diagnostics advanced 12% with favorable currency movements resulting in three percentage points of sales growth compared to the year ago period. Molecular Diagnostics advanced on gains in QuantiFERON-TB sales and solid growth in Personalized Healthcare, primarily due to higher revenues from companion diagnostic pharma collaborations.

Applied Testing sales increased 2% with favorable currency movements resulting in three percentage points of sales growth in the first half of 2018. Sales in Applied Testing were impacted by the divestment of a portfolio of veterinary testing products in early 2018 and a challenging comparison to strong sales after a new U.S. forensics product launch in the year ago period.

In the first half of 2018, Pharma sales increased 9% with favorable currency movements resulting in three percentage points of sales growth. Pharma experienced growth in the Americas and EMEA regions contributing to this increase partially offset by declines in the Asia-Pacific/Japan region.

Academia sales increased 9% with favorable currency movements resulting in a gain of approximately five percentage points of sales growth. Academia experienced growth in both consumables and instrument sales with solid performance in the Asia-Pacific/Japan region that more than offset weaker trends in the Americas region.

Net sales by geographic region

	First six months 2018		
	Sales (In \$ m)	% change	% of sales
Americas	\$339	+11%	47%
Europe / Middle East / Africa	\$236	+11%	33%
Asia-Pacific / Japan	\$144	+4%	20%

H1 2018: Rest of world represented less than 1% of net sales.

All regions contributed to the improved performance in the first half of 2018. The Americas region led with 11% growth with significant growth in Molecular Diagnostics. The EMEA region experienced 11% growth in the first half of 2018 including impacts of favorable currency of seven percentage points as Italy, Switzerland and the United Kingdom experienced the most significant growth. In addition to these gains, geographic expansion in the Middle East and Africa more than offset flat sales in Germany and weaker sales in France. The Asia-Pacific/Japan region experienced 4% growth with growth in China and Australia offset by sales declines in South Korea before favorable currency impacts of four percentage points. The top seven emerging markets provided 15% of sales and 6% of growth including approximately one percentage point of sales growth due to favorable currency movements.

Gross Profit

Gross profit for the six-month period ended June 30, 2018, was \$475.7 million (66% of net sales) as compared to \$415.1 million (63% of net sales) for the same period in 2017. Generally, our consumables and related products have a higher gross margin than our instrumentation products and service arrangements. Fluctuations in the sales levels of these products and services can result in fluctuations in gross margin between periods. The 2018 growth in consumables contributed to the higher margin in the first half of 2018.

For the six-month period ended June 30, 2018, the amortization expense on acquisition-related intangibles within cost of sales was \$30.4 million compared to \$41.5 million in the same period of 2017. The decrease in amortization expense is due to the completion of amortization for significant intangible assets acquired in 2007 and contributed to the increase in gross margin during the six-month period ended June 30, 2018. We expect that our acquisition-related intangible amortization will increase as a result of future acquisitions.

Research and Development Expense

Research and development expenses increased to \$76.5 million (11% of net sales) in the first half of 2018, as compared to \$67.1 million (10% of net sales) in the same period of 2017. The increase in research and development costs in 2018 reflects our ongoing investments in NGS and our life sciences portfolio, together with regulatory activity in support of new products. As we continue to discover, develop and acquire new products and technologies, we expect to incur additional expenses related to facilities, licenses and employees engaged in research and development. Additionally, research and development costs are expected to increase as a result of seeking regulatory approvals, including U.S. FDA Pre-Market Approval (PMA), U.S. FDA 510(k) clearance and EU CE approval of certain assays or instruments. Further, business combinations, along with the acquisition of new technologies, may increase our research and development costs in the future. We have a strong commitment to innovation and expect to continue to make investments in our research and development efforts.

Sales and Marketing Expense

Sales and marketing expenses were \$218.2 million (30% of net sales) for the six-month period ended June 30, 2018, from \$207.0 million (32% of net sales) for the same period in 2017. We experienced efficiencies due to a lower cost base following the realignment of marketing activities as part of the 2016 restructuring projects which were offset by higher personnel costs to the same period in 2017 as well as initiatives for new product launches. Sales and marketing expenses are primarily associated with personnel, commissions, advertising, trade shows, publications, freight and logistics expenses, and other promotional expenses. We anticipate that absolute sales and marketing costs will increase along with new product introductions and growth in sales of our products, but decrease as a percentage of sales.

General and Administrative, Restructuring, Integration and Other Expense

During the six months ended June 30, 2018, we recorded general and administrative, restructuring, integration and other expense of \$87.3 million, as compared to \$88.3 million for the same period in 2017. During the six months ended June 30, 2018, litigation accruals totaled \$17.0 million compared to \$13.4 million in the year-ago period. Restructuring costs were \$12.8 million in the first six months of 2018 compared to \$12.4 million in the first six months of 2017 as discussed in Note 4. Additionally, during 2018 a \$7.9 million revaluation gain of a minority interest investment in connection with the acquisition as discussed in Note 5 was recorded. As we further integrate acquired companies and pursue opportunities to gain efficiencies, we expect to continue to incur additional business integration costs in 2018. Over time, we believe the integration activities will reduce expenses as we improve efficiency in the combined operations.

Financial Income (Expense)

For the six months ended June 30, 2018, financial income increased to \$9.8 million from \$3.6 million in the same period of 2017. Financial income includes interest earned on cash, cash equivalents and short term investments, income related to certain interest rate derivatives and other components including the interest portion of operating lease transactions.

Financial expense increased to \$30.9 million in the six-month periods ended June 30, 2018, as compared to \$20.7 million for the same period of 2017. Interest costs primarily relate to debt, discussed in Note 9, "Financial Debts" in the accompanying notes to the condensed consolidated financial statements and the increase in interest expense reflects the issuance of cash convertible notes in the second half of 2017.

Other Financial Expense, net

For the six months ended June 30, 2018, other financial expense, net was \$204.3 million expense compared to \$17.8 million income in the same period of 2017. The fluctuation from prior year is primarily due to the period changes in the fair value of the Warrants derivative discussed in Note 7.

Provision for Income Taxes

Our effective tax rates differ from The Netherlands statutory tax rate of 25% due in part to our operating subsidiaries being exposed to effective tax rates ranging from zero to more than 34%. Fluctuations in the distribution of pre-tax (loss) income among our operating subsidiaries can lead to fluctuations of the effective tax

rate in the consolidated financial statements. For the six months ended June 30, 2018 and 2017, our effective tax rates were (17.5)% and 6.1%, respectively. Additionally, in 2018 and 2017, tax expense on foreign operations was favorably impacted by lower income tax rates and partial tax exemptions on foreign income primarily derived from operations in Germany, Singapore, Luxembourg, Ireland and Switzerland. These foreign tax benefits are due to a combination of favorable tax laws, rules, rulings, and exemptions in these jurisdictions. In particular, we have pre-tax income in Germany which is statutorily exempt from trade tax on intercompany foreign royalty income. Further, we have intercompany financing arrangements through Luxembourg and Ireland in which the intercompany income is partially exempt.

In future periods, our effective tax rate may fluctuate from similar or other factors as discussed in "Changes in tax laws or their application or the termination or reduction of certain government incentives, could adversely impact our overall effective tax rate, results of operations or financial flexibility" in Principle Risks and Uncertainties of the 2017 Annual Report.

Liquidity and Capital Resources

To date, we have funded our business primarily through internally generated funds, debt and private and public sales of equity. Our primary use of cash has been to support continuing operations and our investing activities, including capital expenditure requirements and acquisitions. As of June 30, 2018, and December 31, 2017, we had cash and cash equivalents of \$674.4 million and \$657.7 million, respectively. Cash and cash equivalents are primarily held in U.S. dollars and euros, other than those cash balances maintained in the local currency of subsidiaries to meet local working capital needs. At June 30, 2018, cash and cash equivalents had increased by \$16.7 million from December 31, 2017, primarily due to cash provided by operating activities of \$168.9 million partially offset by cash used in financing activities of \$25.4 million and cash used in investing activities of \$123.1 million. As of June 30, 2018 and December 31, 2017, we had working capital of \$717.1 million and \$1,304.3 million, respectively.

Operating Activities: For the six-months periods ended June 30, 2018 and 2017, we generated net cash from operating activities of \$168.9 million and \$137.3 million, respectively. While net loss was \$147.0 million in the six-months ended June 30, 2018, non-cash components in income included \$111.3 million of depreciation and amortization as well as other non-cash items, net of \$191.3 million primarily related to the fair value changes in derivatives. Operating cash flows include an increase other long-term assets, which includes \$30.0 million for prepaid royalties and a net decrease in working capital of \$3.0 million excluding changes in fair value of derivative instruments. The current period change in working capital is primarily due to increased inventories partially offset by increased provisions and other current liabilities as well as changes due to interest and income taxes. Because we rely heavily on cash generated from operating activities to fund our business, a decrease in demand for our products, longer collection cycles or significant technological advances of competitors would have a negative impact on our liquidity.

Investing Activities: Approximately \$123.1 million of cash was used in investing activities during the six months ended June 30, 2018 compared to \$87.3 million for the same period in 2017. Cash used in investing activities during the six months ended June 30, 2018 consisted principally of \$172.8 million cash paid for acquisitions, net of cash acquired, \$176.3 million paid for short-term investments, \$16.8 million paid for purchases of property, plant and equipment, \$17.4 million cash paid for collateral assets, as well as \$49.6 million paid for intangible assets. These activities were partially offset by \$311.7 million from redemptions of short-term investments.

Financing Activities: Financing activities used \$25.4 million of cash for the six months ended June 30, 2018, primarily for purchase of treasury shares totaling \$20.8 million. This compares to cash provided by financing activities of \$48.3 million for the six months ended June 30, 2017. Cash provided by financing activities during the six months ended June 30, 2017 consisted primarily of \$300.2 million net cash proceeds from the June 2017 German private placement partially offset by the capital repayment of \$243.9 million made to shareholders in connection with the January 2017 synthetic share buyback discussed in Note 12 "Equity."

Other Factors Affecting Liquidity and Capital Resources

In September 2017, we issued \$400.0 million aggregate principal amount of Cash Convertible Senior Notes which are due in 2023 (2023 Notes), which are discussed fully in Note 9 "Financial Debts." Interest on the 2023 Notes is payable semiannually in arrears at a rate of 0.500% per annum. The 2023 Notes will mature on September 13, 2023 unless repurchased or converted in accordance with their terms prior to such date.

Additionally in 2017, we completed a German private placement of \$329.9 million, net of issuance costs, consisting of several tranches denominated in either U.S. dollars or Euro at either floating or fixed rates and due at various dates through June 2027 as described in Note 9 "Financial Debts."

In June 2017, we completed a German private placement of \$301.2 million consisting of several tranches denominated in either U.S. dollars or Euro at either floating or fixed rates and due at various dates through June 2027.

In October 2016, we extended the maturity of our €400.0 million syndicated revolving credit facility, which now has a contractual life until December 2021 of which no amounts were utilized at June 30, 2018. The facility can be utilized in euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.4% to 1.20% above three months EURIBOR, or LIBOR in relation to any loan not in euro, and is offered with interest periods of one, two, three or six months. We have additional credit lines totaling €26.6 million with no expiration date, none of which were utilized as of June 30, 2018.

In March 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes of which \$430.0 million is due in 2019 (2019 Notes) and \$300.0 million is due in 2021 (2021 Notes). We refer to the 2019 Notes, 2021 Notes and the 2023 Notes, collectively as the "Cash Convertible Notes" which are discussed fully in Note 9 "Debt." Interest on the 2019 and 2021 Notes is payable semiannually in arrears on March 19 and September 19 of each year, at rates of 0.375% and 0.875% per annum for the 2019 Notes and 2021 Notes, respectively. The 2019 Notes will mature on March 19, 2019 and the 2021 Notes will mature on March 19, 2021, unless repurchased or converted in accordance with their terms prior to such date.

In October 2012, we completed a U.S. private placement through the issuance of new senior unsecured notes in a total amount of \$400 million with a weighted average interest rate of 3.66% (settled on October 16, 2012). The notes were issued in three series: (1) \$73 million 7-year term due in 2019 (3.19%); (2) \$300 million 10-year term due in 2022 (3.75%); and (3) \$27 million 12-year term due in 2024 (3.90%).

We also have capital lease obligations, including interest, in the aggregate amount of \$0.7 million as of June 30, 2018.

Pursuant to the purchase agreements for certain acquisitions and other contractual arrangements, we could be required to make additional contingent cash payments totaling up to \$69.3 million based on the achievement of certain revenue and operating results milestones as follows: \$5.0 million in the remainder of 2018, \$23.7 million in 2019, \$16.8 million in 2020, \$5.9 million in 2021, \$5.9 million in 2023 and \$5.0 million and \$7.0 million payable in any 12-month period from now through 2028 and 2029, respectively, based on the achievement of certain revenue or other milestones, regulatory approvals or clearances. Of the \$69.3 million total contingent obligation, we have assessed the fair value at June 30, 2018 to be \$52.2 million, of which \$27.0 million is included in other current liabilities and \$25.2 million is included in other non-current liabilities in the accompanying condensed consolidated balance sheet.

In January 2017, we completed a synthetic share repurchase that combined a direct capital repayment with a consolidation of shares. The transaction was announced in August 2016 and involved an approach used by various large, multinational Dutch companies to provide returns to shareholders in a faster and more efficient manner than traditional open-market purchases. \$243.9 million was repaid to shareholders through the transaction and the outstanding number of common shares was reduced by 8.9 million, or 3.7%. As discussed further in Note 12, the capital repayment program was completed in January 2017.

On April 27, 2016, we announced the launch of our fourth \$100 million share repurchase program. As discussed in Note 12, during the third quarter of 2017, we completed the fourth share repurchase program and repurchased 1.9 million QIAGEN shares for \$61.0 million (including transaction costs).

On January 31, 2018, we announced our fifth share repurchase program of up to \$200 million of our common shares. During the second quarter of 2018, we repurchased 0.8 million QIAGEN shares for \$29.6 million (including transaction costs) of which \$20.8 million was paid as of June 30, 2018.

We expect that cash from financing activities will continue to be impacted by issuances of our common shares in connection with our equity compensation plans and that the market performance of our stock will impact the timing and volume of the issuances. Additionally, we may make future acquisitions or investments requiring cash payments, the issuance of additional equity or debt financing.

We believe that funds from operations, existing cash and cash equivalents, together with the proceeds from our public and private sales of equity, and availability of financing facilities, will be sufficient to fund our planned operations and expansion during the coming year. However, any global economic downturn may have a greater impact on our business than currently expected, and we may experience a decrease in the sales of our products, which could impact our ability to generate cash. If our future cash flows from operations and other capital resources are not adequate to fund our liquidity needs, we may be required to obtain additional debt or equity

financing or to reduce or delay our capital expenditures, acquisitions or research and development projects. If we cannot obtain financing on a timely basis or at satisfactory terms, or implement timely reductions in our expenditures, our business could be adversely affected.

Quantitative and Qualitative Disclosures about Market Risk

Our market risk relates primarily to interest rate exposures on cash, marketable securities and borrowings and foreign currency exposures on intercompany and third-party transactions. The overall objective of our risk management is to reduce the potential negative earnings effects from changes in interest and foreign currency exchange rates. Exposures are managed through operational methods and financial instruments. We do not use financial instruments for trading or speculative purposes. Our exposure to market risk from changes in interest rates and currency exchange rates has not changed materially from our exposure as discussed in our Annual Report for the year ended December 31, 2017.

Contractual Obligations

There were no material changes at June 30, 2018, from the contractual obligations disclosed in our Annual Report for the year ended 2017.

Legal Proceedings

For information on legal proceedings, see Note 15 "Commitments and Contingencies" to the accompanying condensed consolidated financial statements.

While no assurances can be given regarding the outcome of the proceedings described in Note 15 "Commitments and Contingencies", based on information currently available, we believe that the resolution of these matters is unlikely to have a material adverse effect on our financial position or results of future operations for QIAGEN N.V. as a whole. However, because of the nature and inherent uncertainties of litigation, should the outcomes be unfavorable, certain aspects of our business, financial condition, and results of operations and cash flows could be materially adversely affected.

Principal risks and uncertainties

Our risk categories and risk factors which could have a material impact on our financial position and result are extensively described in QIAGEN's 2017 Annual Report. There have been no material changes from the risk factors disclosed in the 2017 Annual Report.

2018 Outlook

QIAGEN reaffirms its guidance for total net sales growth of about 6-7% CER for full-year 2018 based on the solid performance in the first half of the year. This guidance includes anticipated sales of about \$7 million during the second half of 2018 from the acquisition of STAT-Dx (April 27, 2018), as well as about one percentage point of headwind from reduced U.S. HPV test sales compared to 2017. QIAGEN also continues to expect adjusted diluted EPS of about \$1.31-1.33 CER for full-year 2018. Based on exchange rates as of July 30, 2018, currency movements for full-year 2018 against the U.S. dollar are expected to have a positive impact on 2018 net sales of up to about one percentage point, but a negative impact of up to about \$0.01 per share on adjusted diluted EPS. These expectations do not consider any further acquisitions that could be completed in 2018.

Signatures

Venlo, September 28, 2018

QIAGEN N.V.

/s/ Peer M. Schatz

Peer M. Schatz

CEO

/s/ Roland Sackers

Roland Sackers

CFO
