

QIAGEN N.V.
Venlo, The Netherlands

Interim Financial Report

June 30, 2019

(unaudited)

QIAGEN N.V.
CONDENSED FINANCIAL REPORT PERIOD ENDED JUNE 30, 2019
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QIAGEN N.V.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands)

	Note	June 30, 2019	December 31, 2018
		(unaudited)	
Assets			
Current assets:			
Cash and cash equivalents		\$ 624,616	\$ 1,159,079
Current financial assets	(5)	149,964	214,568
Trade accounts receivable		364,891	351,612
Income taxes receivable		51,700	34,936
Inventories	(11)	169,520	162,912
Fair value of derivative financial instruments	(7)	145,811	102,754
Other current assets		78,677	89,795
Total current assets		1,585,179	2,115,656
Non-current assets:			
Property, plant and equipment		349,225	340,012
Goodwill	(6)	2,143,138	2,134,125
Other intangible assets	(6)	891,739	674,997
Equity accounted investments	(5)	18,456	14,845
Non-current financial assets	(5)	77,490	81,639
Deferred tax assets		51,750	57,851
Fair value of derivative financial instruments	(7)	190,465	295,363
Other non-current assets		135,311	83,329
Total non-current assets		3,857,574	3,682,161
Total assets		\$ 5,442,753	\$ 5,797,817

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, 2019	December 31, 2018
		(unaudited)	
Liabilities and equity			
Current liabilities:			
Current financial debts	(9)	\$ 353,715	\$ 503,589
Trade and other accounts payable		56,526	69,415
Provisions		5,075	4,237
Income tax payable		36,863	30,047
Fair value of derivative financial instruments	(7)	148,224	107,027
Other current liabilities	(4, 5)	312,765	258,780
Total current liabilities		913,168	973,095
Non-current liabilities:			
Non-current financial debts	(9)	1,407,886	1,671,811
Deferred tax liabilities		52,855	70,617
Fair value of derivative financial instruments	(7)	455,221	614,200
Other non-current liabilities	(5)	182,864	89,279
Total non-current liabilities		2,098,826	2,445,907
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 2019 and in 2018	(12)	2,702	2,702
Share premium	(12)	1,753,929	1,727,922
Retained earnings		1,146,272	1,133,682
Reserves		(310,057)	(306,588)
Less treasury shares at cost— 4,359 and 5,320 shares in 2019 and in 2018, respectively	(12)	(162,087)	(178,903)
Total equity		2,430,759	2,378,815
Total liabilities and equity		\$ 5,442,753	\$ 5,797,817

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

QIAGEN N.V.

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

	Note	Six months ended	
		June 30,	
		2019	2018
		(unaudited)	
Net sales	(13)	\$ 730,266	\$ 720,764
Cost of sales		(263,800)	(245,089)
Gross profit		466,466	475,675
Operating expenses:			
Other operating income		5,331	21,604
Research and development expense		(71,273)	(76,486)
Sales and marketing expense		(214,484)	(218,163)
General and administrative, restructuring, integration and other expense		(72,840)	(87,314)
Other operating expense		(1,914)	(10,511)
Total operating expenses, net		(355,180)	(370,870)
Income from operations		111,286	104,805
Financial income		13,251	9,778
Financial expense		(39,386)	(30,855)
Foreign currency losses, net		(3,482)	(6,585)
Gain from equity accounted investments		1,643	2,033
Other financial expense, net	(5, 7)	(24,631)	(204,262)
Total financial expense, net		(52,605)	(229,891)
Income (loss) before income taxes		58,681	(125,086)
Income taxes		(7,738)	(21,899)
Net income (loss)		\$ 50,943	\$ (146,985)
Basic earnings per common share		\$ 0.23	\$ (0.65)
Diluted earnings per common share		\$ 0.22	\$ (0.65)
Weighted average shares outstanding (in thousands)			
Basic		226,410	227,096
Diluted		233,160	227,096

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

QIAGEN N.V.

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

	Six Months Ended	
	June 30,	
Note	2019	2018
	(unaudited)	
Net income (loss)	\$ 50,943	\$ (146,985)
Other comprehensive income (loss) to be reclassified to profit or loss in subsequent periods:		
Foreign currency translation adjustments, before tax	(7,879)	(66,802)
Gains on cash flow hedges, before tax	(7) 4,335	2,369
Reclassification adjustments on cash flow hedges, before tax	(7) (1,260)	(6,030)
Net investment hedge	(7) 1,784	8,538
Other comprehensive loss, before tax	(3,020)	(61,925)
Income tax relating to components of other comprehensive (loss) income	(449)	1,625
Total other comprehensive loss, after tax	(3,469)	(60,300)
Comprehensive income (loss)	\$ 47,474	\$ (207,285)

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,	
		2019	2018
		(unaudited)	
Net income (loss)		\$ 50,943	\$ (146,985)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization		126,155	111,294
Non-cash impairments	(5)	1,258	10,644
Amortization of debt discount and issuance costs	(9)	21,576	16,950
Deferred income taxes		(10,322)	3,317
Share based compensation	(16)	23,210	19,273
Loss (gain) on financial assets		897	(3,007)
Reversals of contingent consideration		(7,433)	—
Other non-cash items, including fair value changes in derivatives		22,892	191,341
Changes in operating assets and liabilities:			
Accounts receivable		(16,291)	1,087
Inventories		(15,672)	(19,344)
Other current assets		656	2
Other non-current assets		376	(30,718)
Accounts payable		(10,600)	(7)
Accrued and other current liabilities		(28,979)	22,158
Other non-current liabilities		993	(239)
Income taxes		22,061	13,426
Interest paid		(14,929)	(12,182)
Interest received		11,937	7,816
Income taxes paid, net of refunds		(30,467)	(15,920)
Net cash provided by operating activities		148,261	168,906
Purchases of property, plant and equipment		(26,143)	(16,847)
Purchases of intangible assets	(6)	(162,650)	(49,561)
Development expenses	(6)	(10,301)	(2,668)
Proceeds from sale of equipment		—	7
Purchases of financial assets	(5)	(181,696)	(176,289)
Proceeds from financial assets	(5)	254,734	311,700
Purchase of investments		(4,385)	(15,625)
Cash paid for acquisitions, net of cash acquired	(3)	(24,371)	(172,831)
Proceeds from divestiture		—	16,394
Cash received (paid) for collateral asset		16,150	(17,362)
Other investing activities		10	(57)
Net cash used in investing activities		(138,652)	(123,139)
Repayment of long-term debt	(9)	(433,400)	—
Principal payments on finance leases		(10,744)	(657)
Proceeds from issuance of common shares		1,689	1,286
Tax withholding related to vesting of stock awards		(17,172)	—
Purchase of treasury shares	(12)	(74,394)	(20,782)
Other financing activities		(10,822)	(5,219)
Net cash used in financing activities		(544,843)	(25,372)
Effect of exchange rate changes on cash and cash equivalents		771	(3,696)
Net (decrease) increase in cash and cash equivalents		(534,463)	16,699
Cash and cash equivalents, beginning of period		1,159,079	657,714
Cash and cash equivalents, end of period		\$ 624,616	\$ 674,413

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	Cash flow hedge reserve	Revaluation reserve	Pension reserve	Foreign currency translation	Shares	Amount	
BALANCE AT JANUARY 1, 2018		230,829	\$ 2,702	\$1,687,564	\$1,071,393	\$(30,487)	\$ (942)	\$ (878)	\$ (183,955)	(4,272)	\$ (118,987)	\$ 2,426,410
Balance at January 1, 2018, as previously reported		230,829	\$ 2,702	\$1,687,564	\$1,071,393	\$(30,487)	\$ (942)	\$ (878)	\$ (183,955)	(4,272)	\$ (118,987)	\$ 2,426,410
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		230,829	\$ 2,702	\$1,687,564	\$1,069,145	\$(30,487)	\$ —	\$ (878)	\$ (183,955)	(4,272)	\$ (118,987)	\$ 2,425,104
Net loss		—	—	—	(146,985)	—	—	—	—	—	—	(146,985)
Other comprehensive income (loss)	(7)	—	—	—	—	5,792	—	—	(66,092)	—	—	(60,300)
Total comprehensive loss		—	—	—	(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		230,829	\$ 2,702	\$1,710,563	\$ 891,588	\$(24,695)	\$ —	\$ (878)	\$ (250,047)	(3,793)	\$ (116,706)	\$ 2,212,527
BALANCE AT JANUARY 1, 2019		230,829	\$ 2,702	\$1,727,922	\$1,133,682	\$(15,453)	\$ —	\$ (124)	\$ (291,011)	(5,320)	\$ (178,903)	\$ 2,378,815
Balance at January 1, 2019, as previously reported		230,829	\$ 2,702	\$1,727,922	\$1,133,682	\$(15,453)	\$ —	\$ (124)	\$ (291,011)	(5,320)	\$ (178,903)	\$ 2,378,815
IFRS 16 impact of change in accounting policy		—	—	—	(1,322)	—	—	—	—	—	—	(1,322)
Adjusted balance at January 1, 2019		230,829	\$ 2,702	\$1,727,922	\$1,132,360	\$(15,453)	\$ —	\$ (124)	\$ (291,011)	(5,320)	\$ (178,903)	\$ 2,377,493
Net income		—	—	—	50,943	—	—	—	—	—	—	50,943
Other comprehensive income (loss)	(7)	—	—	—	—	4,090	—	—	(7,559)	—	—	(3,469)
Total comprehensive income		—	—	—	50,943	4,090	—	—	(7,559)	—	—	47,474
Purchase of treasury shares	(12)	—	—	—	—	—	—	—	—	(1,987)	(74,394)	(74,394)
Tax benefit of employee stock plans		—	—	2,801	—	—	—	—	—	—	—	2,801
Issuance of common shares in connection with conversion of the 2019 Notes and early redemption of 2021 Notes	(9)	—	—	(4)	7,510	—	—	—	—	2,051	68,546	76,052
Share-based payments	(15)	—	—	23,210	—	—	—	—	—	—	—	23,210
Employee stock plans		—	—	—	(44,541)	—	—	—	—	1,508	46,230	1,689
Tax withholding related to vesting of stock awards		—	—	—	—	—	—	—	—	(611)	(23,566)	(23,566)
BALANCE AT JUNE 30, 2019		230,829	\$ 2,702	\$1,753,929	\$1,146,272	\$(11,363)	\$ —	\$ (124)	\$ (298,570)	(4,359)	\$ (162,087)	\$ 2,430,759

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, 2019 (unaudited)

1. Corporate Information

QIAGEN N.V. is a public limited liability company ('naamloze vennootschap') under Dutch law with 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 the leading global provider of Sample to Insight solutions that are used by over 500,000 customers worldwide to transform biological samples into valuable molecular insights. Our sample technologies are used to isolate and process DNA, RNA and proteins - the building blocks of life - from blood, tissue and other materials. Assay technologies are used to make these biomolecules visible and ready for analysis. Bioinformatics software and knowledge bases are used to analyze and interpret complex genomic data to report relevant, actionable insights. Automation solutions are used to tie these technologies together in seamless and cost-effective workflows. We provide this portfolio to two major customer classes: Molecular Diagnostics (human healthcare) and Life Sciences comprised of Academia / Applied Testing (life sciences research, forensics and food safety) and Pharma. With approximately 5,200 employees in over 35 locations worldwide, 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, 2018.

We undertake acquisitions to complement our own internal product development activities. On January 4, 2019, we completed the acquisition of N-of-One, Inc, a privately-held U.S. molecular decision support company and pioneer in clinical interpretation services for complex genomic data located in Concord, Massachusetts. On January 31, 2019, we acquired the digital PCR assets of Formulatrix, Inc., a developer of laboratory automation solutions. 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. 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.

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, 2018 including the adoption of new standards and interpretations as of January 1, 2019.

Adoption of New and Amended Standards and Interpretations

In January 2016, the IASB (International Accounting Standards Board) published IFRS 16 *Leases*. Under the new guidance, lessees are 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.

We adopted IFRS 16 as per the effective date of January 1, 2019, using the modified retrospective approach and did not restate the comparative periods. Under this approach, the cumulative effect of initially applying the standard was recognized as an adjustment to the opening balance of retained earnings on the date of initial application. As a lessee, the classification of our leases did not change, but we recognized a lease liability and corresponding right-of-use asset on our consolidated balance sheets for all our leases. We elected the package of practical expedients which allows us to not reassess (1) whether existing contracts contain leases, (2) the lease classification for existing leases, and (3) whether existing initial direct costs meet the new definition. We also elected the hindsight practical expedient which permits entities to use hindsight in determining the lease term when transitioning to IFRS 16. Our initial lease liabilities and right-of-use assets totaled \$56.4 million and \$57.7 million, respectively, as recorded in our condensed consolidated balance sheet as of January 1, 2019, primarily relating to leased office space. The difference between the additional right-of-use assets and lease liabilities was recorded as a \$1.3 million adjustment to retained earnings. The standard did not materially impact our consolidated net earnings or cash flows. Further disclosure is found in Note 14 "Leases".

Effective January 1, 2019, we adopted both the *Annual Improvements to IFRS Standards 2015-2017 Cycle* and IFRIC 23, *Uncertainty over Income Tax Treatments*, without impact.

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.

The IASB refined its definition of material to make it easier to understand and issued amendments to IAS 1 and IAS 8, *Definition of Material*. The amendments are effective from 1 January 2020 but may be applied earlier. However, the IASB does not expect significant change – the refinements are not intended to alter the concept of materiality.

The IASB issued amendments to IFRS 3, *Definition of a Business*, to provide more guidance on the definition of a business. The amendments include an election to use a concentration test. This is a simplified assessment that results in an asset acquisition if substantially all of the fair value of the gross assets is concentrated in a single identifiable asset or a group of similar identifiable assets. The amendments apply to businesses acquired in annual reporting periods beginning on or after January 1, 2020. Earlier application is permitted.

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, 2018.

3. Acquisitions and Divestitures

2019 Asset Acquisition

On January 31, 2019, we acquired the digital PCR asset of Formulatrix, Inc., a developer of laboratory automation solutions. We paid Formulatrix \$125.0 million in cash upon closing and will pay future milestone payments of \$135.9 million in 2020. As of June 30, 2019, \$79.4 million is included in other current liabilities and \$53.6 million is included in other non-current liabilities in the accompanying condensed consolidated balance sheet for the present value of the future expected payments.

Business Combinations

For acquisitions which have been accounted for as business combinations, the acquired companies' results have been included in the accompanying condensed consolidated statements of 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 an acquired business' 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.

Other 2019 Acquisition

In January 2019, we completed the acquisition of N-of-One, Inc, a privately-held U.S. molecular decision support company and pioneer in clinical interpretation services for complex genomic data located in Concord, Massachusetts. The cash consideration, net of cash acquired totaled \$24.4 million. 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. Accordingly, the allocation may change. We continue to gather information about the fair value of intangible assets acquired and tax balances. This acquisition was not significant to the overall consolidated financial statements and 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.

2018 Acquisitions

In April 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 \$37.4 million was recorded as purchase price using a probability-weighted analysis of the future milestones applying discount rates between 6.5% and 6.9%. Direct acquisition costs totaled \$2.0 million.

The final purchase price allocation differed from the initial preliminary purchase price allocation as follows:

(in thousands)	Final	Preliminary as of April 27, 2018	Difference
Purchase Price:			
Cash consideration	\$ 148,780	\$ 148,780	\$ —
Fair value of contingent consideration	37,377	36,751	626
	<u>\$ 186,157</u>	<u>\$ 185,531</u>	<u>\$ 626</u>
Final Allocation:			
Cash and cash equivalents	\$ 7,357	\$ 7,357	\$ —
Prepaid expenses and other current assets	1,432	1,432	—
Inventories	1,868	1,868	—
Income tax receivables	2,213	2,213	—
Accounts payable	(1,412)	(1,412)	—
Accruals and other current liabilities	(1,785)	(560)	(1,225)
Fixed and other long-term assets	6,306	6,434	(128)
Developed technology	31,300	80,100	(48,800)
In-process research and development	24,300	—	24,300
Goodwill	117,621	97,268	20,353
Deferred tax liability on fair value of identifiable intangible assets acquired	(3,043)	(9,169)	6,126
Total	<u>\$ 186,157</u>	<u>\$ 185,531</u>	<u>\$ 626</u>

The changes in the values of in-process research and development assets and developed technology relate to new information obtained, that existed at the acquisition date, regarding key assumptions in the valuation model since the initial purchase price allocation. The weighted average amortization period for the developed technology is 10 years. The goodwill acquired is not deductible for tax purposes.

In-process research and development relates to technologies that remain in development at the time of acquisition and which had not yet obtained regulatory approval. The technologies within in-process research and development are expected to be completed within the next two years. During the second quarter of 2019, one development project was completed and a portion of in-process research and development costs were reclassified into developed technology as further discussed in Note 6 "Intangible Assets".

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

In April 2018, we acquired all remaining shares of a privately held entity in which we held a minority interest. The value of the minority interest investment was revalued in connection with the acquisition and a corresponding gain of \$7.9 million was recorded in general and administrative, restructuring, integration and other expense in the accompanying condensed consolidated statement of income for the six-month period ended June 30, 2018. For the year ended December 31, 2018, the gain recorded in general, administrative, restructuring, integration and other expense in the consolidated statement of income totaled \$4.8 million. This acquisition was not significant to the overall consolidated financial statements and the allocation of the purchase price was final as of June 30, 2019. 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 a total of €15.1 million (\$18.5 million), of which \$16.4 million was received in cash and the balance due in April 2020. An \$8.0 million gain was recorded on the sale to other financial (expense) income, net in the consolidated statement of income for the year ended

December 31, 2018, of which \$6.6 million is included in other operating income in the accompanying condensed consolidated statement of income for the six-month period ended June 30, 2018.

4. Restructuring

2017 Restructuring

We initiated restructuring initiatives in 2017 to mitigate the negative impacts stemming from the U.S. tax reform. Total pre-tax costs for the initiatives, which were concluded in 2018, were \$25 million and no additional costs will be incurred related to this program. Cumulative costs for this program were 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	424	1,193	—	1,617
General and administrative, restructuring, integration and other, net	10,381	4,232	1,610	16,223
Total 2018 costs	10,805	5,425	1,610	17,840
General and administrative, restructuring, integration and other, net	(146)	—	—	(146)
Total 2019 releases	(146)	—	—	(146)
Total cumulative costs	\$ 10,659	\$ 10,008	\$ 4,649	\$ 25,316

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

(in thousands)	Personnel Related	Contract and Other Costs	Total
Liability at December 31, 2017	\$ —	\$ 4,585	\$ 4,585
Additional costs in 2018	12,642	5,554	18,196
Release of excess accrual	(1,837)	(129)	(1,966)
Payments	(6,892)	(7,149)	(14,041)
Foreign currency translation adjustment	(93)	(17)	(110)
Liability at December 31, 2018	<u>\$ 3,820</u>	<u>\$ 2,844</u>	<u>\$ 6,664</u>
Release of excess accrual	(146)	—	(146)
Payments	(1,877)	(2,813)	(4,690)
Foreign currency translation adjustment	(7)	(23)	(30)
Liability at June 30, 2019	<u>\$ 1,790</u>	<u>\$ 8</u>	<u>\$ 1,798</u>

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, 2019 and December 31, 2018, liabilities of \$1.8 million and \$6.7 million, respectively, are included in other current liabilities in the accompanying condensed consolidated balance sheets.

5. Financial Assets and Equity Accounted Investments

Financial Assets

(in thousands)	2019	2018
Current financial assets:		
Unquoted debt securities	\$ 149,798	\$ 214,568
Quoted equity securities	166	350
Current Financial Assets	\$ 149,964	\$ 214,918
Non-current financial instruments:		
Unquoted debt securities	\$ 11,380	\$ 20,038
Quoted equity securities	2,158	2,117
Unquoted equity securities	63,952	59,484
Non-current Financial Assets	\$ 77,490	\$ 81,639
Total Financial Assets	\$ 227,454	\$ 296,557

Unquoted Debt Securities

At June 30, 2019 and December 31, 2018, we had \$161.2 million and \$234.3 million, respectively, of loan receivables and commercial paper due from 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 measured at fair market value with gains and losses recorded in earnings. At June 30, 2019, these loans consist of \$24.6 million and €120.0 million (\$136.5 million) which mature at various dates through October 2020. At December 31, 2018, these loans consist of \$134.1 million and €87.5 million (\$100.2 million as of December 31, 2018) which mature at various dates through October 2020.

For the six-months ended June 30, 2019 proceeds from sales of financial assets totaled \$254.7 million, purchases of financial assets totaled \$181.7 million and realized losses totaled of \$0.9 million.

Quoted Equity Securities

A summary of our investments in quoted equity securities that have readily determinable fair values follows below. These investments are reported at fair value with gains and losses recorded in earnings beginning in January 2018 upon adoption of IFRS 9. Prior to adoption, these investments were reported at fair value with unrealized gains and losses recognized in accumulated other comprehensive income on the balance sheet. Accordingly, upon adoption, we recorded a cumulative effect adjustment to decrease opening retained earnings at January 1, 2018 by a net of tax amount of \$0.9 million (pre-tax \$1.1 million) for unrealized losses as of the adoption date.

(in thousands, except shares held)

	As of June 30, 2019		
	Oncimmune Holdings plc (Oncimmune)	HTG Molecular Diagnostics, Inc (HTGM)	Curetis N.V. (Curetis)
Shares held	560,416	833,333	204,000
Cost basis	\$ —	\$ 2,000	\$ 1,444
Fair value	\$ 775	\$ 1,383	\$ 166
Total cumulative unrealized gain (loss)	\$ 775	\$ (617)	\$ (1,278)

	As of December 31, 2018	
	HTGM	Curetis
Shares held	833,333	204,000
Cost basis	\$ 2,000	\$ 1,444
Fair value	\$ 2,117	\$ 350
Total cumulative unrealized gain (loss)	\$ 117	\$ (1,094)

In the first half of 2019, we received 560,416 shares in Oncimmune in settlement of a zero-book value financial asset held with a third party. On the date of receipt, these shares had a fair value of \$0.7 million which was

recorded as a gain in other operating income. During the six months ended June 30, 2018, we sold 116,424 shares of Curetis and recognized a gain of \$0.3 million in other operating income in the accompanying condensed statement of income.

During the six months ended June 30, 2019 and 2018, total net losses recognized for the change in fair market value of all marketable equity securities totaled a loss of \$0.8 million, of which \$0.9 million is included in other operating expense and \$0.1 million is included in other operating income. During the six months ended June 30, 2018, gains of \$1.2 million were recognized in other operating income in the accompanying condensed consolidated statements of income.

Unquoted Equity Securities

At June 30, 2019 and December 31, 2018, we had investment in non-publicly traded companies that do not have readily determinable fair values with carrying amounts of \$64.0 million and \$59.5 million, respectively. Upon adoption of IFRS 9 in 2018, these investments are required to be accounted for at fair value through profit and loss unless the investment is not held for trading, and the holder elects at initial recognition to account for it at fair value through other comprehensive income. As this election has not been made, these investments are accounted for at fair value through profit and loss. One of our investments is in a structured entity that we do not have the ability to effect the variable returns through power over the entity and is therefore not consolidated. As of June 30, 2019 and December 31, 2018, this investment had a total carrying amount of \$41.0 million and is included in the total carrying amounts listed above.

Changes in these investments for the six months ended June 30, 2019 and 2018 are as follows:

(in thousands)	2019	2018
Balance at beginning of year	\$ 59,484	\$ 33,605
Cash investments in equity securities	179	9,334
Net increases due to observable price changes	4,305	12,448
Conversion of note receivable to equity securities	—	11,369
Full acquisition of equity securities	—	(2,710)
Foreign currency translation adjustments	(16)	(72)
Balance at end of period	\$ 63,952	\$ 63,974

During the first half of 2019, we recognized a gain of \$4.3 million in other operating income in the accompanying consolidated statement of income due to upward adjustments resulting from an observable price change. This adjustment was due to an equity offering at a higher price from the issuer in an orderly transaction for a similar investment as those we hold. Also, we made additional investments of \$0.2 million in non-publicly traded companies that do not have readily determinable fair values during the six months ended June 30, 2019.

During the first half of 2018, we made an additional investment in a non-publicly traded company of \$9.3 million. This equity interest is 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 and a corresponding gain was recorded in other operating income in the accompanying condensed statement of income. Also during the second quarter of 2018, we acquired all remaining shares of a non-publicly traded company in which we held a minority interest as discussed in Note 3.

Also during the first half of 2018, we converted a note receivable from a non-publicly traded company, considered a related party, into an equity interest in that company and is currently held at the value of the shares received. This note held a balance of \$11.4 million including principal balance and accrued interest at conversion which was a non-cash investing activity and is therefore not included in the consolidated statement of cash flows. Following an orderly transaction for a similar investment of the same issuer, this investment was adjusted by \$0.8 million during the six-months ended June 30, 2018 and a corresponding gain was recorded in other operating income in the accompanying condensed statement of income.

Equity Accounted Investments

As of June 30, 2019 and December 31, 2018, we had a total of equity-method investments in non-publicly traded companies of \$18.5 million and \$14.8 million, respectively, which are included in equity accounted investments in the accompanying condensed consolidated balance sheets. During 2019, we made an investment in a non-publicly traded company accounted for under the equity method that is considered a structured entity. As of June 30, 2019, this investment held a balance of \$1.6 million. With this additional investment, we now hold three equity method investments in structured entities. We do not have the ability to effect the variable returns through power over any of these entities and therefore, these investments are not consolidated. As of June 30, 2019 and December 31, 2018, these investments had a total carrying value of \$2.6 million and \$1.1 million, respectively, which are included in other long-term assets in the consolidated balance sheets, representing our maximum exposure to loss.

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

6. Goodwill and Other Intangible Assets

The changes in intangibles assets in 2019 are summarized as follows:

(in thousands)	Other Intangible Assets	Goodwill
Balance at December 31, 2018	\$ 674,997	\$ 2,134,125
Additions	301,681	—
Purchase adjustments	—	(236)
Acquisitions	10,785	11,788
Amortization/disposals	(90,973)	—
Impairments	(1,259)	—
Foreign currency translation adjustments	(3,492)	(2,539)
Balance at June 30, 2019	\$ 891,739	\$ 2,143,138

Cash paid for purchases of intangible assets during the six months ended June 30, 2019 totaled \$162.7 million. Additionally, during the six months ended June 30, 2019, we capitalized \$10.3 million of development expenses.

The changes in the carrying amount of goodwill for the six months ended June 30, 2019 resulted from acquisitions and divestitures as discussed in Note 3 "Acquisitions and Divestitures" and changes in foreign currency translation.

7. Derivatives and Hedging

Objective and Strategy

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, 2019, cash collateral positions consisted of \$2.2 million recorded in other current liabilities and \$9.2 million recorded in other current assets in the accompanying condensed consolidated balance sheet. As of December 31, 2018, we had cash

collateral positions consisting of \$1.0 million recorded in other current liabilities and \$25.4 million recorded in other current assets in the accompanying condensed consolidated balance sheets.

Non-Derivative Hedging Instrument

Net Investment Hedge

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 "Financial Debts". 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. Based on the spot rate method, the unrealized loss recorded in equity was \$4.1 million and \$5.9 million as of June 30, 2019 and December 31, 2018, 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, 2019 and December 31, 2018.

Derivatives Designated as Hedging Instruments

Cash Flow Hedges

As of June 30, 2019 and December 31, 2018, 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 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 2019 and in 2018, we did not record any hedge ineffectiveness related to any cash-flow hedges in earnings. Based on their valuation as of June 30, 2019, we expect approximately \$7.2 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 sheets account of the underlying item.

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, 2019 and December 31, 2018, interest receivables of \$1.4 million and \$1.4 million, respectively are recorded in other current assets in the accompanying consolidated balance sheets.

Fair Value Hedges

As of June 30, 2019 and December 31, 2018, 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 2019 and in 2018, 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 sheets account of the underlying item.

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, 2019, and December 31, 2018, accrued and unpaid interest of \$0.2 million and \$0.1 million, respectively, are recorded in other current assets in the accompanying condensed consolidated balance sheets.

Derivatives Not Designated as Hedging Instruments

Call Options

We entered into Call Options which, along with the sale of the Warrants, represent the Call Spread Overlay entered into in connection with the Cash Convertible Notes and which are more fully described in Note 9 "Financial Debts". In these 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 premiums 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 is the underlying security, are derivative assets 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 "Fair Value Measurements".

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 income in other financial expense, net. 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.

Cash Convertible Notes Embedded Cash Conversion Option

The embedded cash conversion option within the Cash Convertible Notes discussed in Note 9 "Financial Debts" 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 income in other financial expense, net until the cash conversion option settles or expires. 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 "Fair Value Measurements".

Embedded Conversion Option

During 2017, we purchased a convertible note for \$3.0 million from a publicly listed company considered a related party. The embedded conversion option within the convertible note is required to be separated from the convertible note and accounted for separately as a derivative liability, with changes in fair value reported in our condensed consolidated statements of income in other financial expense, net. 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 "Fair Value Measurements".

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.

We are party to various foreign exchange forward, option and swap arrangements which had, at June 30, 2019 and December 31, 2018, aggregate notional values of \$493.3 million and \$792.7 million which expire at various dates

through November 2019. 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, 2019 and December 31, 2018:

(in thousands)	As of June 30, 2019		As of December 31, 2018	
	Current Asset	Non-current Asset	Current Asset	Non-current Asset
Assets:				
Derivative instruments designated as hedges				
Interest rate contracts - cash flow hedge ⁽¹⁾	\$ —	\$ —	\$ —	\$ —
Interest rate contracts - fair value hedge ⁽¹⁾	—	2,671	—	—
Total derivative instruments designated as hedges	\$ —	\$ 2,671	\$ —	\$ —
Undesignated derivative instruments				
Embedded conversion option	\$ —	\$ —	\$ —	\$ 349
Call options	143,424	187,794	100,081	295,014
Foreign exchange contracts	2,387	—	2,673	—
Total undesignated derivative instruments	\$ 145,811	\$ 187,794	\$ 102,754	\$ 295,363
Total Derivative Assets	\$ 145,811	\$ 190,465	\$ 102,754	\$ 295,363

(in thousands)	As of June 30, 2019		As of December 31, 2018	
	Current Liability	Non-current Liability	Current Liability	Non-current Liability
Liabilities:				
Derivative instruments designated as hedges				
Interest rate contracts - cash flow hedge ⁽¹⁾	\$ —	\$ (13,239)	\$ —	\$ (17,574)
Interest rate contracts - fair value hedge ⁽¹⁾	(99)	—	(473)	(721)
Total derivative instruments designated as hedges	\$ (99)	\$ (13,239)	\$ (473)	\$ (18,295)
Undesignated derivative instruments				
Cash convertible notes embedded conversion option	\$ (143,867)	\$ (189,660)	\$ (100,164)	\$ (299,098)
Cash conversion option	—	(252,322)	(433)	(296,807)
Foreign exchange contracts	(4,258)	—	(5,957)	—
Total undesignated derivative instruments	\$ (148,125)	\$ (441,982)	\$ (106,554)	\$ (595,905)
Total Derivative Liabilities	\$ (148,224)	\$ (455,221)	\$ (107,027)	\$ (614,200)

⁽¹⁾ The fair value amounts for the interest rate contracts do not include accrued interest.

Gains and Losses on Derivative Instruments

The following tables summarize the gains and losses on derivative instruments for the six months ended June 30, 2019 and 2018:

	Six months ended June 30,	
	2019	2018
(in thousands)	Other financial expense, net	Other financial expense, net
Total amounts presented in the Condensed Consolidated Statements of Income in which the effects of cash flow and fair value hedges are recorded	\$ (24,631)	\$ (204,262)
Gains (Losses) on Derivatives in Cash Flow Hedges		
Interest rate contracts		
Amount of (loss) gain reclassified from accumulated other comprehensive income	\$ (1,260)	\$ (6,030)
Amounts excluded from effectiveness testing	—	—
Gains (Losses) on Derivatives in Fair Value Hedges		
Interest rate contracts		
Hedged item	(3,766)	3,991
Derivatives designated as hedging instruments	3,766	(3,991)
Gains (Losses) Derivatives Not Designated as Hedging Instruments		
Embedded conversion option	(348)	434
Call options	(63,878)	207,631
Cash convertible notes embedded cash conversion option	65,736	(209,703)
Cash conversion option	(31,138)	(198,634)
Foreign exchange contracts	(1,189)	(14,042)
Total losses	\$ (32,077)	\$ (220,344)

Balance Sheet Line Items in which the Hedged Item is Included

The following tables summarizes the balance sheet line items in which the hedged item is included as of June 30, 2019 and December 31, 2018:

	Carrying Amount of the Hedged Assets (Liabilities)	
	June 30, 2019	December 31, 2018
(in thousands)		
Current portion of long-term debt	\$ (72,982)	\$ (72,956)
Long-term debt	\$ (126,784)	\$ (126,751)

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 and derivative financial instruments entered into in connection with the Cash Convertible Notes discussed in Note 9 "Financial Debts", 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 were 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, considering 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, 2019 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 2.4% and 6.9%), 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, 2019 and December 31, 2018:

(in thousands)	Level 1	Level 2	Level 3	June 30, 2019
Financial assets, current	\$ 166	\$ 149,798	\$ —	\$ 149,964
Financial assets, non-current	2,158	11,380	63,952	77,490
Call option	—	331,218	—	331,218
Foreign exchange contracts	—	2,387	—	2,387
Interest rate contract	—	2,671	—	2,671
Assets	\$ 2,324	\$ 497,454	\$ 63,952	\$ 563,730
Foreign exchange contracts	\$ —	\$ (4,258)	\$ —	\$ (4,258)
Interest rate contracts	—	(13,338)	—	(13,338)
Cash conversion option	—	(333,527)	—	(333,527)
Warrants	—	(252,322)	—	(252,322)
Contingent consideration	—	—	(163,933)	(163,933)
Liabilities	\$ —	\$ (603,445)	\$ (163,933)	\$ (767,378)

(in thousands)	Level 1	Level 2	Level 3	December 31, 2018
Financial assets, current	\$ 350	\$ 214,568	\$ —	\$ 214,918
Financial assets, non-current	2,117	20,038	59,484	81,639
Call option	—	395,095	—	395,095
Foreign exchange contracts	—	2,673	—	2,673
Assets	\$ 2,467	\$ 632,374	\$ 59,484	\$ 694,325
Foreign exchange contracts	\$ —	\$ (5,957)	\$ —	\$ (5,957)
Interest rate contracts	—	(18,768)	—	(18,768)
Cash conversion option	—	(399,262)	—	(399,262)
Warrants	—	(297,240)	—	(297,240)
Contingent consideration	—	—	(48,971)	(48,971)
Liabilities	\$ —	\$ (721,227)	\$ (48,971)	\$ (770,198)

For financial liabilities with Level 3 inputs, the following table summarizes the activity for the six months ended June 30, 2019.

(in thousands)	Contingent Consideration
Beginning Balance at January 1, 2019	\$ (48,971)
Additions	(134,195)
Payments	11,800
Gain included in earnings	7,433
Ending balance at June 30, 2019	\$ (163,933)

As of June 30, 2019, of the total \$163.9 million accrued for contingent consideration, \$87.6 million is included in other non-current liabilities and \$76.3 million is included in other current liabilities in the accompanying condensed consolidated balance sheet. For the six months ended June 30, 2019, the \$134.2 million of additions is primarily related to the asset acquisition of Formulatrix discussed in Note 3 "Acquisitions and Divestitures".

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, 2019			As of December 31, 2018		
	Carrying Amount	Level 1	Level 2	Carrying Amount	Level 1	Level 2
Long-term debt including current portion:						
Cash convertible notes	\$ 1,027,709	\$ 1,450,601	\$ —	\$ 1,439,931	\$ 1,794,000	\$ —
U.S. Private placement	399,410	—	401,786	399,301	—	391,700
German private placement	334,482	—	338,825	336,168	—	337,768
	\$ 1,761,601	\$ 1,450,601	\$ 740,611	\$ 2,175,400	\$ 1,794,000	\$ 729,468

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 2021, 2023 and 2024.

U.S. 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 cash 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, 2019 and 2018 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, 2019 total €426.6 million (approximately \$485.5 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, 2019 or at December 31, 2018, and three other lines of credit amounting to €26.6 million with no expiration date, none of which were utilized as of June 30, 2019 or at December 31, 2018. 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, 2019. The credit facilities are for general corporate purposes.

During the first quarter of 2019, we repaid \$433.4 million of long-term debt including \$430.0 million for the amount due for the 2019 Cash Convertible Notes and \$3.4 million for a portion of the 2021 Cash Convertible Notes which was converted during the contingent conversion period as discussed further below

At June 30, 2019 and December 31, 2018, non-current financial debt, net of debt issuance costs of \$12.3 million and \$14.2 million, respectively, consists of the following:

(in thousands)	June 30, 2019	December 31, 2018
0.375% Senior Unsecured Cash Convertible Notes due 2019	\$ —	\$ 427,445
0.875% Senior Unsecured Cash Convertible Notes due 2021	280,733	279,492
0.500% Senior Unsecured Cash Convertible Notes due 2023	341,535	335,201
1.000% Senior Unsecured Cash Convertible Notes due 2024	405,441	397,793
3.19% Series A Senior Notes due October 16, 2019	72,982	72,956
3.75% Series B Senior Notes due October 16, 2022	299,489	299,412
3.90% Series C Senior Notes due October 16, 2024	26,939	26,933
German Private Placement (Schuldschein)	334,482	336,168
Total non-current financial debts	\$ 1,761,601	\$ 2,175,400
Less: current portion of financial debts	353,715	503,589
Total non-current financial debts	\$ 1,407,886	\$ 1,671,811

At June 30, 2019, the \$353.7 million current portion of the debt includes the \$280.7 million Cash Convertible Notes due in 2021 which became convertible pursuant to the indenture as further discussed below, together with the \$73.0 million of Senior Notes due October 19, 2019.

The notes are all unsecured obligations that rank pari passu.

Cash Convertible Notes due 2019, 2021, 2023 and 2024

On March 19, 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes in two tranches consisting of \$430.0 million due in 2019 (2019 Notes) and \$300.0 million due in 2021 (2021 Notes). The aggregate net proceeds of the 2019 Notes and 2021 Notes were \$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. During the first quarter of 2019, \$430.0 million was paid at maturity (2019 Notes) and \$3.4 million of the 2021 Notes was redeemed.

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.

On November 13, 2018, we issued \$500.0 million aggregate principal amount of Cash Convertible Senior Notes which is due in 2024 (2024 Notes). The net proceeds of the 2024 Notes were \$468.9 million, after payment of the net cost of the Call Spread Overlay described below and transaction costs paid through June 30, 2019.

We refer to the 2019 Notes, 2021 Notes 2023 Notes and 2024 Notes, collectively as the “Cash Convertible Notes.”

Interest on the Cash Convertible Notes is payable semi-annually in arrears and will mature on the maturity date unless repurchased or converted with their terms prior to such date. The interest rate and corresponding maturity of each Note are summarized in the table below. The Cash Convertible Notes are solely convertible into cash in whole, but not in part, at the option of noteholders under the circumstances described below and during the contingent conversion periods as shown in the table below.

Cash Convertible Notes	Annual Interest Rate	Date of Interest Payments	Maturity Date	Contingent Conversion Period	Conversion Rate per \$200,000 Principal Amount
2021 Notes	0.875%	March 19 and September 19	March 19, 2021	April 29, 2014 to September 18, 2020	7,063.1647
2023 Notes	0.500%	March 13 and September 13	September 13, 2023	October 24, 2017 to March 13, 2023	4,829.7279
2024 Notes	1.000%	May 13 and November 13	November 13, 2024	December 24, 2018 to August 2, 2024	4,360.3098

Additionally, conversion may occur at any time following a Contingent Conversion Period through the fifth business day immediately preceding the applicable maturity date.

Upon conversion, 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.

Noteholders may convert of the Cash Convertible Notes into cash at their option at any time during the Contingent Conversion Periods described above only under the following circumstances (Contingent Conversion Conditions):

- if the last reported sale price of our common stock for at least 20-consecutive trading days during a period of 30--consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day;
- if we undergo certain fundamental changes as defined in the agreement;
- during the five-business day period immediately after any 10-consecutive trading day period in which the quoted price for the 2021 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day;
- if parity event or trading price unavailability event, as the case maybe occurs for the 2023 Notes and 2024 Notes during the period of 10 days, including the first business day following the relevant trading price notification date.
- if we elect to distribute assets or property to all or substantially all the holders of our common stock and those assets or other property have a value of more than 25% of the average daily volume-weighted average trading price of our common stock for the prior 20-consecutive trading days;
- if we elect to redeem the Cash Convertible Notes; or
- if we experience certain customary events of default, including defaults under certain other indebtedness until such event has been cured or waived or the payment of the Notes have been accelerated.

The Contingent Conversion Conditions in the 2021 Notes, 2023 Notes and 2024 Notes noted above have been analyzed under IFRS 9, *Financial Instruments*, and, based on our analysis, we determined that each of the embedded features listed above are clearly and closely related to the 2021 Notes, 2023 Notes and 2024 Notes (i.e., the host contracts). As a result, pursuant to the accounting provisions of IFRS 9, *Financial Instruments*, these features noted above are not required to be bifurcated as separate instruments.

Beginning on July 1, 2019 and ending at the close of business on September 30, 2019, the 2021 Notes became convertible pursuant to the indenture. The 2021 Notes became convertible pursuant to Section 12.01(b)(iv) of the indenture because

the arithmetic mean of the last reported sale prices of our common stock, in each trading day in at least one 20-consecutive trading day period during the 30-consecutive trading day period ending on the last trading day of the preceding fiscal quarter, was greater than 130% of the conversion price in effect on such last trading day.

No Contingent Conversion Conditions were triggered for the 2023 Notes and 2024 Notes as of June 30, 2019.

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.

We may redeem the Cash Convertible 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 income until the cash conversion option transaction settles or expires. The initial fair value liability of the embedded cash conversion options for the 2019 Notes and 2021 Notes was \$51.2 million and \$54.0 million, respectively, \$74.5 million for the 2023 Notes, and \$98.5 million for the 2024 Notes, 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 years for the 2019 Notes, seven years for the 2021 Notes, and six years for the 2023 Notes and 2024 Notes. 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, 2023 Notes and 2024 Notes is 2.937%, 3.809%, 3.997% and 4.782%, 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.

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. For the 2024 Notes, we incurred \$5.7 million transaction costs of which \$0.2 million was accrued as of June 30, 2019. Such costs have been allocated to the Cash Convertible Notes and deferred and are being amortized to interest expense over the terms of the Cash Convertible Notes 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,	
	2019	2018
Coupon interest	\$ 5,156	\$ 3,119
Amortization of original issuance discount	19,502	14,889
Amortization of debt issuance costs	1,676	1,664
Total interest expense related to the Cash Convertible Notes	\$ 26,334	\$ 19,672

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 \$73.7 million of the proceeds from the from the issuance of the 2023 Cash Convertible Notes to pay for the premium for the Call Option, and simultaneously received \$45.3 million from the sale of Warrants, for a net cash outlay of \$28.3 million for the Call Spread Overlay. Issuance costs incurred in connection with the Warrant and the Call Option were \$0.3 million and \$0.1 million respectively.

In November 2018, we used \$97.3 million of the proceeds from the from the issuance of the 2024 Notes to pay for the premium for the Call Option, and simultaneously received \$72.4 million from the sale of Warrants, for a net cash outlay of \$24.9 million for the Call Spread Overlay. Issuance costs incurred in connection with the Warrant and the Call Option were \$0.5 million and \$0.5 million respectively, of which \$48.0 thousand was accrued as of June 30, 2019.

The Call Options and Warrants are derivative financial instruments and are discussed further in Note 7 "Derivatives and Hedging".

Aside from the initial payment of a premium of \$105.2 million (2019 and 2021 Notes), \$73.7 million (2023 Notes), and \$97.3 million (2024 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.

During the first quarter of 2019, we received \$133.2 million in cash upon the exercise of the call options in connection with the repayment of the 2019 Notes. In the same transaction, we paid \$132.7 million for the intrinsic value of the 2019 Notes' embedded cash conversion option. Not all of the 2019 Note holders tendered the required conversion notice, and as a result the net effect of the cash paid and received of \$0.5 million was recognized as a gain in other financial expense, net.

In connection with the early conversion of a portion of the 2021 Notes during the first quarter of 2019, we received \$0.4 million in cash and recorded an other current asset of \$0.7 million upon the exercise of the related call options. In the same transaction, we paid \$1.1 million for the intrinsic value of the 2021 Notes' embedded cash conversion option. During the second quarter of 2019, we collected the \$0.7 million receivable balance and received \$0.4 million in cash upon the exercise of additional call options. As a result of these early conversions, we have recognized a \$0.4 million gain in other financial expense, net.

We issued Warrants as summarized in the table below. The number of warrants and exercise prices are subject to customary adjustments under certain circumstances. The proceeds, net of issuance costs, from the sale of the Warrants are included as additional paid in capital in the accompanying consolidated balance sheets.

Cash convertible notes	Issued on	Number of share warrants (in millions)	Exercise price per share	Proceeds from issuance of warrants, net of issuance costs (in millions)	Warrants expire over a period of 50 trading days beginning on
2019	March 19, 2014	15.2	\$32.0560	\$40.6	December 27, 2018
2021	March 19, 2014	10.6	\$32.0560	\$28.3	December 29, 2020
2023	September 13, 2017	9.7	\$50.9664	\$45.3	June 26, 2023
2024	November 13, 2018	10.9	\$52.1639	\$72.4	August 27, 2024

During the first quarter of 2019, 2.1 million common shares were issued in connection with the conversion of the 15.2 million warrants related to the 2019 Notes which resulted in a \$7.5 million increase in retained earnings, a decrease of \$68.5 million in treasury shares and an approximately \$4.0 thousand cash payment for fractional shares.

The Warrants that were issued with our Cash Convertible Notes, 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, plus cash in lieu of any fractional shares. We will not receive any proceeds if the Warrants are exercised.

Private Placement

In October 2012, we completed a private placement through the issuance of new senior unsecured notes at a total amount of \$400.0 million with a weighted average interest rate of 3.66% (settled on October 16, 2012). The notes were issued in three series: (1) \$73.0 million 7-year term due in 2019 (3.19%); (2) \$300.0 million 10-year term due in 2022 (3.75%); and (3) \$27.0 million 12-year term due in 2024 (3.90%). We paid \$2.1 million in debt issue costs which will be 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. Based on an estimation using the changes in the U.S. Treasury rates, the Level 2 fair value of these senior notes as of June 30, 2019 and December 31, 2018 was approximately \$401.8 million and \$391.7 million, respectively.

German Private Placement (Schuldschein)

In 2017, we completed a German private placement bond ("Schuldschein") which was issued 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". Based on the spot rate method, the change in the carrying value of the Euro denominated tranches attributed to the net investment hedge as of June 30, 2019 totaled \$4.1 million of unrealized loss and is recorded in equity. 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, 2019 and December 31, 2018 is as follows:

Currency	Notional Amount	Interest Rate	Maturity	Carrying Value (in thousands) as of	
				June 30, 2019	December 31, 2018
EUR	€11.5 million	Fixed 0.4%	March 2021	\$ 13,068	\$ 13,143
EUR	€23.0 million	Floating EURIBOR + 0.4%	March 2021	26,136	26,286
EUR	€21.5 million	Fixed 0.68%	October 2022	24,418	24,561
EUR	€64.5 million	Floating EURIBOR + 0.5%	October 2022	73,255	73,684
USD	\$45.0 million	Floating LIBOR + 1.2%	October 2022	44,905	44,891
EUR	€25.0 million	Floating EURIBOR + 0.5%	October 2022	28,379	28,543
EUR	€64.0 million	Fixed 1.09%	June 2024	72,665	73,097
EUR	€31.0 million	Floating EURIBOR + 0.7%	June 2024	35,197	35,406
EUR	€14.5 million	Fixed 1.61%	June 2027	16,459	16,557
				\$ 334,482	\$ 336,168

The financial markets regulators in the United Kingdom and the Eurozone have passed regulations that will become effective in 2021 under which LIBOR and EURIBOR in their current form will not be compliant. Market participants and regulators are working on establishing new interest rate benchmarks. While the outcome of this work is not clear yet, the Schuldschein our syndicated loan facility, and our interest rate swaps continue to make reference to the current LIBOR and EURIBOR benchmark rates. These agreements contain language for the determination of interest rates in case the benchmark rate is not available. However, it appears likely that the agreements will need to be adjusted in line with still to be developed market practice once new benchmark rates become available.

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 income (loss) 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, 2019 and 2018, the effective tax rates were 13.2% and 17.5%, respectively.

In the first half of 2019 and 2018, 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, 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. Tax years in the Netherlands are potentially open back to 2006 for income tax examinations by tax authorities. The U.S. consolidated group is subject to Federal and most state income tax examinations by tax authorities beginning within the year ending December 31, 2015 through the current period. Our subsidiaries, with few exceptions, are no longer subject to income tax examinations by tax authorities for years before 2014. The German tax authorities

have commenced an audit for the 2014-2016 tax years. The German tax audit for tax year 2010-2013 has been settled during the first six months of 2019.

As of June 30, 2019, 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.

11. Inventories

The components of inventories consist of the following as of June 30, 2019 and December 31, 2018:

(in thousands)	June 30, 2019	December 31, 2018
Raw materials	\$ 26,359	\$ 25,819
Work in process	43,190	38,659
Finished goods	99,971	98,434
Total inventories	<u>\$ 169,520</u>	<u>\$ 162,912</u>

12. Equity

Share Repurchase Programs

On May 6, 2019, we announced our sixth share repurchase program of up to \$100 million of our common shares.

On January 31, 2018, we announced our fifth share repurchase program of up to \$200 million of our common shares. During the six-month period ended June 30, 2019, we repurchased 2.0 million QIAGEN shares for \$74.4 million (including transaction costs) bringing the total shares repurchased under this program to 4.9 million for \$179.1 million (including transaction costs).

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.

13. Revenue

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, 2019, we had \$21.4 million of remaining performance obligations for which the transaction price is not constrained related to these contracts which we expect to recognize over the next 12 to 18 months.

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.

Contract assets as of June 30, 2019 and December 31, 2018 totaled \$7.3 million and \$6.9 million, respectively, and are included in other current assets in the accompanying condensed consolidated balance sheet and relate to the companion diagnostic co-development contracts discussed above.

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. As of June 30, 2019 and December 31, 2018, contract liabilities totaled \$54.5 million and \$54.3 million, respectively, of which \$46.8 million and \$45.3 million is included in other current liabilities, respectively, and \$7.7 million and \$9.0 million in included in other non-current liabilities, respectively. During the six months ended June 30, 2019 and 2018, we satisfied the associated performance obligations and recognized revenue of \$33.9 million and \$32.2 million, respectively, related to advance customer payments previously received.

Disaggregation of Revenue

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

(in thousands)	Six Months Ended June 30, 2019			Six Months Ended June 30, 2018		
	Consumables and related	Instruments	Total	Consumables and related	Instruments	Total
Molecular Diagnostics	\$ 320,781	\$ 35,274	\$ 356,055	\$ 312,817	\$ 35,500	\$ 348,317
Life Sciences	326,959	47,252	374,211	326,991	45,456	372,447
<i>Academia / Applied Testing</i>	194,777	32,617	227,394	196,784	30,556	227,340
<i>Pharma</i>	132,182	14,635	146,817	130,207	14,900	145,107
Total	\$ 647,740	\$ 82,526	\$ 730,266	\$ 639,808	\$ 80,956	\$ 720,764

(in thousands)	Six Months Ended June 30,	
	2019	2018
Americas	\$ 350,239	\$ 338,671
Europe, Middle East and Africa	226,917	236,156
Asia Pacific and Rest of World	153,110	145,937
Total	\$ 730,266	\$ 720,764

14. Leases

In January 2016, the IASB published IFRS 16 *Leases*. The new standard increases transparency and comparability by requiring the recognition by lessee of right-of-use (“ROU”) assets and lease liabilities arising from lease contracts on the balance sheet. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing and uncertainty of cash flows arising from leases.

Accounting Policies

We adopted IFRS 16 *Leases* on its effective date on January 1, 2019 and the comparative information has not been adjusted and continues to be reported under IAS 17 *Leases*. As a result, we changed our accounting policy for leases as detailed below.

We implemented the standard using the required modified retrospective approach and have also elected to utilize the package of practical expedients, which permits us to not reassess (1) whether any expired or existing contracts are or contain leases, (2) the lease classification for any expired or existing leases, and (3) any initial direct costs for any existing leases as of the effective date. We also elected the practical expedient to use hindsight in determining the appropriate lease term and in assessing impairment of its right-of-use assets. In using the modified retrospective approach, we are required to recognize and measure leases existing at, or entered into after, the beginning of the earliest comparative period presented.

Adoption of the new standard resulted in the recording of additional right-of-use assets and lease liabilities of approximately \$56.4 million and \$57.7 million, respectively as of January 1, 2019. The difference between the

additional right-of-use assets and lease liabilities was recorded as a \$1.3 million adjustment to retained earnings. The standard did not materially impact our condensed consolidated income statements and had no impact on cash flows.

Nature of Existing Leases

We have leases for equipment, cars, machinery, other equipment, office and buildings. Our leases have remaining lease terms of 1 year to 10 years, some of which include options to extend or early renew the leases, and some of which include options to early terminate the leases. As of June 30, 2019, no such options have been recognized as part of the right-of-use assets and lease liabilities.

Leases can contain variable lease charges based on index like consumer prices or rates. During the six months ended June 30, 2019, amounts recorded as variable lease payments not included in the lease liabilities were not material.

As we regularly cannot readily determine the interest rate implicit in the lease contracts we apply our incremental borrowing rate based on information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable.

Supplemental balance sheet and other information related to leases was as follows:

(in thousands, except lease term and discount rate)	Location in balance sheet	June 30, 2019
Right-of-use assets	Other non-current assets	\$ 58,022
<i>Office and buildings</i>		46,433
<i>Cars and all others assets</i>		11,589
Current lease liabilities	Other current liabilities	\$ 18,810
Non-current lease liabilities	Other non-current liabilities	\$ 41,130
Weighted Average Remaining Lease Term (in years)		5.67

The components of lease expense were as follows:

(in thousands)	For the Six Months Ended June 30, 2019
Amortization of right-of-use assets	\$ 11,641
<i>Office and buildings</i>	8,243
<i>Cars and all others assets</i>	3,398
Interest on lease liabilities	\$ 770

Supplemental cash flow information related to leases was as follows:

(in thousands)	For the Six Months Ended June 30, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Financing cash flows from principal portion of lease payments	\$ (10,744)
Operating cash flows from interest portion of lease payments	(770)
Total cash outflow for leases	\$ (11,514)

Maturities of lease liabilities were as follows:

(in thousands)	Operating Leases
2020	\$ 20,016
2021	15,521
2022	11,137
2023	7,598
2024	5,140
Thereafter	3,487
Total lease payments	<u>62,899</u>
Less imputed interest	<u>(2,959)</u>
Total	<u>\$ 59,940</u>

As of June 30, 2019, we do not have additional leases that have not yet commenced.

15. 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,	
	2019	2018
Net income (loss)	<u>\$ 50,943</u>	<u>\$ (146,985)</u>
Weighted average number of common shares used to compute basic net income per common share	<u>226,410</u>	227,096
Dilutive effect of stock options and restricted stock units	<u>4,384</u>	—
Dilutive effect of warrants	<u>2,366</u>	—
Weighted average number of common shares used to compute diluted net income per common share	<u>233,160</u>	<u>227,096</u>
Outstanding options and awards having no dilutive effect, not included in above calculation	<u>113</u>	222
Outstanding warrants having no dilutive effect, not included in above calculation	<u>35,800</u>	<u>34,024</u>
Basic earnings (loss) per common share	<u>\$ 0.23</u>	<u>\$ (0.65)</u>
Diluted earnings (loss) per common share	<u>\$ 0.22</u>	<u>\$ (0.65)</u>

16. Commitments and Contingencies

Contingent Consideration Commitments

Pursuant to the purchase agreements for certain acquisitions including business combinations and asset acquisitions as well as other contractual arrangements, we could be required to make additional contingent cash payments totaling up to \$181.4 million based on the achievement of certain revenue and operating results milestones as follows: \$8.9 million in the remainder of 2019, \$155.7 million in 2020, \$5.9 million in 2021, \$5.9 million in 2023 and \$5.0 million, payable in any 12-month period from now until 2028 based on the accomplishment of certain revenue or other milestones, regulatory approvals or clearances. Of the \$155.7 million potentially due in 2020, \$135.9 million is related to the asset acquisition of assets from Formulatrix, Inc. as discussed further in Note 3 "Acquisitions and Divestitures". The fair value of the contingent obligation at June 30, 2019 is \$163.9 million, of which \$87.6 million is included in other current liabilities and \$76.3 million is included in other non-current liabilities in the accompanying consolidated balance sheet. This is further discussed in Note 8 "Fair Value Measurements".

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 \$2.8 million as of both June 30, 2019 and December 31, 2018, 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, 2019, 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 recorded in other current liabilities totaled \$0.7 million as of June 30, 2019 and \$6.0 million as of December 31, 2018. The estimated amount of a range of possible losses as of June 30, 2019, is between \$0.3 million and \$2.1 million. During the six-month period ended June 30, 2019, payments of \$5.4 million related to previous matters were made. 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.

17. 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, 2019, we granted 1.4 million stock awards compared to 1.3 million stock awards for the six-month periods ended June 30, 2018.

At June 30, 2019, there was \$118.9 million remaining in unrecognized compensation expense, less estimated forfeitures, related to these awards which will be recognized over a weighted-average period of 2.86 years.

Share-Based Compensation Expense

Total share-based compensation expense for the six months ended June 30, 2019 and 2018 is comprised of the following:

(in thousands)	Six months ended June 30,	
	2019	2018
Cost of sales	\$ 1,559	\$ 1,548
Research and development	2,752	2,916
Sales and marketing	5,316	4,569
General and administrative, restructuring, integration and other, net	13,583	10,237
Share-based compensation expense before taxes	23,210	19,270
Income tax	7,834	6,032
Net share-based compensation expense	\$ 15,376	\$ 13,238

No compensation cost was capitalized in inventory at June 30, 2019 or December 31, 2018 as the amounts were not material.

18. Subsequent Events

On July 24, 2019, we announced that we intend to restructure the current format of our next-generation sequencing (NGS) partnership in China due to the slower-than-expected uptake of in-vitro diagnostic clinical sequencing in this country. Details will be further defined and finalized in the second half of 2019.

Venlo, September 27, 2019

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, 2019

(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, 2019 (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 27, 2019

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, 2019

(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 32 to 45 of the 2018 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 two major customer classes:

- **Molecular Diagnostics** - healthcare providers engaged in many aspects of patient care requiring accurate diagnosis and insights to guide treatment decisions in oncology, infectious diseases and immune monitoring. Includes Precision Medicine and companion diagnostics.
- **Life Sciences** - customers including government, biotechnology companies and researchers who utilize molecular testing and technologies who are generally served by public funding including areas such as medicine and clinical development efforts, forensics and exploring the secrets of life. Includes Pharma, Academia and Applied Testing customers.

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, 2019, we employed approximately 5,200 people in more than 35 locations worldwide.

Sample to Insight portfolio developments

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:

- As announced on July 24, QIAGEN intends to restructure the current format of its **NGS joint venture in China**. Planned 2019 sales from this joint venture were weighted to the second half of this year, primarily for the services to be provided by QIAGEN to develop in-vitro diagnostic assays on behalf of

the joint venture, as well as the sale of the GeneReader NGS System and other consumables and products to the joint venture at transfer prices. Sales of universal NGS solutions in China are handled directly by QIAGEN in this country, and QIAGEN is experiencing strong growth in this portfolio and intends to review various options in the second half of 2019 on how to further add from the growth opportunities for NGS technologies in China.

In other areas of QIAGEN's portfolio for NGS technologies, the QIAseq Expanded Carrier Screening Panel was launched for translational and clinical research into genetic drivers of rare and inherited diseases. The panel identifies targets, genes and other regions of interest responsible for over 200 disease indications, and is integrated into QIAGEN's bioinformatics solutions. QIAGEN also recently won a key tender in the United Kingdom for the use of QIAseq panels and QCI-Interpret at The Royal Marsden NHS Trust Foundation, which is one of the country's largest cancer testing sites.

- Another new application of **QuantiFERON** technology began development as QIAGEN and DiaSorin expanded their collaboration with plans for an ultra-sensitive diagnostic test for Lyme disease, designed to run on LIAISON platforms.
- In **Precision Medicine**, the *therascreen* PIK3CA RGQ PCR Kit was launched in the U.S. to aid in identifying breast cancer patients suitable for treatment with the newly approved Novartis therapy PIQRAY (alpelisib). The kit is the first FDA-approved companion diagnostic for detection of activating mutations in the PIK3CA gene and has received approval for use with both tissue and liquid biopsy samples.

This marks the second FDA approval of a QIAGEN companion diagnostic in 2019, with the *therascreen* FGFR RGQ RT-PCR Kit launched in April 2019 for use in selecting urothelial cancer patients eligible for treatment with the newly approved therapy BALVERSA™ (erdafitinib), developed by Janssen. The two assays have been made available under QIAGEN's Day-One Lab Readiness program that includes leading U.S. labs and allows for testing availability quickly after the FDA approval.

- **New automation solutions** are enlarging QIAGEN's reach in large diagnostic segments:
 - **QIAstat-Dx**, the next-generation solution for Sample to Insight syndromic testing, was launched in the U.S. in May 2019 after receiving 510(k) clearance along with the QIAstat-Dx Respiratory Panel for qualitative detection and identification of more than 20 viral and bacterial pathogens. QIAGEN also recently announced a new partnership with McKesson Medical-Surgical Inc. to serve as exclusive distributor in the market segment of U.S. hospitals with 200 beds or less. McKesson is also slated to be a non-exclusive distributor for future expansion into non-acute clinics located in U.S. retail pharmacies.
 - **NeuMoDx 96 and 228 Molecular Systems** now have six CE-IVD assays available for infectious diseases in Europe, and QIAGEN is on track to have 11 assays available on these systems by the end of 2019 that use proprietary microfluidic PCR technology. QIAGEN is the distributor of the NeuMoDx systems in Europe and other countries, while NeuMoDx is responsible for commercialization in the United States. QIAGEN has the right to fully acquire the remaining 80% stake in NeuMoDx it does not own at a predetermined price of \$234 million until mid-2020, subject to the achievement of certain regulatory and operational milestones.
- In **Bioinformatics**, QIAGEN Clinical Insight (QCI), a cloud-based decision support platform for interpretation and reporting of variants from NGS data, recently achieved a milestone of more than one million patient test cases analyzed and interpreted. Additionally, QCI was selected by the National Cancer Center of Japan for the analysis, interpretation and reporting of molecular oncology and oncogenetic screening as part of a national precision medicine initiative.

Six-Month Period Ended June 30, 2019, compared to Six-Month Period Ended June 30, 2018

Net Sales

Net sales grew 1% in the first half of 2019 to \$730.3 million from \$720.8 million in the year-ago period, including approximately four percentage points from positive currency movements against the U.S. dollar.

Net sales by product category and customer class

	First six months 2019		
	Sales (In \$ m)	% change	% of sales
Consumables and related revenues	\$648	+1%	89%
Instruments	\$83	+2%	11%
Molecular Diagnostics ⁽¹⁾	\$356	+2%	49%
Life Sciences	\$374	0%	51%
<i>Academia / Applied Testing</i>	\$227	0%	31%
<i>Pharma</i>	\$147	+1%	20%

(1) Includes companion diagnostic co-development revenues (H1 2019: \$23 million, +3%)
Percentage changes are calculated based on the comparative prior year period.

In the first half of 2019, Molecular Diagnostics sales increased 2% and were adversely affected by five percentage points from adverse currency movements compared to the same period in the prior year. Life Sciences sales remained unchanged and were adversely affected by four percentage points from adverse currency movements compared to the same period in the prior year. Results for the first six months of 2019 reflect in part, the April 2018 divestment of the Applied Testing veterinary testing assay portfolio.

Net sales by geographic region

	First six months 2019		
	Sales (In \$ m)	% change	% of sales
Americas	\$350	+3%	48%
Europe / Middle East / Africa	\$227	-4%	31%
Asia-Pacific / Japan	\$151	+5%	21%

H1 2019: Rest of world represented less than 1% of net sales.

The Asia-Pacific / Japan region led with 5% sales growth in the first half of 2019 and experienced the largest gains in China with increased demand in both Life Sciences and Molecular Diagnostics. The Americas region saw improvements within both the Life Sciences and Molecular Diagnostics in the first half of 2019. The EMEA region fell by 4% reflecting eight percentage points of adverse currency movements.

Gross Profit

Gross profit for the six-month period ended June 30, 2019, was \$466.5 million (64% of net sales) as compared to \$475.7 million (66% of net sales) for the same period in 2018. 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 lower gross profit in 2019 reflects the net effect of higher material costs following the higher mix of instrument sales together with higher amortization expense.

For the six-month period ended June 30, 2019, the amortization expense on acquisition-related intangibles within cost of sales was \$37.2 million compared to \$30.4 million in the same period of 2018. The increase in amortization expense is due to the asset acquisition from Formulatrix as further discussed in Note 3 "Acquisitions and Divestitures". This contributed to the decrease in gross margin during the six-month period ended June 30, 2019. We expect that our acquisition-related intangible amortization will increase as a result of future acquisitions.

Research and Development Expense

Research and development expenses decreased to \$71.3 million (10% of net sales) in the first half of 2019, as compared to \$76.5 million (11% of net sales) in the same period of 2018. The increase in research and development costs in 2019 reflects our investments in QIAstat-Dx and the planned launch of a digital PCR system. 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. Overall, 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 \$214.5 million (29% of net sales) for the six-month period ended June 30, 2019, from \$218.2 million (30% of net sales) for the same period in 2018. We experienced a lower cost base following the realignment of sales and marketing activities as part of restructuring projects which were partly offset by higher personnel costs driven by targeted investments in regional sales forces, 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, 2019, we recorded general and administrative, restructuring, integration and other expense of \$72.8 million, as compared to \$87.3 million for the same period in 2018. The decrease in 2019 compared to 2018 is partially due to impacts in the prior year including a \$7.9 million revaluation gain of a minority interest investment in connection with the acquisition as discussed in Note 3, as well as litigation accruals of \$17.0 million incurred during the six months ended June 30, 2018. These were partially offset due to a \$7.4 million gain from the reduction in the fair value of contingent consideration during the six months ended June 30, 2019 and also lower restructuring expenses in 2019. 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, 2019, financial income increased to \$13.3 million from \$9.8 million in the same period of 2018. 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 \$39.4 million in the six-month periods ended June 30, 2019, as compared to \$30.9 million for the same period of 2018. 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 November 2018.

Other Financial Expense, net

For the six months ended June 30, 2019, other financial expense, net was \$24.6 million expense compared to \$204.3 million income in the same period of 2018. 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, 2019 and 2018, our effective tax rates were 13.2% and 17.5%, respectively. Additionally, in 2019 and 2018, 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 and the termination or reduction of certain government incentives, could adversely impact our overall effective tax rate, results of operations or financial flexibility" in Principal Risks and Uncertainties of the 2018 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, 2019, and December 31, 2018, we had cash and cash equivalents of \$624.6 million and \$1.16 billion, 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, 2019, cash and cash equivalents had decreased by \$534.5 million from December 31, 2018, primarily due to cash used in financing activities of \$544.8 million and cash used in investing activities of \$138.7 million partially offset by cash provided by operating activities of \$148.3 million. As of June 30, 2019 and December 31, 2018, we had working capital of \$672.0 million and \$1.14 billion, respectively.

Operating Activities: For the six-months periods ended June 30, 2019 and 2018, we generated net cash from operating activities of \$148.3 million and \$168.9 million, respectively. While net income was \$50.9 million in the six-months ended June 30, 2019, non-cash components in income included \$126.2 million of depreciation and amortization as well as other non-cash items, net of \$22.9 million primarily related to the fair value changes in derivatives. Operating cash flows include a net decrease in working capital of \$82.3 million excluding changes in fair value of derivative instruments. The current period change in working capital is primarily due to increased accounts receivables and inventories as well as a decrease to other current liabilities and taxes payable. 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 \$138.7 million of cash was used in investing activities during the six months ended June 30, 2019 compared to \$123.1 million for the same period in 2018. Cash used in investing activities during the six months ended June 30, 2019 includes \$162.7 million paid for intangible assets primarily related to the asset acquisition from Formulatrix, \$24.4 million cash paid for acquisition of N-of-One, net of cash acquired, \$181.7 million for purchases of short-term investments, \$26.1 million paid for purchases of property, plant and equipment. These activities were partially offset by \$16.2 million cash received for collateral assets and \$254.7 million from redemptions of short-term investments.

Financing Activities: Financing activities used \$544.8 million of cash for the six months ended June 30, 2019, primarily of \$433.4 million repayment of long-term debt as further discussed in Note 9 "Financial Debts" and the purchase of treasury shares totaling \$74.4 million as further discussed in Note 12 "Equity". This compares to cash used in financing activities of \$25.4 million for the six months ended June 30, 2018 primarily for purchase of treasury shares totaling \$20.8 million.

Other Factors Affecting Liquidity and Capital Resources

In November 2018, we issued \$500.0 million aggregate principal amount of Cash Convertible Senior Notes which is due in 2024 (2024 Notes). The net proceeds of the 2024 Notes were \$470.0 million, after payment of the net cost of the Call Spread Overlay and transaction costs paid through June 30, 2019 as described more fully in Note 9 "Financial Debts". Interest on the 2024 Notes is payable semiannually in arrears at a rate of 1.000% per annum. The 2024 Notes will mature on November 13, 2024 unless repurchased or converted in accordance with their terms prior to such date.

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 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, 2019. The facility can be utilized in euro, British pounds sterling, Swiss franc or U.S. dollar and bears interest of 0.40% 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, 2019.

In March 2014, we issued \$730.0 million aggregate principal amount of Cash Convertible Senior Notes of which \$433.4 million was paid in the six months ended June 30, 2019 and \$296.6 million is due in 2021 (2021 Notes).

Interest on the 2021 Notes is payable semiannually in arrears on September 19 of each year, at a rate of 0.875% per annum commencing on September 19, 2014. 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%).

As of June 30, 2019, we carry \$1.8 billion of long-term debt, of which \$353.7 million is current, and \$59.9 million of operating lease liabilities, of which \$18.8 million is current.

In connection with certain acquisitions, we could be required to make additional contingent cash payments totaling up to \$181.4 million based on the achievement of certain revenue and operating results milestones as further discussed in Note 16 "Commitments and Contingencies".

In January 2018, we announced our fifth share repurchase program of up to \$200 million of our common shares. During the six months period ended June 30, 2019, we repurchased 2.0 million QIAGEN shares for \$74.4 million (including transaction costs) bringing the total shares repurchased under this program to 4.8 million for \$179.0 million (including transaction costs). Repurchased shares will be held in treasury in order to satisfy various obligations, which include employee share-based remuneration plans.

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 could not 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 strategy 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, 2018.

Contractual Obligations

There were no material changes at June 30, 2019, from the contractual obligations disclosed in our Annual Report for the year ended 2018.

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 16, 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 2018 Annual Report. There have been no material changes from the risk factors disclosed in the 2018 Annual Report.

2019 Outlook

Based on the intention to restructure the NGS joint venture in China as announced on July 24, 2019, QIAGEN expects full-year 2019 net sales growth of approximately 5-6% CER and adjusted diluted EPS of approximately \$1.42-1.44 CER per share. As of July 29, 2019, for the full-year 2019, currency movements against the U.S. dollar are expected to create an adverse impact of about three percentage points on net sales growth at actual rates, and an adverse impact of about \$0.03-0.04 per share on adjusted EPS. These expectations do not take into account any future acquisitions that could be completed in 2019.

Signatures

Venlo, September 27, 2019

QIAGEN N.V.

/s/ Peer M. Schatz

Peer M. Schatz

CEO

/s/ Roland Sackers

Roland Sackers

CFO
