Performance Review

Our future operating results may be affected by various risk factors, many of which are beyond our control.

Certain statements included in this Annual Report and the documents incorporated herein by reference may be forward-looking statements within the meaning of Section 27A of the U.S. Securities Act of 1933, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended, including statements regarding potential future net sales, gross profit, net income and liquidity. 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. Reference is made in particular to the description of our plans and objectives for future operations, assumptions underlying such plans and objectives, and other forward-looking statements. 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. Factors which could cause such results to differ materially from those described in the forward-looking statements include those set forth in the risk factors below. As a result, our future success involves a high degree of risk. When considering forward-looking statements, you should keep in mind that the risk factors could cause our actual results to differ significantly from those contained in any forward-looking statement.

Results of Operations

Overview

We are a leading global provider of Sample to Insight solutions that enable customers to gain valuable molecular insights from samples containing the building blocks of life. Our sample technologies isolate and process DNA, RNA and proteins from blood, tissue and other materials. Assay technologies make these biomolecules visible and ready for analysis, such as identifying the DNA of a virus or a mutation of a gene. QIAGEN Digital insights 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 December 31, 2020, we employed more than 5,600 people in more than 35 locations worldwide.

Recent Acquisitions

We have made a number of strategic acquisitions and implemented other strategic transactions aiming to achieve market-leading positions with innovative technologies in high-growth areas of molecular diagnostics and research. These transactions have enhanced our product offerings and technology platforms, as well as our geographic footprint. They include:

- In September 2020, we acquired the remaining 80.1% of NeuMoDx, a company that designs and develops molecular diagnostic solutions for hospital and clinical reference laboratories. Prior to acquisition, we held a 19.9% investment in NeuMoDx and entered a strategic partnership in 2018 to commercialize next-generation, fully integrated automation systems for PCR testing. The NeuMoDx 288 (high-throughput version) and NeuMoDx 96 (mid-throughput) systems help clinical laboratories process increasing molecular test volumes and deliver more rapid diagnostic insights. We distribute these systems in Europe and other markets outside the United States.
- In January 2019, we began developing next-generation systems for digital PCR and acquired the digital PCR assets of Formulatrix, Inc., a developer of laboratory automation solutions. In 2020, we began commercialization of fully integrated digital PCR solutions, combining QIAGEN technologies and automation with the Formulatrix assets we acquired. Known as QIAcuity digital PCR, the system offers highly automated workflows, quicker time-to-result, and higher multiplexing and throughput flexibility than current digital PCR platforms. Digital PCR is one of the fastest-growing molecular testing applications in the life sciences industry. We paid Formulatrix $125.0 million in cash upon closing and paid $135.9 million during 2020 for the remaining milestone payments.
- Also in January 2019, we acquired N-of-One, Inc., a pioneer in molecular oncology decision support services, to strengthen our bioinformatics leadership in clinical NGS interpretation. The acquisition broadened the QIAGEN Digital Insights offering of software, content and service-based solutions. N-of-One's services and content have been integrated into QIAGEN Clinical Insights (QCI), adding medical interpretation and real-world evidence insights. The N-of-One somatic cancer database, drawing upon more than 125,000 anonymized patient samples, has increased our lead as the provider of the industry's largest genomics knowledge base.

Our financial results include the impacts of recent acquisitions from their effective dates.

Year Ended December 31, 2020, Compared to 2019

Net Sales

(in millions)	2020		2019		
Product type	**Net sales**	**% of net sales**	**Net sales**	**% of net sales**	**% change**
Consumables and related revenues	$ 1,615.4	86%	$ 1,354.1	89%	+19%
Instruments	254.9	14%	172.3	11%	+48%
Net Sales	$ 1,870.3		$ 1,526.4		+23%
Non-COVID-19 and COVID-19 products					
Non-COVID-19 products	$ 1,252.4	67%	$ 1,383.1	91%	-9%
COVID-19 products	617.9	33%	143.3	9%	+331%
Net Sales	$ 1,870.3		$ 1,526.4		+23%

In 2020, we experienced significant demand for solutions used in the COVID-19 pandemic and experienced improving trends in other areas of the business during the second half of 2020.

The instruments portfolio saw strong sales growth across multiple product categories including sample preparation platforms as well as general and integrated PCR equipment and platforms. Consumables and related revenues benefited from increased output of key consumable products including sample technologies kits and testing cartridges for QIAstat-Dx and NeuMoDx instruments. Net sales were positively impacted by two percentage points from favorable currency movements against the U.S. dollar.

(in millions)	2020		2019		
Customer class	**Net sales**	**% of net sales**	**Net sales**	**% of net sales**	**% change**
Molecular Diagnostics	$ 904.0	48%	$ 737.1	48%	+23%
Life Sciences	966.4	52%	789.3	52%	+22%
Net Sales	$ 1,870.3		$ 1,526.4		+23%
Product group					
Sample technologies	$ 803.9	43%	$ 548.4	36%	+47%
Diagnostic solutions	460.8	25%	465.5	30%	-1%
PCR / Nucleic acid amplification	363.6	19%	224.7	15%	+62%
Genomics / NGS	165.6	9%	183.8	12%	-10%
Other	76.6	4%	104.1	7%	-26%
Net Sales	$ 1,870.3		$ 1,526.4		+23%

Sample technologies were driven by strong growth in both consumables and instruments. Key drivers of this product group, which represents products involved in the first step in any molecular lab process, included COVID-19 solutions such as automated RNA extraction kits along with the launch of QIAprep&amp and improving trends in non-COVID products in the later portion of 2020.

Diagnostic solutions includes molecular testing platforms and products as well as Precision Medicine and companion diagnostic co-development revenues. This product group experienced growth due to sales of COVID testing solutions including QIAstat-Dx and NeuMoDx that was more than offset by the steep declines experienced earlier in 2020 for QuantiFERON-TB test sales that did see improving trends during the later portion of 2020 but finished the year down 21% compared to 2019.

PCR / Nucleic acid amplification involves research and applied PCR solutions and components and includes the QIAcuity digital PCR platform launched in September 2020. This product group was driven by strong growth across consumables and instruments in 2020 and also saw strong demand for OEM solutions and enzymes used in third-party diagnostic kits for COVID-19 testing.

Genomics / NGS includes universal NGS solutions as well as the full QIAGEN Digital Insights portfolio. This product group faced slower customer demand during the pandemic. Universal NGS sales were supported by initial orders of NGS-based kits used for epidemiological research of positive COVID-19 samples for viral variants during the second half of 2020.

Geographic region (in millions)	2020	2019	% change
Americas	$ 825.5	$ 722.0	+14%
Europe, Middle East and Africa	682.3	487.5	+40%
Asia Pacific, Japan and Rest of World	362.6	317.0	+14%
Net Sales	$ 1,870.3	$ 1,526.4	+23%

Top 7 emerging markets: Brazil, Russia, India, China, South Korea, Mexico and Turkey (2020: $287 million, 2019: $250 million, +14%)

EMEA led the geographic regions with 40% sales growth in 2020 due to strong performance in countries including France, the United Kingdom, Italy and Germany. EMEA was supported by one percentage point of sales growth from positive currency movements in 2020. Asia Pacific, Japan and Rest of World experienced gains during 2020 in China in part from strong QIAstat-Dx instrument sales as well as overall gains in other countries including Japan and Australia that more than offset a decline in South Korea particularly in QuantiFERON-TB tests. The Americas region benefited from significant increased demand in Brazil and Mexico throughout the year and gains in the United States in other areas of the portfolio more than offset the decline in QuantiFERON-TB tests for the full-year.

Gross Profit

(in millions)	2020	2019	% change
Gross Profit	$ 1,232.7	$ 1,005.3	+23%
Gross Margin	65.9%	65.9%	

Generally, our consumables and related products have a higher gross margin than our instrumentation products and service arrangements and fluctuations in the sales levels of these products and services can result in changes in gross margin between periods. Gross profit in 2020 includes the shift in product mix where lower margin instrument products advanced at a faster pace than consumable products as well as higher material costs. These adverse impacts were offset by lower amortization expenses related to developed technology and patent and license rights, which have been acquired in business combinations or asset acquisitions. The amortization expense on acquisition-related intangibles within cost of sales decreased to $63.2 million in 2020 from $71.5 million in 2019. The decrease follows the full amortization of assets previously acquired in 2007. We expect that our acquisition-related intangible amortization will increase as a result of the acquisition of NeuMoDx as further discussed in Note 5 *"Acquisitions and Divestitures"* and in the event of future acquisitions.

Operating Expenses

	2020		2019		
(in millions)	Expenses	% of net sales	Expenses	% of net sales	% change
Research and development	$ 149.1	8.0%	$ 157.4	10.3%	-5%
Sales and marketing	413.7	22.1%	391.9	25.7%	+6%
General and administrative	111.7	6.0%	112.3	7.4%	-1%
Acquisition-related intangible amortization	20.8	1.1%	30.0	2.0%	-31%
Restructuring, acquisition, integration and other, net	150.0	8.0%	199.8	13.1%	-25%
Long-lived asset impairments	1.0	0.1%	140.0	9.2%	-99%
Total operating expenses	$ 846.3	45.2%	$ 1,031.4	67.6%	
Income (loss) from operations	$ 386.4	20.7%	$ (26.1)	(1.7)%	

2020 results include the expenses from the discontinued tender offer while 2019 includes expense related to the decision to stop NGS instrument development and targeted efficiency improvement initiatives.

Research and Development

The overall decrease is the result of the suspended development of NGS-related instrument systems in connection with the 2019 restructuring measures discussed in Note 6 *"Restructuring"*. In 2020, additional costs include costs associated with QIAstat menu expansion, the launch of new products including QIAprep&amp and QIAcuity as well as costs incurred following the acquisition of NeuMoDx. 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 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

Sales and marketing expenses were primarily associated with personnel, commissions, advertising, trade shows, publications, freight and logistics expenses, and other promotional expense. Higher costs in 2020 reflect higher share-based compensation expense as a result of an increase in estimated performance achievement and increases in freight and commissions due to higher sales, partially offset from the lockdowns and limitations resulting from the COVID-19 pandemic, such as restricted travel and postponed trade shows and exhibits. When pandemic lockdowns and restrictions are lifted, we anticipate that absolute sales and marketing costs will increase along with new product introductions and growth in sales of our products.

General and Administrative

The decrease in general and administrative expenses reflects lower share-based compensation following the 2019 restructuring measures partially offset by continued investments in information technology systems, including cyber security, across the

organization as well as an increase in the personnel expenses from performance achievements due to sales volume increases.

Acquisition-Related Intangible Amortization

Amortization expense related to developed technology and patent and license rights acquired in a business combination is included in cost of sales. Amortization of trademarks and customer base acquired in a business combination is recorded in operating expense under the caption "acquisition-related intangible amortization." Amortization expenses of intangible assets not acquired in a business combination are recorded within cost of sales, research and development, or sales and marketing line items based on the use of the asset.

During 2020, amortization expense on acquisition-related intangibles within operating expense decreased to $20.8 million, compared to $30.0 million in 2019. The decrease follows the full amortization of assets previously acquired in 2007. Our acquisition-related intangible amortization will increase in the event of future acquisitions.

Restructuring, Acquisition, Integration and Other, net

Restructuring, acquisition, integration and other, net expenses totaled $150.0 million during the year ended December 31, 2020 and includes acquisition expenses related to the unsuccessful acquisition attempt by Thermo Fisher of $125.5 million, including a $95.0 million expense reimbursement. Additionally, we incurred net acquisition, integration and other expenses of $21.2 million, including charges for NeuMoDx as well as the $11.7 million gain on the value of our interest held on the acquisition date. We also incurred $3.3 million of charges related to the 2019 Restructuring program as discussed further in Note 6. As we continue the integration of NeuMoDx, we expect to incur additional integration costs in 2021.

During 2019, $199.8 million of restructuring, acquisition, integration and other, net expenses were incurred including $163.0 million for the 2019 Restructuring program. Additionally, we incurred net acquisition, integration and other expenses of $36.8 million, including charges for the 2019 acquisitions as well as a $7.4 million gain from the reduction in the fair value of contingent consideration.

Long-lived Asset Impairments

In 2020, $1.0 million impairments to property, plant and equipment were recorded and in 2019, $140.0 million impairments including both intangible assets and property, plant and equipment were recorded primarily in connection with the 2019 restructuring measures as further discussed in Note 6 "Restructuring and Impairments".

Other Income (Expense)

(in millions)	2020	2019	% change
Interest income	$ 10.0	$ 22.1	-55%
Interest expense	(71.3)	(74.2)	-4%
Other income, net	114.3	0.4	
Total other income (expense), net	$ 53.0	$ (51.6)	+203%

Interest income includes interest earned on cash, cash equivalents and short-term investments, income related to certain interest rate derivatives as discussed in Note 14 "Derivatives and Hedging" and other components including the interest portion of operating lease transactions. Interest income earned in 2019 included interest on higher cash balances following the issuance of cash convertible notes in November 2018.

Interest expense primarily relates to debt, discussed in Note 16 "Debt" in the accompanying consolidated financial statements. During 2020, the majority of the 2021 Notes were repaid and we issued new zero coupon convertible debt due in 2027.

Other income, net the for year ended December 31, 2020 includes a gain of $123.3 million for the sale of our investment in ArcherDX, $5.0 million of income from equity method investees and a total of $1.6 million in gains related to prior sales of assets. These gains were partially offset by $9.3 million in unrealized losses recognized for the change in fair market value of all marketable equity securities, $4.1 million net losses on foreign currency transactions and a $2.3 million loss from the sale of an equity security investment.

Other income, net was $0.4 million of income for the year ended December 31, 2019. Other income includes $7.8 million of upward adjustments resulting from observable price changes for non-marketable investments not accounted for under the equity method, $2.1 million in income from equity-method investments and a $0.7 million gain from receipt of shares in settlement of a zero-book value financial instrument held with a third party. This income was partially offset by impairments, including $4.8 million of impairments in non-marketable investments accounted for under the equity method and net losses on foreign currency of $5.7 million for the year ended December 31, 2019.

Income Tax Expense (Benefit)

(in millions)	2020	2019	% change
Income (loss) before income taxes	$ 439.5	$ (77.8)	+665%
Income tax expense (benefit)	80.3	(36.3)	+321%
Net income (loss)	$ 359.2	$ (41.5)	
Effective tax rate	18.3%	46.7%	

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 35%. 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. In 2020 and 2019, our effective tax rates were 18.3% and 46.7%, respectively. The comparison is impacted by pre-tax book income which was higher in 2020 reflecting higher operating income in the current year due to the significant demand for solutions used in COVID-19 testing. This compares to pre-tax book loss in 2019 which reflects the restructuring charges incurred during the third quarter of 2019. Additionally, we record partial tax exemptions on foreign income primarily derived from operations in Germany, the Netherlands and Singapore. These foreign tax benefits are due to a combination of favorable tax laws, rules, and exemptions in these jurisdictions, including intercompany foreign royalty income in Germany which is statutorily exempt from trade tax. Further, we have intercompany financing arrangements in which the intercompany income is nontaxable or partially exempt. During 2020, we have intercompany financing arrangements through Dubai, and through mid-2019 had arrangements through Luxembourg and Ireland.

See Note 17 "Income Taxes" to the consolidated financial statements for a full reconciliation of the effective tax rate to The Netherlands statutory rate.

In future periods, our effective tax rate may fluctuate from similar or other factors as discussed in “Changes in tax laws or their application could adversely affect our results of operations or financial flexibility” in the “Opportunities and Risks” section.

Foreign Currencies

QIAGEN N.V.’s reporting currency is the U.S. dollar, and most of our subsidiaries’ functional currencies are the local currencies of the countries in which they are headquartered. All amounts in the financial statements of entities whose functional currency is not the U.S. dollar are translated into U.S. dollar equivalents at exchange rates as follows: (1) assets and liabilities at period-end rates, (2) income statement accounts at average exchange rates for the period, and (3) components of shareholders’ equity at historical rates. Translation gains or losses are recorded in shareholders’ equity, and transaction gains and losses are reflected in net income. The net

loss on foreign currency transactions is included in other income, net, and in 2020, 2019 and 2018 was $4.1 million, $5.7 million, and $12.3 million, respectively.

Derivatives and Hedging

In the ordinary course of business, we use derivative instruments, including swaps, forwards and/or options, to manage potential losses from foreign currency exposures and variable rate debt. The principal objective of such derivative instruments is to minimize the risks and/or costs associated with global financial and operating activities. We do not utilize derivative or other financial instruments for trading or speculative purposes. We recognize all derivatives as either assets or liabilities on the balance sheet, 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. In determining fair value, we consider both the counterparty credit risk and our own creditworthiness, to the extent that the derivatives are not covered by collateral agreements with the respective counterparties. To determine our own credit risk, we estimated our own credit rating by benchmarking the price of our outstanding debt to publicly-available comparable data from rated companies. Using the estimated rating, we quantify our credit risk by reference to publicly-traded debt with a corresponding rating.

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 our balance sheet exposure on a group-wide basis using foreign exchange forwards, options and cross-currency swaps.

Interest Rate Derivatives

We use interest rate derivative contracts on certain borrowing transactions to hedge interest rate exposures. We have entered into interest rate swaps in which we agree to exchange, at specified intervals, the difference between fixed and floating interest amounts calculated by reference to an agreed-upon notional principal amount.

We also make use of economic hedges. Further details of our derivative and hedging activities can be found in Note 14 "Derivatives and Hedging" to the accompanying consolidated financial statements.

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 December 31, 2020, we had cash and cash equivalents of $598.0 million and short-term investments of $117.2 million. As of December 31, 2019, we had cash and cash equivalents of $623.6 million, restricted cash of $5.7 million and short-term investments of $129.6 million. 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 December 31, 2020, cash and cash equivalents had decreased by $31.4 million from December 31, 2019, primarily as a result of cash used in investing activities of $443.3 million and cash used financing activities of $50.1 million, partially offset by cash provided by operating activities of $457.8 million. As of December 31, 2020 and 2019, we had working capital of $1.05 billion and $618.9 million, respectively.

Cash Flow Summary

(in millions)	2020	2019
Net cash provided by operating activities	$ 457.8	$ 330.8
Net cash used in investing activities	$ (443.3)	$ (222.3)
Net cash used in financing activities	$ (50.1)	$ (639.1)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	$ 4.2	$ 0.8
Net decrease in cash, cash equivalents and restricted cash	$ (31.4)	$ (529.7)

Operating Activities

For the years ended December 31, 2020 and 2019, we generated net cash from operating activities of $457.8 million and $330.8 million, respectively. While net income was $359.2 million in 2020, non-cash components in income included $205.0 million of depreciation and amortization, a gain of $121.8 million on sales of investments primarily related to the sale of the investment in ArcherDX as discussed in Note 10 "Investments", $42.3 million of amortization of debt discount and issuance costs and $40.9 million of share-based compensation expense. Operating cash flows include a net decrease in working capital of $130.2 million excluding changes in fair value of derivative instruments. The current period change in working capital is primarily due to increased inventories in order to meet the increase in demand and decreased accrued and other current liabilities following cash payments made in connection with the 2019 restructuring measures. 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 $443.3 million of cash was used in investing activities during 2020, compared to $222.3 million during 2019. Investing activities during 2020 consisted principally of $239.6 million in cash paid for acquisitions, net of cash acquired primarily for NeuMoDx, $171.5 million paid for intangible assets including $135.9 million of the remaining milestone payments for the digital PCR assets acquired from Formulatrix in 2019, $132.8 million in cash paid for purchases of property and equipment which includes the investments we are making in expanded production capacity, $53.4 million paid for collateral assets and $49.8 million for purchases of short-term investments. This was partially offset by $181.2 million from the sale of short-term investments and $25.6 million net proceeds from sales of investments in privately held companies as discussed in Note 10 "Investments".

Cash used in investing activities during 2019 includes $156.9 million paid for intangible assets primarily related to the asset acquisition from Formulatrix, $294.0 million for purchases of short-term investments and $118.0 million purchases of property, plant and equipment partially offset by $396.1 million from the sale of short-term investments.

Financing Activities

For the year ended December 31, 2020, cash used in financing activities was $50.1 million compared to cash provided by financing activities of $639.1 million in 2019. Financing activities during 2020 consisted primarily of net payments of $468.6 million in connection with the final conversion, redemption and termination of the 2021 Cash Convertible Notes and warrants as discussed further in Note 16 "Debt" as well as $64.0 million for repurchases of QIAGEN shares. This was partially offset by $497.6 million in proceeds from issuance of the 2027 Zero Coupon Convertible Notes.

In 2019, cash used in financing activities totaled $639.1 million primarily due to $506.4 million repayments of long-term debt and repurchases of QIAGEN shares totaled $74.5 million in 2019.

Other Factors Affecting Liquidity and Capital Resources

As of December 31, 2020, we carry $1.9 billion of long-term debt, of which $42.5 million is current.

In December 2020, we issued $500.0 million aggregate principal amount of zero coupon Convertible Notes due in 2027 (2027 Notes). The 2027 Notes will mature on December 17, 2027 unless converted in accordance with their terms prior to such date as described more fully in Note 16 "Debt".

In November 2018, we issued $500.0 million aggregate principal amount of Cash Convertible Senior Notes which is due in 2024 (2024 Notes). 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). 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 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 16 "Debt".

In December 2020, we obtained a €400 million syndicated revolving credit facility with a contractual life of three years with the ability to extend by one year two times. No amounts were utilized at December 31, 2020. The facility can be utilized in Euro and bears interest of 0.525% to 1.525% above EURIBOR, and is offered with interest periods of one, three or six months. The interest rate is linked to our environmental, social and governance (ESG) performance. We have additional credit lines totaling €27.0 million with no expiration date, none of which were utilized as of December 31, 2020.

In March 2014, we issued Cash Convertible Senior Notes of which $0.2 million remains outstanding as of December 31, 2020 and will be repaid at maturity on March 19, 2021.

In October 2012, we completed a U.S. private placement with three series at a weighted average interest rate of 3.66%. The following two series remain outstanding at December 31, 2020: (1) $300 million 10-year term due in 2022 (3.75%); and (2) $27 million 12-year term due in 2024 (3.90%).

In connection with certain acquisitions, we could be required to make additional contingent cash payments totaling up to $26.6 million based on the achievement of certain revenue and operating results milestones as further discussed in Note 20 "Commitments and Contingencies".

In May 2019, we announced our sixth share repurchase program of up to $100 million of our common shares. During 2020, we repurchased 1.3 million QIAGEN shares for $64.0 million (including transaction costs). This program ended in December 2020. 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 any 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.

Off-Balance Sheet Arrangements

We did not use special purpose entities and do not have off-balance sheet financing arrangements as of and during the years ended December 31, 2020, 2019 and 2018.

Contractual Obligations

As of December 31, 2020, our future contractual cash obligations are as follows:

Contractual Obligations	Payments Due by Period						
(in millions)	Total	2021	2022	2023	2024	2025	Thereafter
Long-term debt [1]	$ 1,980.0	$ 64.7	$ 505.3	$ 370.2	$ 578.9	$ 0.3	$ 460.7
Purchase obligations	250.8	199.8	42.6	5.4	3.0	-	-
Operating leases	117.0	25.4	21.0	16.3	10.8	6.7	36.9
License and royalty payments	30.0	10.0	7.2	4.5	2.6	2.3	3.4
Total contractual cash obligations	$ 2,377.9	$ 299.9	$ 576.1	$ 396.3	$ 595.3	$ 9.3	$ 501.0

[1] Amounts include required principal, stated at the current carrying values, and interest payments.

In addition to the above, and pursuant to the purchase agreements for certain acquisitions and other contractual arrangements, we could be required to make additional contingent cash payments totaling up to $26.6 million based on the achievement of certain revenue and operating results milestones as follows:

(in millions)	
2021	$ 8.9
2022	17.7
	$ 26.6

Of the $26.6 million total contingent obligation, we have assessed the fair value at December 31, 2020 to be $23.6 million which is included in accrued and other current liabilities in the accompanying consolidated balance sheet.

Liabilities associated with uncertain tax positions, including interest and penalties, are currently estimated at $104.9 million as of December 31, 2020 and are not included in the table above, as we cannot reasonably estimate when, if ever, an amount would be

paid to a government agency. Ultimate settlement of these liabilities is dependent on factors outside of our control, such as examinations by each agency and expiration of statutes of limitation for assessment of additional taxes.

Dividend

QIAGEN has not paid a cash dividend since its inception and does not intend to pay any dividends in the foreseeable future. We intend to retain any earnings for the development of the business.

Credit Rating

QIAGEN is currently not rated by any credit rating agency.