

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2020

OR

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

For the transition period from _____ to _____.

Commission File Number: 001-38319

QUANTERIX CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

20-8957988

(IRS Employer Identification No.)

900 Middlesex Turnpike

Billerica, MA

(Address of principal executive offices)

01821

(Zip Code)

Registrant's telephone number, including area code: **(617) 301-9400**

Securities registered pursuant to Section 12(b) of the Exchange Act:

<u>Title of each class:</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered:</u>
Common Stock, \$0.001 par value per share	QTRX	The Nasdaq Global Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

As of May 1, 2020, the registrant had 28,310,994 shares of common stock, \$0.001 par value per share, outstanding.

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Special Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q are forward-looking statements. In some cases, you can identify forward-looking statements by words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “seek,” “should,” “target,” “will,” “would,” or the negative of these words or other comparable terminology. These forward-looking statements include, but are not limited to, statements about our financial performance, and are subject to a number of risks, uncertainties and assumptions, including those described in this Quarterly Report on Form 10-Q and in “Part I, Item 1A, Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019 or other filings that we make with the Securities and Exchange Commission, or SEC. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, events or circumstances reflected in the forward-looking statements will be achieved or occur. You should read this Quarterly Report on Form 10-Q, and the documents that we reference herein and have filed with the SEC, with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this Quarterly Report on Form 10-Q to conform these statements to new information, actual results or to changes in our expectations, except as required by law.

Unless the context otherwise requires, the terms “Quanterix,” the “Company,” “we,” “us” and “our” in this Quarterly Report on Form 10-Q refer to Quanterix Corporation and its subsidiaries. “Quanterix,” “Simoa,” “Simoa HD-X,” “Simoa HD-1,” “SR-X,” “SP-X,” “HD-X Analyzer,” “HD-1 Analyzer” and our logo are our trademarks. All other service marks, trademarks and trade names appearing in this Quarterly Report on Form 10-Q are the property of their respective owners. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

PART I — FINANCIAL INFORMATION**Item 1. Financial Statements**

Quanterix Corporation
Condensed Consolidated Balance Sheets
(amounts in thousands, except share and per share data)

	(Unaudited)	
	March 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 96,359	\$ 109,155
Accounts receivable (less reserve for doubtful accounts of \$277 and \$162 as of March 31, 2020 and December 31, 2019, respectively; including \$91 and \$186 from related parties as of March 31, 2020 and December 31, 2019, respectively)	12,065	10,906
Inventory	11,392	10,463
Prepaid expenses and other current assets	2,722	2,137
Total current assets	122,538	132,661
Restricted cash	1,000	1,026
Property and equipment, net	11,992	12,047
Intangible assets, net	13,115	14,307
Goodwill	8,914	9,353
Right-of-use assets	12,221	—
Other non-current assets	525	557
Total assets	\$ 170,305	\$ 169,951
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable (including \$29 and \$36 to related parties as of March 31, 2020 and December 31, 2019, respectively)	\$ 4,723	\$ 5,777
Accrued compensation and benefits	4,292	6,570
Other accrued expenses (including \$232 and \$0 to related parties as of March 31, 2020 and December 31, 2019, respectively)	3,068	2,498
Deferred revenue (including \$36 and \$55 with related parties as of March 31, 2020 and December 31, 2019, respectively)	5,438	4,697
Current portion of long term debt	—	75
Short term lease liabilities	305	—
Other current liabilities	184	216
Total current liabilities	18,010	19,833
Deferred revenue, net of current portion	396	466
Long term debt, net of current portion	7,608	7,587
Long term lease liabilities	22,741	—
Other non-current liabilities	2,504	13,407
Total liabilities	51,259	41,293
Commitments and contingencies (Note 11)		
Stockholders' equity:		
Common stock, \$0.001 par value:		
Authorized—120,000,000 shares as of March 31, 2020 and December 31, 2019; issued and outstanding — 28,243,442 and 28,112,201 shares as of March 31, 2020 and December 31, 2019, respectively	28	28
Additional paid-in capital	348,072	345,027
Accumulated other comprehensive loss	(1,200)	(153)
Accumulated deficit	(227,854)	(216,244)
Total stockholders' equity	119,046	128,658
Total liabilities and stockholders' equity	\$ 170,305	\$ 169,951

See accompanying notes

Quanterix Corporation
Condensed Consolidated Statements of Operations
(amounts in thousands, except share and per share data)
(Unaudited)

	Three Months Ended March 31,	
	2020	2019
Product revenue (including related party activity of \$120 and \$80 for the three months ended March 31, 2020 and 2019, respectively)	\$ 9,833	\$ 9,547
Service and other revenue (including related party activity of \$24 and \$23 for the three months ended March 31, 2020 and 2019, respectively)	5,762	2,790
Collaboration and license revenue	132	—
Total revenue	15,727	12,337
Costs of goods sold:		
Cost of product revenue (including related party activity of \$63 and \$35 for the three months ended March 31, 2020 and 2019, respectively)	6,186	4,248
Cost of services and other revenue	2,728	2,082
Total costs of goods sold and services	8,914	6,330
Gross profit	6,813	6,007
Operating expenses:		
Research and development	4,268	3,852
Selling, general and administrative	14,273	11,512
Total operating expenses	18,541	15,364
Loss from operations	(11,728)	(9,357)
Interest income (expense), net	161	21
Other income (expense), net	(167)	(47)
Loss before income taxes	(11,734)	(9,383)
Income tax benefit (provision)	124	(22)
Net loss	\$ (11,610)	\$ (9,405)
Net loss per share, basic and diluted	\$ (0.41)	\$ (0.42)
Weighted-average common shares outstanding, basic and diluted	28,179,132	22,422,960

See accompanying notes

Quanterix Corporation
Condensed Consolidated Statements of Comprehensive Loss
(amounts in thousands)
(Unaudited)

	<u>Three Months Ended March 31,</u>	
	<u>2020</u>	<u>2019</u>
Net loss	\$ (11,610)	\$ (9,405)
Other comprehensive loss:		
Cumulative translation adjustment	(1,047)	—
Total other comprehensive loss	(1,047)	—
Comprehensive loss	<u>\$ (12,657)</u>	<u>\$ (9,405)</u>

See accompanying notes

Quanterix Corporation
Condensed Consolidated Statements of Cash Flows
(amounts in thousands)
(Unaudited)

	Three Months Ended	
	March 31,	
	2020	2019
Operating activities		
Net loss	\$ (11,610)	\$ (9,405)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	1,046	409
Inventory step-up amortization	438	—
Stock-based compensation expense	2,109	1,284
Non-cash interest expense	22	24
Loss on disposal of fixed assets	69	—
Changes in operating assets and liabilities:		
Accounts receivable	(1,174)	(465)
Prepaid expenses and other assets	(495)	142
Inventory	(1,398)	(1,798)
Other non-current assets	32	3
Accounts payable	(1,145)	(1,321)
Accrued compensation and benefits, other accrued expenses and other current liabilities	(1,710)	(327)
Contract acquisition costs	(110)	(25)
Operating lease liabilities	253	—
Other non-current liabilities	(177)	6,082
Deferred revenue	671	45
Net cash used in operating activities	<u>(13,179)</u>	<u>(5,352)</u>
Investing activities		
Purchases of property and equipment	(426)	(5,917)
Net cash used in investing activities	<u>(426)</u>	<u>(5,917)</u>
Financing activities		
Proceeds from stock options exercised	496	503
Proceeds from ESPP purchase	440	328
Payments on notes payable	(75)	—
Net cash provided by financing activities	<u>861</u>	<u>831</u>
Net decrease in cash and cash equivalents	(12,744)	(10,438)
Effect of foreign currency exchange rate on cash	(78)	—
Cash, restricted cash, and cash equivalents at beginning of period	110,181	45,429
Cash, restricted cash, and cash equivalents at end of period	<u>\$ 97,359</u>	<u>\$ 34,991</u>
Supplemental cash flow information		
Cash paid for interest	\$ 155	\$ 160
Purchases of property and equipment included in accounts payable	\$ 102	\$ 11
Reconciliation of cash, cash equivalents, and restricted cash:		
Cash and cash equivalents	\$ 96,359	\$ 33,972
Restricted cash	<u>\$ 1,000</u>	<u>\$ 1,019</u>
Total cash, cash equivalents, and restricted cash	<u>\$ 97,359</u>	<u>\$ 34,991</u>

See accompanying notes

Quanterix Corporation
Condensed Consolidated Statements of Stockholders' Equity
(amounts in thousands, except share data)
(Unaudited)

	Common stock shares	Common stock value	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
Balance at December 31, 2019	28,112,201	\$ 28	\$ 345,027	\$ (153)	\$ (216,244)	\$ 128,658
Exercise of common stock options and vesting of restricted stock	108,548	—	496	—	—	496
ESPP stock purchase	22,693	—	440	—	—	440
Stock-based compensation expense	—	—	2,109	—	—	2,109
Cumulative translation adjustment	—	—	—	(1,047)	—	(1,047)
Net loss	—	—	—	—	(11,610)	(11,610)
Balance at March 31, 2020	28,243,442	\$ 28	\$ 348,072	\$ (1,200)	\$ (227,854)	\$ 119,046

	Common stock shares	Common stock value	Additional paid-in capital	Accumulated other comprehensive loss	Accumulated deficit	Total stockholders' equity
Balance at December 31, 2018	22,369,036	\$ 22	\$ 216,931	\$ —	\$ (175,888)	\$ 41,065
Cumulative-effect adjustment for the adoption of ASC 606	—	—	—	—	440	440
Exercise of common stock options and vesting of restricted stock	102,361	1	502	—	—	503
ESPP stock purchase	20,050	—	328	—	—	328
Stock-based compensation expense	—	—	1,284	—	—	1,284
Net loss	—	—	—	—	(9,405)	(9,405)
Balance at March 31, 2019	22,491,447	\$ 23	\$ 219,045	\$ —	\$ (184,853)	\$ 34,215

See accompanying notes

Quanterix Corporation
Notes to condensed consolidated financial statements
(Unaudited)

1. Organization and operations

Quanterix Corporation (Nasdaq: QTRX) (the Company) is a life sciences company that has developed next generation, ultra-sensitive digital immunoassay platforms that advance precision health for life sciences research and diagnostics. The Company's platforms are based on its proprietary digital "Simoa" detection technology. The Company's Simoa bead-based and planar array platforms enable customers to reliably detect protein biomarkers in extremely low concentrations in blood, serum and other fluids that, in many cases, are undetectable using conventional, analog immunoassay technologies, and also allow researchers to define and validate the function of novel protein biomarkers that are only present in very low concentrations and have been discovered using technologies such as mass spectrometry. These capabilities provide the Company's customers with insight into the role of protein biomarkers in human health that has not been possible with other existing technologies and enable researchers to unlock unique insights into the continuum between health and disease. The Company is currently focusing on protein detection, which it believes is an area of significant unmet need and where it has significant competitive advantages. However, in addition to enabling new applications and insights in protein analysis, the Company's Simoa platforms have also demonstrated applicability across other testing applications, including detection of nucleic acids and small molecules.

The Company launched its first immunoassay platform, the Simoa HD-1, in 2014. The HD-1 is a fully automated immunoassay bead-based platform with multiplexing and custom assay capability, and related assay test kits and consumable materials. The Company launched a second bead-based immunoassay platform (SR-X) in the fourth quarter of 2017 with a more compact footprint than the Simoa HD-1 and less automation designed for lower volume requirements while still allowing multiplexing and custom assay capability. The Company initiated an early-access program for its third instrument (SP-X) on the new Simoa planar array platform in January 2019, with the full commercial launch commencing in April 2019. In July 2019, the Company launched the Simoa HD-X, an upgraded version of the Simoa HD-1 which replaces the HD-1. The HD-X has been designed to deliver significant productivity and operational efficiency improvements, as well as greater user flexibility. The Company began shipping and installing HD-X instruments at customer locations in the third quarter of 2019, ahead of its original fourth quarter expectation. The Company also performs research services on behalf of customers to apply the Simoa technology to specific customer needs. The Company's customers are primarily in the research use only market, which includes academic and governmental research institutions, the research and development laboratories of pharmaceutical manufacturers, contract research organizations, and specialty research laboratories.

The Company acquired Aushon Biosystems, Inc. (Aushon) in January 2018. With the acquisition of Aushon, the Company acquired a CLIA certified laboratory, as well as Aushon's proprietary sensitive planar array detection technology. Leveraging its proprietary sophisticated Simoa image analysis and data analysis algorithms, the Company further refined this planar array technology to develop the SP-X instrument to provide the same Simoa sensitivity found in its bead-based platform.

The Company completed the acquisition of UmanDiagnostics AB (Uman), a Swedish company located in Umea, Sweden, in August 2019. The acquisition closed with respect to 95% of the outstanding shares of capital stock of Uman on July 1, 2019 and with respect to the remaining 5% of the outstanding shares of capital stock of Uman on August 1, 2019. Uman supplies neurofilament light (Nf-L) antibodies and ELISA kits, which are widely recognized by researchers and biopharmaceutical and diagnostics companies world-wide as the premier solution for the detection of Nf-L to advance the development of therapeutics and diagnostics for neurodegenerative conditions. With the acquisition of Uman, the Company has secured a long-term source of supply for a critical technology.

“At-the-market offering”

On March 19, 2019, the Company entered into a Sales Agreement (the Sales Agreement) with Cowen and Company, LLC (Cowen) with respect to an “at-the-market” offering program under which the Company may offer and

sell, from time to time at its sole discretion, shares of its common stock, par value \$0.001 per share, having an aggregate offering price of up to \$50.0 million through Cowen as its sales agent.

On June 5, 2019, the Company issued approximately 2.2 million shares of common stock at an average stock price of \$22.73 per share pursuant to the terms of the Sales Agreement. The “at-the-market” offering resulted in gross proceeds of \$49.7 million. The Company incurred \$1.7 million in issuance costs associated with the “at-the-market” offering, resulting in net proceeds to the Company of \$48.0 million.

Underwritten public offering

On August 8, 2019, the Company entered into an underwriting agreement with J.P. Morgan Securities LLC and SVB Leerink LLC, as representatives of the several underwriters, relating to an underwritten public offering of approximately 2.7 million shares of the Company’s common stock, par value \$0.001 per share. The underwritten public offering resulted in gross proceeds of \$69.0 million. The Company incurred \$4.5 million in issuance costs associated with the underwritten public offering, resulting in net proceeds to the Company of \$64.5 million.

Basis of presentation

The interim condensed consolidated financial statements are unaudited. The unaudited condensed consolidated financial statements reflect, in the opinion of the Company’s management, all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of financial position, results of operations, comprehensive loss and cash flows for each period presented in accordance with United States generally accepted accounting principles (U.S. GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, certain information and disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted. These interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes thereto included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2019 filed with the Securities and Exchange Commission on March 13, 2020 (the 2019 Annual Report on Form 10-K). The consolidated financial information as of December 31, 2019 has been derived from the audited 2019 consolidated financial statements included in the 2019 Annual Report on Form 10-K.

2. Significant accounting policies

Principles of consolidation

The condensed consolidated financial statements have been prepared in accordance with U.S. GAAP and include the accounts of Quanterix Corporation and its wholly-owned subsidiaries. All material intercompany transactions and balances have been eliminated in consolidation.

Use of estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. In making those estimates and assumptions, the Company bases its estimates on historical experience and on various other assumptions believed to be reasonable. The Company’s significant estimates included in the preparation of the consolidated financial statements are related to revenue recognition, fair value of equity instruments and notes receivable, fair value of assets acquired and liabilities assumed in acquisitions, valuation allowances recorded against deferred tax assets, right-of-use assets and lease liabilities, and stock-based compensation. Actual results could differ from those estimates.

Foreign Currency

The Company translates assets and liabilities of its foreign subsidiaries at rates in effect at the end of the reporting period. Revenues and expenses are translated at average rates in effect during the reporting period. Translation adjustments are included in accumulated other comprehensive loss.

Income taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on differences between the consolidated financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions in accordance with the provisions of Accounting Standards Codification (ASC) 740, *Income Taxes* (ASC 740). When uncertain tax positions exist, the Company recognizes the tax benefit of tax positions to the extent that the benefit will more likely than not be realized. The determination as to whether the tax benefit will more likely than not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of March 31, 2020 the Company did not have any significant uncertain tax positions.

Business combinations

Under the acquisition method of accounting, the Company allocates the fair value of the total consideration transferred to the tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values on the date of acquisition. The fair values assigned, defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between willing market participants, are based on estimates and assumptions determined by management. The excess consideration over the aggregate fair value of tangible and intangible assets, net of liabilities assumed, is recorded as goodwill. These valuations require significant estimates and assumptions, especially with respect to intangible assets.

The Company typically uses the discounted cash flow method to value acquired intangible assets. This method requires significant management judgment to forecast future operating results and establish residual growth rates and discount factors. The estimates used to value and amortize intangible assets are consistent with the plans and estimates that are used to manage the business and are based on available historical information and industry estimates and averages. If the subsequent actual results and updated projections of the underlying business activity change compared with the assumptions and projections used to develop these values, the Company could experience impairment charges. In addition, the Company has estimated the economic lives of certain acquired assets and these lives are used to calculate depreciation and amortization expense. If estimates of the economic lives change, depreciation or amortization expenses could be accelerated or slowed.

Restricted cash

Restricted cash primarily represents collateral for a letter of credit issued as security for the lease for the Company's headquarters in Billerica, Massachusetts. The restricted cash is long term in nature as the Company will not have access to the funds until more than one year from March 31, 2020.

Recent accounting pronouncements

The Company is considered to be an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, as amended (JOBS Act). The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. The Company has elected to avail itself of this extended transition period and, as a result, the

Company will not be required to adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies so long as the Company remains an emerging growth company.

Recently Adopted

In February 2016, the Financial Accounting Standards Board (FASB) established Topic 842, *Leases*, by issuing Accounting Standards Update (ASU) No. 2016-02, which requires lessees to recognize leases on-balance sheet and disclose key information about leasing arrangements. Topic 842 was subsequently amended by ASU No. 2018-01, *Land Easement Practical Expedient for Transition to Topic 842*; ASU No. 2018-10, *Codification Improvements to Topic 842, Leases*; and ASU No. 2018-11, *Targeted Improvements*. The new standard establishes a right-of-use (ROU) model that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. An optional transition approach is required under ASU 2018-11, applying the new standard to all leases existing at the date of initial application.

On January 1, 2020, the Company adopted ASU No. 2016-02, *Leases (Topic 842)*, (ASC 842), using the optional transition method allowing entities to recognize a cumulative effect adjustment to the opening balance sheet without restating comparative prior periods presented. ASC 842 requires a lessee to recognize assets and liabilities on the balance sheet for most leases and changes many key definitions, including the definition of a lease. Lessees will continue to differentiate between finance leases and operating, and classification will impact expense recognition.

The Company elected the following practical expedients for all lease asset classes, which must be elected as a package and applied consistently to all of its leases at the transition date: i) the Company did not reassess whether any expired or existing contracts are or contain leases; ii) the Company did not reassess the lease classification for any expired or existing leases (that is, all existing leases that were classified as operating leases in accordance with ASC 840, *Leases* (ASC 840), are classified as operating leases); and iii) the Company did not reassess initial direct costs for any existing leases.

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the facts and circumstances present in the arrangement. Leases with a term greater than one year are recognized on the balance sheet as right-of-use assets and short-term and long-term lease liabilities, as applicable. The Company has elected the practical expedient not to recognize leases on the balance with a term of twelve months or less. The Company's leases consist of office and lab space and office equipment. All of the Company's leases are classified as operating, and options to renew a lease are only included in the lease term to the extent those options are reasonably certain to be exercised. Additionally, the Company elected to apply the practical expedient not to separate lease and nonlease components for all leases.

Operating lease liabilities and their corresponding ROU assets are initially recorded based on the present value of lease payments over the expected remaining lease term. The rate implicit in lease contracts is typically not readily determinable, and as a result, the Company utilizes its incremental borrowing rate to discount lease payments, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments, for a similar term, in a similar economic environment. To estimate its incremental borrowing rate, a credit rating applicable to the Company is estimated using a synthetic credit rating analysis since the Company does not currently have a rating agency-based credit rating.

The adoption of ASC 842 resulted in the recognition of operating lease ROU assets and operating lease liabilities of \$12.2 million and \$22.8 million, respectively, on the Company's condensed consolidated balance sheet, with the difference between the ROU asset and lease liability primarily attributable to unamortized lease incentives and deferred rent related to its lease for its corporate headquarters at 900 Middlesex Turnpike in Billerica, Massachusetts (the "900 Middlesex Turnpike Lease").

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment*. This ASU eliminates Step 2 from the goodwill impairment test. In addition, income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit should be

considered when measuring the goodwill impairment loss, if applicable. The amendments also eliminate the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. An entity still has the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. The Company adopted this ASU on January 1, 2020 with no material effect to its financial statements.

In August 2018, the FASB issued ASU No. 2018-13, “*Fair Value Measurement (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*”. This ASU removed the following disclosure requirements: (1) the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy; (2) the policy for timing of transfers between levels; and (3) the valuation processes for Level 3 fair value measurements. Additionally, this update added the following disclosure requirements: (1) the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period; and (2) the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 will be effective for fiscal years beginning after December 15, 2019 with early adoption permitted. The Company adopted this ASU on January 1, 2020 with no material effect to its financial statements.

Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments — Credit Losses: Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which amends the impairment model by requiring entities to use a forward-looking approach based on expected losses to estimate credit losses on certain types of financial instruments, including trade receivables and available-for-sale debt securities. The standard is effective for the Company beginning in the first quarter of 2021, with early adoption permitted. The Company is currently evaluating the expected impact of ASU 2016-13 on its financial statements.

There have been no other material changes to the significant accounting policies and recent accounting pronouncements previously disclosed in the 2019 Annual Report on Form 10-K.

3. Revenue recognition

The Company recognizes revenue when a customer obtains control of a promised good or service. The amount of revenue recognized reflects consideration that the Company expects to be entitled to receive in exchange for these goods and services, incentives and taxes collected from customers, that are subsequently remitted to governmental authorities.

The Company adopted Topic 606, *Revenue from Contracts with Customers* (ASC 606) on January 1, 2019, using the modified retrospective method for all contracts not completed as of the date of adoption.

Customers

The Company’s customers primarily consist of entities engaged in the life sciences research market that pursue the discovery and development of new drugs for a variety of neurologic, cardiovascular, oncologic and other protein biomarkers associated with diseases. The Company’s customer base includes several of the largest biopharmaceutical companies, academic research organizations and distributors who serve certain geographic markets.

Product revenue

The Company's products are composed of analyzer instruments, assay kits and other consumables such as reagents. Products are sold directly to biopharmaceutical and academic research organizations or are sold through distributors in EMEA and Asia Pacific regions. The sales of instruments are generally accompanied by an initial year of implied service-type warranties and may be bundled with assays and other consumables and may also include other items such as training and installation of the instrument and/or an extended service warranty. Revenues from the sale of products are recognized at a point in time when the Company transfers control of the product to the customer, which is upon installation for instruments sold to direct customers, and based upon shipping terms for assay kits and other consumables. Revenue for instruments sold to distributors is generally recognized based upon shipping terms (either upon shipment or delivery).

Service and other revenue

Service revenues are composed of contract research services, initial implied one-year service-type warranties, extended services contracts and other services such as training. Contract research services are provided through the Company's Accelerator Laboratory and generally consist of fixed fee contracts. Revenues from contract research services are recognized at a point in time when the Company completes and delivers its research report on each individually completed study, or over time if the contractual provisions allow for the collection of transaction consideration for costs incurred plus a reasonable margin through the period of performance of the services. Revenues from service-type warranties are recognized ratably over the contract service period. Revenues from other services are immaterial.

Collaboration and license revenue

The Company may enter into agreements to license the intellectual property and know-how associated with its instruments in exchange for license fees and future royalties (as described below). The license agreements provide the licensee with a right to use the intellectual property with the license fee revenues recognized at a point in time as the underlying license is considered functional intellectual property. The Company recognized revenues from a sales- or usage- based royalties related to the licensing of the Company's technology and intellectual property.

Payment terms

The Company's payment terms vary by the type and location of customer and the products or services offered. Payment from customers is generally required in a term ranging from 30 to 45 days from date of shipment or satisfaction of the performance obligation. The Company does not provide financing arrangements to its customers.

Disaggregated revenue

When disaggregating revenue, the Company considered all of the economic factors that may affect its revenues. The following tables disaggregate the Company's revenue from contracts with customers by revenue type (in thousands):

(in thousands)	Three Months Ended March 31, 2020			
	NA	EMEA	Asia Pacific	Total
Product revenues				
Instruments	\$ 1,753	\$ 726	\$ 1,209	\$ 3,688
Consumable and other products	2,924	2,704	517	6,145
Totals	\$ 4,677	\$ 3,430	\$ 1,726	\$ 9,833
Service and other revenues				
Service-type warranties	\$ 748	\$ 379	\$ 52	\$ 1,179
Research services	3,667	82	538	4,287
Other services	231	60	5	296
Totals	\$ 4,646	\$ 521	\$ 595	\$ 5,762
Collaboration and license revenue				
Collaboration and license revenue	\$ 122	\$ 10	\$ —	\$ 132
Totals	\$ 122	\$ 10	\$ —	\$ 132

(in thousands)	Three Months Ended March 31, 2019			
	NA	EMEA	Asia Pacific	Total
Product revenues				
Instruments	\$ 1,397	\$ 1,145	\$ 874	\$ 3,416
Consumable and other products	3,619	2,088	424	6,131
Totals	\$ 5,016	\$ 3,233	\$ 1,298	\$ 9,547
Service and other revenues				
Service-type warranties	\$ 689	\$ 234	\$ 37	\$ 960
Research services	1,504	—	—	1,504
Other services	201	108	17	326
Totals	\$ 2,394	\$ 342	\$ 54	\$ 2,790
Collaboration and license revenue				
Collaboration and license revenue	\$ —	\$ —	\$ —	\$ —
Totals	\$ —	\$ —	\$ —	\$ —

The Company's contracts with customers may include promises to transfer multiple products and services to a customer. The Company combines any performance obligations that are immaterial with one or more other performance obligations that are material to the contract. For arrangements with multiple performance obligations, the Company allocates the contract transaction price, including discounts, to each performance obligation based on its relative standalone selling price. Judgment is required to determine the standalone selling price for each distinct performance obligation. The Company determines standalone selling prices based on prices charged to customers in observable transactions, and uses a range of amounts to estimate standalone selling prices for each performance obligation. The Company may have more than one range of standalone selling price for certain products and services based on the pricing for different customer classes.

Variable consideration in the Company's contracts primarily relates to (i) sales- and usage-based royalties related to the license of intellectual property in collaboration and license contracts and (ii) certain non-fixed fee research services contracts. ASC 606 provides for an exception to estimating the variable consideration for sales- and usage-based royalties related to the license of intellectual property, such that the sales- or usage-based royalty will be recognized in

the period the underlying transaction occurs. The Company has recorded sales- or usage-based royalty revenue for the three months ended March 31, 2020 related to the intellectual property licensed by the Company. The Company recognizes revenue from sales- or usage-based royalty revenue at the later of when the sale or usage occurs and the satisfaction or partial satisfaction of the performance obligation to which the royalty has been allocated.

The aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied or are partially satisfied as of March 31, 2020 and 2019 is \$5.8 million and \$5.9 million, respectively. As of March 31, 2020, of the performance obligations not yet satisfied or partially satisfied, \$5.4 million is expected to be recognized as revenue in the next 12 months, with the remainder to be recognized within the 24 months thereafter. The \$5.8 million at March 31, 2020 principally consists of amounts billed for undelivered services related to initial and extended service-type warranties and research services, as well as \$1.7 million related to undelivered licenses of intellectual property for a diagnostics company (see Note 13).

Changes in deferred revenue from contracts with customers were as follows (in thousands):

	Three Months Ended March 31, 2020	
Balance at December 31, 2019	\$	5,163
Deferral of revenue		1,850
Recognition of deferred revenue		(1,179)
Balance at March 31, 2020	\$	<u>5,834</u>

Costs to obtain a contract

The Company's sales commissions are generally based on revenues of the Company. The Company has determined that certain commissions paid under its sales incentive programs meet the requirements to be capitalized as they are incremental and would not have occurred absent a customer contract. The change in the balance of costs to obtain a contract are as follows (in thousands):

	Three Months Ended March 31, 2020	
Balance at December 31, 2019	\$	335
Deferral of costs to obtain a contract		94
Recognition of costs to obtain a contract		(203)
Balance at March 31, 2020	\$	<u>226</u>

The Company has classified the balance of capitalized costs to obtain a contract as a component of prepaid expenses and other current assets and classifies the expense as a component of cost of goods sold and selling, general and administrative expense over the estimated life of the contract. The Company considers potential impairment in these amounts each period.

ASC 606 provides entities with certain practical expedients and accounting policy elections to minimize the cost and burden of adoption.

The Company does not disclose the value of unsatisfied performance obligations for (i) contracts with original expected length of one year or less and (ii) contracts for which revenue is recognized at the amount to which the Company has the right to invoice for services performed.

The Company will exclude from its transaction price any amounts collected from customers related to sales and other similar taxes.

When determining the transaction price of a contract, an adjustment is made if payment from a customer occurs either significantly before or significantly after performance, resulting in a significant financing component. The Company does not assess whether a significant financing component exists if the period between when the Company

performs its obligations under the contract and when the customer pays is one year or less. None of the Company's contracts contained a significant financing component as of March 31, 2020 and 2019, respectively.

The Company has elected to account for the shipping and handling as an activity to fulfill the promise to transfer the product, and therefore will not evaluate whether shipping and handling activities are promised services to its customers.

4. Net loss per share

Basic net loss per common share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares and potentially dilutive securities outstanding for the period determined using the treasury-stock and if-converted methods. For purposes of the diluted net loss per share calculation, unvested restricted common stock, restricted stock units, stock options, and warrants are considered to be potentially dilutive securities, but are excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive and therefore basic and diluted net loss per share were the same for all periods presented.

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because to do so would be anti-dilutive (in common stock equivalent shares):

	March 31,	
	2020	2019
Unvested restricted common stock and restricted stock units	561,786	419,716
Outstanding stock options	2,840,525	2,802,343
Outstanding warrants	10,000	76,041
Total	3,412,311	3,298,100

As of March 31, 2020 and 2019, the Company had an obligation to issue warrants to purchase an additional 93,341 shares of common stock to a vendor if a contract is terminated prior to a minimum purchase commitment being met. No amounts are presented in the table above for this obligation to issue a warrant as the issuance of the warrant is not considered probable.

5. Fair value of financial instruments

ASC Topic 820, *Fair Value Measurement* (ASC 820), establishes a fair value hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

ASC 820 identifies fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC 820 establishes a three-tier fair value hierarchy that distinguishes between the following:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 inputs are inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly; and

Level 3 inputs are unobservable inputs that reflect the Company's own assumptions about the assumptions market participants would use in pricing the asset or liability.

Fair value measurements as of March 31, 2020 are as follows (in thousands):

Description	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Financial assets				
Cash equivalents	\$ 91,916	\$ 91,916	\$ —	\$ —
Note receivable	150	—	—	150
	<u>\$ 92,066</u>	<u>\$ 91,916</u>	<u>\$ —</u>	<u>\$ 150</u>

Fair value measurements as of December 31, 2019 are as follows (in thousands):

Description	Total	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Financial assets				
Cash equivalents	\$ 109,155	\$ 109,155	\$ —	\$ —
Note receivable	150	—	—	150
	<u>\$ 109,305</u>	<u>\$ 109,155</u>	<u>—</u>	<u>\$ 150</u>

6. Inventory

Inventory consists of the following (in thousands):

	March 31, 2020	December 31, 2019
Raw materials	\$ 5,128	\$ 4,717
Work in process	2,619	2,573
Finished goods	3,645	3,173
Total	<u>\$ 11,392</u>	<u>\$ 10,463</u>

Inventory comprises commercial instruments, assays, and the materials required to manufacture assays.

7. Investments

During the third quarter of 2016, the Company purchased a minority interest in preferred stock in a privately held company for \$0.3 million. During the third quarter of 2018, the Company was issued a convertible note by a privately held company having a principal amount of \$0.2 million.

The preferred stock investment is recorded on a cost basis in other non-current assets on the accompanying balance sheets as the Company does not have a controlling interest, does not have the ability to exercise significant influence over the privately held company, and the fair value of the equity investment is not readily determinable. The Company performs an impairment analysis at each reporting period to determine if there is any readily available fair value information that would indicate an impairment. The Company has determined there was no impairment during the three months ended March 31, 2020 or in any prior period.

The convertible note is held as an available-for-sale investment, which is carried at fair market value, with the unrealized gains and losses included in the determination of comprehensive income and reporting stockholders equity. When determining the estimated fair value of the convertible notes, the Company used a commonly accepted valuation methodology.

Equity investments that do not result in consolidation and are not accounted for under the equity method are measured at fair value, with any changes in fair value recognized in net income. For any such investments that do not

have readily determinable fair values, the Company elects the measurement alternative to measure the investments at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

8. Other accrued expenses and other non-current liabilities

Other accrued expenses consist of the following (in thousands):

	March 31, 2020	December 31, 2019
Accrued inventory	\$ 999	\$ 459
Accrued royalties	535	476
Accrued professional services	692	655
Accrued development costs	121	151
Accrued other	721	757
Total accrued expenses	<u>\$ 3,068</u>	<u>\$ 2,498</u>

Other non-current liabilities consist of the following (in thousands):

	March 31, 2020	December 31, 2019
Leasehold obligation incentive	\$ —	\$ 7,572
Deferred rent	—	3,011
Deferred tax liabilities	2,498	2,816
Other	6	8
Total non-current liabilities	<u>\$ 2,504</u>	<u>\$ 13,407</u>

As part of the Company's adoption of ASC 842 on January 1, 2020, the Company derecognized the leasehold obligation incentive of \$7.6 million and deferred rent of \$3.0 million. Per ASC 842 the leasehold obligation incentive and deferred rent reduce the Company's ROU assets at time of adoption for the related leases. Refer to Note 2 and Note 10 for further detail.

9. Warrants, stock-based compensation, stock options, restricted stock and restricted stock units

Warrants

The Company issued no warrants during the three months ended March 31, 2020, and had 10,000 warrants outstanding as of March 31, 2020.

Stock-based compensation

Stock-based compensation expense for all stock awards consists of the following (in thousands):

	Three Months Ended March 31,	
	2020	2019
Cost of product revenue	\$ 36	\$ 17
Cost of service and other revenue	68	60
Research and development	242	168
Selling, general, and administrative	1,763	1,039
Total	<u>\$ 2,109</u>	<u>\$ 1,284</u>

As of March 31, 2020, under the 2007 Stock Option and Grant Plan (the 2007 Plan), options to purchase 1,178,538 shares of common stock were outstanding and no shares of common stock were available for future awards. In

connection with the completion of the Company’s initial public offering (IPO) in December 2017, the Company terminated the 2007 Plan.

In December 2017, the Company adopted the 2017 Employee, Director and Consultant Equity Incentive Plan (the 2017 Plan), under which it may grant incentive stock options, non-qualified stock options, restricted stock, and other stock-based awards. Upon its adoption, the 2017 Plan allowed for the issuance of up to 1,042,314 shares of common stock plus up to 2,490,290 shares of common stock represented by awards granted under the 2007 Plan that are forfeited, expire or are cancelled without delivery of shares or which result in the forfeiture of shares of common stock back to the Company on or after the date the 2017 Plan became effective. The 2017 Plan contains an “evergreen” provision, which allows for an annual increase in the number of shares of common stock available for issuance under the 2017 Plan on the first day of each fiscal year during the period beginning in fiscal year 2019 and ending in fiscal year 2027. The annual increase in the number of shares shall be equal to the lowest of: 4% of the number of shares of common stock outstanding as of such date; and an amount determined by the Company’s Board of Directors or Compensation Committee. The number of shares available for grant under the 2017 Plan increased by 1,126,172 on January 1, 2020 due to this provision. As of March 31, 2020, under the 2017 Plan, options to purchase 1,661,987 shares of common stock were outstanding and unvested restricted stock units for 521,980 shares of common stock were outstanding. As of March 31, 2020, 802,135 shares were available for grant under the 2017 Plan.

In December 2017, the Company adopted the 2017 Employee Stock Purchase Plan (the 2017 ESPP). The 2017 ESPP contains an “evergreen” provision, which allows for an increase on the first day of each fiscal year beginning with fiscal year 2018. The increase in the number of shares shall be equal to the lowest of: 1% of the number of shares of common stock outstanding on the last day of the immediately preceding fiscal year or an amount determined by the Company’s Board of Directors or Compensation Committee. The number of shares available for grant under the 2017 ESPP increased by 281,543 on January 1, 2020 due to this provision. As of March 31, 2020, 871,422 shares were available for issuance under the 2017 ESPP.

Stock options

Under the 2007 Plan and the 2017 Plan, stock options may not be granted with exercise prices of less than fair market value on the date of the grant. Options generally vest ratably over a four-year period with 25% vesting on the first anniversary and the remaining 75% vesting ratably on a monthly basis over the remaining three years. These options expire ten years after the grant date. Activity under the 2007 Plan and the 2017 Plan was as follows:

	Options	Weighted-average exercise price	Remaining contractual life (in years)	Aggregate intrinsic value (in thousands)
Outstanding at December 31, 2019	2,507,062	\$ 14.41	7.58	\$ 24,870
Granted	428,271	\$ 27.16		
Exercised	(63,074)	\$ 7.86		
Cancelled	(31,734)	\$ 24.29		
Outstanding at March 31, 2020	2,840,525	\$ 16.37	7.75	\$ 14,641
Vested and expected to vest at March 31, 2020	2,840,525	\$ 16.37	7.75	\$ 14,641
Exercisable at March 31, 2020	1,411,836	\$ 9.93	6.54	\$ 12,703

Using the Black-Scholes option pricing model, the weighted-average fair value of options granted to employees and directors during the three months ended March 31, 2020 and 2019 was \$11.82 and \$7.90 per share, respectively. The expense related to awards granted to employees was \$1.1 million and \$0.7 million for the three months ended March 31, 2020 and 2019, respectively. The intrinsic value of stock options exercised was \$1.1 million and \$1.2 million for the three months ended March 31, 2020 and 2019, respectively. Activity related to non-employee awards was not material to the three months ended March 31, 2020 and 2019.

Restricted stock

Restricted common stock awards represent shares of common stock issued to employees subject to forfeiture if the vesting conditions are not satisfied. In December 2014, the Company issued 78,912 shares of restricted common stock to a director of the Company under the 2007 Plan. Under the terms of the agreement, shares of common stock issued are subject to a four-year vesting schedule. Vesting occurs periodically at specified time intervals and specified percentages. In January 2015, the Company issued 781,060 shares of restricted common stock to an executive of the Company under the 2007 Plan. The majority of these shares were issued subject to a four-year vesting schedule with 25% vesting on the first anniversary and the remaining vesting 75% ratably on a monthly basis over the remaining three years, while another portion was issued subject to performance based vesting. The vesting of performance based awards is dependent upon achievement of specified financial targets of the Company. The majority of the performance criteria were achieved during the years ended December 31, 2016 and 2015 and the remaining unvested awards with performance conditions are not material. No restricted common stock awards were granted or vested during the three months ended March 31, 2020. As of March 31, 2020, the Company had 39,806 shares of unvested restricted common stock with a weighted average grant date fair value of \$3.12 per share.

Restricted stock units

Restricted stock units (RSUs) represent the right to receive shares of common stock upon meeting specified vesting requirements. In the three months ended March 31, 2020, the Company issued 210,074 RSUs to employees of the Company under the 2017 Plan. Under the terms of the agreements, 191,867 of the RSUs issued are subject to a four-year vesting schedule with 25% vesting on the first anniversary of the grant date and the remaining vesting 75% ratably on a monthly basis over the remaining three years; 15,890 of the RSUs vest on December 31, 2020; and 2,317 vested immediately upon grant. A summary of RSU activity is as follows:

	Shares	Weighted-average grant date fair value per share
Unvested RSUs as of December 31, 2019	370,123	\$ 20.48
Granted	210,074	\$ 27.36
Vested	(45,474)	\$ 18.92
Cancelled	(12,743)	\$ 26.89
Unvested RSUs as of March 31, 2020	521,980	\$ 23.22

The expense related to awards granted to employees and directors was \$0.9 million and \$0.5 million for the three months ended March 31, 2020 and 2019, respectively.

At March 31, 2020, there was \$11.4 million of total unrecognized compensation cost related to unvested restricted stock units, which is expected to be recognized over the remaining weighted-average vesting period of 3.07 years.

10. Leases

The Company is a lessee under leases of offices, lab spaces, and certain office equipment. Some of the Company's leases include options to extend the lease, and these options are included in the lease term to the extent they are reasonably certain to be exercised.

900 Middlesex Turnpike Lease

The Company's primary lease is the 900 Middlesex Turnpike Lease. On October 2, 2018, the Company entered into a 137-month operating lease for the Company's new headquarters in Billerica, Massachusetts. The lease is for approximately 92,000 square feet of office and laboratory space and commenced on April 1, 2019. The lease contains a period of free rent and escalating monthly rent payments. As part of the lease, the Company was required to enter into a \$1.0 million Letter of Credit drawable by the lessor under specifically outlined conditions, which will be subsequently

reduced throughout the lease term. Pursuant to a work letter entered into in connection with the 900 Middlesex Turnpike Lease, the landlord contributed an aggregate of \$8.2 million toward the cost of construction and tenant improvements for the building. Under the lease the Company has the option to extend the lease for two successive five-year terms, and the renewal options are not reasonably certain to be exercised.

In applying the ASC 842 transition guidance, the 900 Middlesex Turnpike Lease remained classified as an operating lease and the Company recorded ROU assets of \$12.2 million and lease liability of \$22.8 million on the effective date. The difference between the ROU and the lease liability was driven by the Company derecognizing deferred rent of \$3.0 million and the lease obligation incentive of \$7.6 million. The Company is recognizing rent expense on a straight-line basis throughout the remaining term of the leases.

48 Tvistevägen

The Company has three leases at 48 Tvistevägen Umeå, Sweden for laboratory spaces, manufacturing spaces, and office space. All of these Uman leases have been assessed as operating leases.

In applying the ASC 842 transition guidance, the Uman leases remained classified as operating leases and the Company recorded ROU assets of less than \$0.1 million and lease liability of less than \$0.1 million on the effective date. The Company is recognizing rent expense on a straight-line basis throughout the remaining term of the leases.

Summary of all lease costs recognized under ASC 842

The following table contains a summary of the lease costs recognized under ASC 842 and other information pertaining to the Company's operating leases for the three months ended March 31, 2020:

Operating leases (in thousands)	For the three months ended March 31, 2020
Lease Costs (1)	
Operating lease costs	\$ 660
Total lease cost	\$ 660
Other information	
Operating cash flows used for operating leases	\$ 407
Weighted average remaining lease term	10.3 years
Weighted average discount rate	9.73%

(1) Short-term lease costs and variable lease costs incurred by the Company for the three months ended March 31, 2020 were immaterial.

As of March 31, 2020, future minimum commitments under ASC 842 under the Company's operating leases were as follows:

Maturity of lease liabilities (in thousands)	As of March 31, 2020
Remainder 2020	\$ 1,696
2021	3,363
2022	3,435
2023	3,487
2024	3,557
2025 and thereafter	22,203
Total lease payments	\$ 37,741
Less: imputed interest	14,695
Total operating lease liabilities	\$ 23,046

As previously disclosed in the Company's 2019 Annual Report on Form 10-K and under the previous lease accounting standard, ASC 840, the total commitment for non-cancelable operating leases was \$38.0 million as of December 31, 2019 (amounts in thousands):

2020	\$ 2,081
2021	3,322
2022	3,396
2023	3,480
2024 and Forward	25,760
	<u>\$ 38,039</u>

11. Commitments and contingencies

Tufts University

In June 2007, the Company entered into a license agreement (the License Agreement) for certain intellectual property with Tufts University (Tufts). Tufts is a related party to the Company due to Tufts' equity ownership in the Company and because a board member of the Company's Board of Directors was affiliated with Tufts. The License Agreement, which was subsequently amended, is exclusive and sublicensable, and will continue in effect on a country-by-country basis as long as there is a valid claim of a licensed patent in a country. The Company is committed to pay license and maintenance fees, prior to commercialization, in addition to low single digit royalties on direct sales and services and a royalty on sublicense income. During each of the three months ended March 31, 2020 and 2019, the Company recorded royalty expense of \$0.2 million in cost of product revenue on the consolidated statements of operations.

Other licenses

During the year ended December 31, 2012, the Company entered into a license agreement for certain intellectual property with a third party. The non-exclusive, non-sublicensable license provides the Company access to certain patents specifically for protein detection, and shall be in effect until the expiration of the last licensed patent. In consideration for these rights, the Company committed to certain license fees, milestone payments, minimum annual royalties and a mid-single digit royalty. The Company is required to make mid-single digit royalty payments on net sales of products and services which utilize the licensed technology. In September 2019, all remaining patents related to the intellectual property expired and the license agreement terminated. As this agreement was terminated in 2019, the Company recorded no royalty expense during the three months ended March 31, 2020 and royalty expense of less than \$0.1 million in cost of product revenue on the consolidated statements of operations during the three months ended March 31, 2019.

Development and supply agreement

Through the Company's development agreement with STRATEC Biomedical, as amended in December 2016, the parties agreed on additional development services for an additional fee, which is payable when the additional development is completed. A total of \$11.7 million is payable to STRATEC upon completion of the development activities. This amount is being recorded to research and development expense and accrued expenses as the services are performed. The services were completed during the year ended December 31, 2018. Substantive efforts related to these additional development activities started in the first quarter of 2019 and were completed in the third quarter of 2019.

The Company's supply agreement with STRATEC Biomedical requires the Company to purchase a minimum number of commercial units over a seven-year period ending in May 2021. If the Company were to fail to purchase a required number of commercial units, the Company would be obligated to pay termination costs plus a fee based on the shortfall of commercial units purchased compared to the required minimum amount. Based on the number of commercial instruments purchased as of March 31, 2020, assuming no additional commercial units were purchased, this fee would equal \$9.1 million. The amount the Company could be obligated to pay under the minimum purchase commitment is reduced as each commercial unit is purchased. Also, if the Company terminates the supply agreement

under certain circumstances and has not purchased a required number of commercial units, it would be obligated to issue warrants to purchase 93,341 shares of common stock (the Supply Warrants) at \$0.003214 per share. The Company believes that it will purchase sufficient units to meet the requirements of the minimum purchase commitment and, therefore, has not accrued for any of the potential cash consideration. The Supply Warrants are accounted for at fair value; however, the fair value of the Supply Warrants as of March 31, 2020 and December 31, 2019 was insignificant as there was a low probability of the warrants being issued.

Legal contingencies

The Company is subject to claims in the ordinary course of business; however, the Company is not currently a party to any pending or threatened litigation, the outcome of which would be expected to have a material adverse effect on its financial condition or the results of its operations. The Company accrues for contingent liabilities to the extent that the liability is probable and estimable.

12. Notes payable

Loan agreement

On April 14, 2014, the Company executed a Loan Agreement with a lender, as subsequently amended. As of March 31, 2020, there were no additional amounts available to borrow under the debt facility. The interest rate on this term loan is variable based on a calculation of the prime rate less 5.25% with a minimum interest rate of 8%. Interest is paid monthly beginning the month following the borrowing date. At loan inception and in connection with the amendments, the Company issued the lender warrants to purchase shares of stock. The Loan Agreement also contains prepayment penalties and an end of term charge. Fees incurred upon execution of the agreements, and the fair value of warrants on the date of grant were accounted for as a reduction in the book value of debt and accreted through interest expense, using the effective interest rate method, over the term of the debt.

Amendment 5 to loan agreement

In August 2018, the Company signed Amendment 5 to the Loan Agreement (Amendment 5). Amendment 5 instituted a 2018 End of Term Charge of \$0.1 million. Additionally, the Term Loan Maturity Date extended until March 1, 2020. Amendment 5 additionally, changed the due date of the End of Term Charge to, the earlier of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations or (iii) the date that the Secured Obligations become due and payable. The Company incurred a cost of \$0.05 million in relation to the execution of Amendment 5. In connection with the extension of the due date of the Loan, the deferral of principal payments (Amendment 3) was further deferred until the new Term Loan Maturity Date.

On March 2, 2020, the Company paid \$0.1 million in end of term fees related to Amendment 5 of the Loan Agreement.

Amendment 6 to loan agreement

In October 2018, the Company signed Amendment 6 to the Loan Agreement, which amended the Loan Agreement's collateral clause to exclude the \$1 million certificate of deposit associated with the lease on the Company's new headquarters in Billerica, MA.

Amendment 7 to loan agreement

On April 15, 2019, the Company signed Amendment 7 to the Loan Agreement, which extends the interest only payment period through July 1, 2021 and also extends the maturity date until October 1, 2021. As part of this Amendment 7, a "2019 End of Term Charge" for \$50,000 was added to the Loan Agreement due on the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that the Company prepays the outstanding Secured Obligations and (iii) the date that the Secured Obligations become due and payable. In addition, the Company is required to pay the loan principal in five equal installments starting July 1, 2021 with the final principal payment to be made on October 1, 2021.

As of March 31, 2020, the remaining loan balance is classified as a long term liability since all principal payments are due greater than twelve months after the balance sheet date.

As of March 31, 2020, debt payment obligations due based on principal payments are as follows (in thousands):

Remainder 2020	\$	—
2021		7,688
	\$	<u>7,688</u>

Non-cash interest expense related to debt discount amortization and accretion of end of term fees was \$0.1 million or less for each of the three months ended March 31, 2020 and 2019.

13. Collaboration and license arrangements

The Company has entered into certain licenses with other companies for use of Uman's technology. These licenses have royalty components which the Company earns and recognizes royalty revenue from throughout the year. The Company recognized revenue of \$0.1 million for the three months ended March 31, 2020, as collaboration and license revenue. The Company did not earn and recognize any royalty revenue from license agreements prior to the Company's acquisition of Uman.

As of December 31, 2019 the Company had \$1.7 million of deferred revenue related to ongoing negotiations with a diagnostics company.

14. Employee benefit plans

The Company sponsors a 401(k) savings plan for its employees. The Company may make discretionary contributions for each 401(k) plan year. During the three months ended March 31, 2020 and 2019, the Company made contributions of \$0.1 million and \$0.1 million, respectively.

15. Business Combinations

UmanDiagnostics AB

On August 1, 2019, the Company completed its acquisition of Uman for an aggregate purchase price of \$21.2 million, comprised of (i) \$15.7 million in cash plus (ii) 191,152 shares of common stock (representing \$5.5 million based on the closing prices of the Company's common stock on the Nasdaq Global Market on July 1, 2019 and August 1, 2019, the dates of issuance). The acquisition closed with respect to 95% of the outstanding shares of capital stock of Uman on July 1, 2019 and with respect to the remaining 5% of the outstanding shares of capital stock of Uman on August 1, 2019.

Uman supplies Nf-L antibodies and ELISA kits, which are widely recognized by researchers and biopharmaceutical and diagnostics companies world-wide as the premier solution for the detection of Nf-L to advance the development of therapeutics and diagnostics for neurodegenerative conditions. With the acquisition of Uman, the Company has secured a long-term source of supply for a critical technology. This acquisition was considered a business acquisition for accounting purposes.

The Company has accounted for the acquisition of Uman as a purchase of a business under U.S. GAAP. Under the acquisition method of accounting, the assets and liabilities of Uman are recorded as of the acquisition date of July 1, 2019, at their respective fair values, and consolidated with those of the Company.

The Company has preliminarily allocated the purchase price to the net tangible and intangible assets based on their estimated fair values as of July 1, 2019. As such, the fair value of the assets acquired and liabilities assumed, including intangible assets, presented in the table below are provisional and will be finalized in a later period once the

fair value procedures are completed. Goodwill established as a result of the Uman acquisition is not tax deductible in any taxing jurisdiction.

The following table summarizes the preliminary purchase price allocation, net of \$1.2 million in cash and cash equivalents acquired (in thousands):

Purchase price:	
Cash and stock paid	\$ 21,217
Cash and cash equivalents acquired	1,221
Purchase price, net	19,996
Assets (liabilities) acquired:	
Accounts receivable	\$ 638
Inventory	1,680
Prepays and other current assets	114
Property and equipment	33
Intangibles	13,450
Goodwill	8,111
Accounts payable	(20)
Accrued expense and other current liabilities	(871)
Deferred tax liabilities	(3,139)
Total	\$ 19,996

Revenue and net loss related to Uman's operations was \$0.4 million and less than \$0.1 million, respectively, for the three months ended March 31, 2020, and is included in the Company's consolidated statements of operations.

The following unaudited pro forma information presents the condensed consolidated results of operations of the Company and Uman for the three months ended March 31, 2019 as if the acquisition of Uman had been completed on January 1, 2018. These pro forma condensed consolidated financial results have been prepared for comparative purposes only and include certain adjustments that reflect pro forma results of operations, such as increased amortization for the fair value of acquired intangible assets, increased cost of sales related to the inventory valuation adjustment, and adjustments relating to the tax effect of combining the Company and Uman businesses.

The unaudited pro forma results do not reflect any operating efficiencies or potential cost savings which may result from the consolidation of the operations of the Company and Uman. Accordingly, these unaudited pro forma results are presented for informational purposes only and are not necessarily indicative of the results of operations that actually would have been achieved had the acquisition occurred as of January 1, 2018, nor are they intended to represent or be indicative of future results of operations (in thousands):

	Three months ended	
	March 31, 2019	
Revenue (unaudited)	\$	12,908
Pre-tax loss (unaudited)	\$	(9,062)

The Company recorded no costs associated with the acquisition of Uman for the three months ended March 31, 2020 and 2019, respectively. For the year ended December 31, 2019, the Company incurred \$1.9 million in costs associated with the acquisition of Uman. Costs associated with the acquisition of Uman are recorded as selling, general, and administrative expenses within the consolidated statements of operations.

16. Goodwill and Acquired Intangible Assets

As of March 31, 2020, the carrying amount of goodwill was \$8.9 million. The following is a rollforward of the Company's goodwill balance (in thousands):

	Goodwill
Balance as of December 31, 2019	\$ 9,353
Cumulative translation adjustment	(439)
Balance as of March 31, 2020	<u>\$ 8,914</u>

Acquired intangible assets as of March 31, 2020 consist of the following (in thousands):

	Estimated Useful Life (in years)	March 31, 2020				Weighted Average Life Remaining
		Gross Carrying Value	Accumulated Amortization	Cumulative Translation Adjustment	Net Carrying Value	
Know-how	8.5	\$ 13,000	\$ (1,149)	\$ (738)	\$ 11,113	7.75
Developed technology	7	1,650	(815)	—	835	4.84
Customer relationships	8.5 - 10	1,360	(472)	(6)	882	7.83
Non-compete agreements	5.5	340	(51)	(18)	271	4.75
Trade names	3	50	(36)	—	14	0.84
Total		<u>\$ 16,400</u>	<u>\$ (2,523)</u>	<u>\$ (762)</u>	<u>\$ 13,115</u>	

Acquired intangible assets as of December 31, 2019 consist of the following (in thousands):

	Estimated Useful Life (in years)	December 31, 2019				Weighted Average Life Remaining
		Gross Carrying Value	Accumulated Amortization	Cumulative Translation Adjustment	Net Carrying Value	
Know-how	8.5	\$ 13,000	\$ (767)	\$ (99)	\$ 12,134	8.00
Developed technology	7	1,650	(737)	—	913	5.09
Customer relationships	8.5 - 10	1,360	(421)	(1)	938	8.08
Non-compete agreements	5.5	340	(34)	(2)	304	5.00
Trade names	3	50	(32)	—	18	1.09
Total		<u>\$ 16,400</u>	<u>\$ (1,991)</u>	<u>\$ (102)</u>	<u>\$ 14,307</u>	

The Company acquired \$13.5 million of intangible assets in the Uman acquisition, of which \$13.0 million was assigned to know-how, \$0.4 million was assigned to non-compete agreements, and \$0.1 million was assigned to customer relationships. The know-how and customer relationships intangible assets are being amortized on a straight-line basis over an 8.5 year amortization period, and the non-compete agreement intangible asset is being amortized on a straight-line basis over a 5.5 year amortization period. In total, the weighted-average amortization period for these intangible assets is 8.4 years.

The Company is currently evaluating the fair value of assets acquired and liabilities assumed from the Uman acquisition, including intangible assets and their related amortization periods. As such, the \$13.5 million in intangible assets presented in the table above are provisional and will be finalized in a later period once the fair value procedures are completed.

The Company recorded amortization expense of \$0.5 million and \$0.2 million for the three months ended March 31, 2020 and 2019, respectively. Amortization relating to developed technology is recorded within research and development expenses, amortization of customer relationships is recorded within selling, general, and administrative expenses, amortization of trade names is recorded within selling, general and administrative expenses, amortization of non-compete agreements is recorded within selling, general, and administrative expenses, and amortization of know-how is recorded within cost of goods sold.

Future estimated amortization expense of acquired intangible assets as of March 31, 2020 is as follows (in thousands):

For the Years Ended December 31,	Estimated Amortization Expense	
Remainder 2020	\$	1,578
2021		2,013
2022		1,930
2023		1,848
2024		1,733
Thereafter		4,013
	\$	13,115

17. Related party transactions

The Company entered into the License Agreement for certain intellectual property with Tufts (see Note 11). Tufts is a related party to the Company due to Tufts' equity ownership in the Company and because a member of the Company's Board of Directors was affiliated with Tufts. During the three months ended March 31, 2020 and 2019, the Company recorded royalty expense of \$0.2 million and \$0.2 million, respectively, in cost of product revenue on the consolidated statements of operations.

During the year ended December 31, 2017, Harvard University became a related party because a member of the Company's Board of Directors is affiliated with Harvard University. Revenue recorded from sales to Harvard University were less than \$0.1 million for each of the three months ended March 31, 2020 and 2019, respectively.

18. Accumulated other comprehensive loss

The following shows the changes in the components of accumulated other comprehensive loss for the three months ended March 31, 2020 which consisted of only foreign currency translation adjustments for the periods shown (in thousands):

	Cumulative Translation Adjustment	Accumulated Other Comprehensive Loss
Balance - December 31, 2019	\$ (153)	\$ (153)
Current period accumulated other comprehensive loss	(1,047)	(1,047)
Balance - March 31, 2020	\$ (1,200)	\$ (1,200)

19. Subsequent events

The Company had no significant subsequent events for the period March 31, 2020 through the filing date of this Quarterly Report on Form 10-Q.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations together with our condensed consolidated financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q and our audited financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC. In addition to historical information, the following discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results, performance or experience could differ materially from what is indicated by any forward-looking statement due to various important factors, risks and uncertainties, including, but not limited to, those set forth under "Special Note Regarding Forward-Looking Statements" included elsewhere in this quarterly report or under "Risk Factors" in Item 1A of Part I of our Annual Report on Form 10-K for the year ended December 31, 2019 or other filings that we make with the SEC.

Overview

We are a life sciences company that has developed next generation, ultra-sensitive digital immunoassay platforms that advance precision health for life sciences research and diagnostics. Our platforms are based on our proprietary digital "Simoa" detection technology. Our Simoa bead-based and planar array platforms enable customers to reliably detect protein biomarkers in extremely low concentrations in blood, serum and other fluids that, in many cases, are undetectable using conventional, analog immunoassay technologies, and also allow researchers to define and validate the function of novel protein biomarkers that are only present in very low concentrations and have been discovered using technologies such as mass spectrometry. These capabilities provide our customers with insight into the role of protein biomarkers in human health that has not been possible with other existing technologies and enable researchers to unlock unique insights into the continuum between health and disease. We believe this greater insight will enable the development of novel therapies and diagnostics and facilitate a paradigm shift in healthcare from an emphasis on treatment to a focus on earlier detection, monitoring, prognosis and, ultimately, prevention. We are currently focusing on protein detection, which we believe is an area of significant unmet need and where we have significant competitive advantages. However, in addition to enabling new applications and insights in protein analysis, our Simoa platforms have also demonstrated applicability across other testing applications, including detection of nucleic acids and small molecules.

We currently sell all of our products for life science research, primarily to laboratories associated with academic and governmental research institutions, as well as pharmaceutical, biotechnology and contract research companies, through a direct sales force and support organizations in North America and Europe, and through distributors or sales agents in other select markets, including Australia, Brazil, China, Czech Republic, India, Israel, Japan, Lebanon, Mexico, Qatar, Saudi Arabia, Singapore, South Korea and Taiwan.

Our instruments are designed to be used either with assays fully developed by us, including all antibodies and supplies required to run the tests, or with "homebrew" kits where we supply some of the components required for testing, and the customer supplies the remaining required elements. Accordingly, our installed instruments generate a recurring revenue stream. We believe that our recurring consumable revenue is driven by our customers' ability to extract more valuable data using our platform and to process a large number of samples quickly with little hands-on preparation.

We commercially launched our first immunoassay platform, the Simoa HD-1, in January 2014. The HD-1 is based on our bead-based technology, and assays run on the HD-1 are fully automated. We initiated commercial launch of the SR-X instrument in December 2017. The SR-X utilizes the same Simoa bead-based technology and assay kits as the HD-1 in a compact benchtop form with a lower price point, more flexible assay preparation, and a wider range of applications. In July 2019, we launched the Simoa HD-X, an upgraded version of the Simoa HD-1, which replaces the HD-1. The HD-X has been designed to deliver significant productivity and operational efficiency improvements, as well as greater user flexibility. We began shipping and installing HD-X instruments at customer locations in the third quarter of 2019, ahead of our original fourth quarter expectation. As the installed base of the Simoa instruments increases, total consumables revenue overall is expected to increase. We believe that consumables revenue should be subject to less

period-to-period fluctuation than our instrument sales revenue, and will become an increasingly important contributor to our overall revenue.

On January 30, 2018, we acquired Aushon for \$3.2 million in cash, with an additional payment of \$0.8 million made in July 2018, six months after the acquisition date. With the acquisition of Aushon, we acquired a CLIA certified laboratory, as well as Aushon's proprietary sensitive planar array detection technology. Leveraging our proprietary sophisticated Simoa image analysis and data analysis algorithms, we further refined this planar array technology to develop the SP-X instrument to provide the same Simoa sensitivity found in our Simoa bead-based platform. We initiated an early-access program for the SP-X instrument in January 2019, with the full commercial launch commenced in April 2019.

On August 1, 2019, we completed our acquisition of Uman for an aggregate purchase price of \$21.2 million, comprised of (i) \$15.7 million in cash plus (ii) 191,152 shares of our common stock (representing \$5.5 million based on the closing prices of our common stock on the Nasdaq Global Market on July 1, 2019 and August 1, 2019, the dates of issuance). The acquisition closed with respect to 95% of the outstanding shares of capital stock of Uman on July 1, 2019 and with respect to the remaining 5% of the outstanding shares of capital stock of Uman on August 1, 2019. Uman supplies neurofilament light (Nf-L) antibodies and ELISA kits, which are widely recognized by researchers and biopharmaceutical and diagnostics companies world-wide as the premier solution for the detection of Nf-L to advance the development of therapeutics and diagnostics for neurodegenerative conditions.

We are subject to ongoing uncertainty concerning the COVID-19 pandemic, including its length and severity and its effect on our business. During the quarter, we implemented a resiliency plan focused on the health and safety of our employees and maintaining continuity of our operations. We have seen an impact on instrument revenue due to limitations on our ability to access certain customer sites and complete instrument installations, as well as an impact on consumables revenue from interruptions in certain customer laboratories. We expect these COVID-19 related challenges to continue until these customers return to normal operations.

In view of the pandemic, we have adjusted our operations to expand capacity in our Accelerator Laboratory to support customers whose operations have been disrupted and to sustain clinical trials. We also believe that our cytokine assay technology provides researchers with important and differentiated tools to study disease progression, cytokine release syndrome, and patient-treatment response in the fight against COVID-19. We are also working towards developing a SARS-COV-2 quantitative IgG assay, an antigen early detection assay in blood, and a high-definition SARS-COV-2 assay to enable research pursuits. We believe that these activities may provide additional business and revenue opportunities as the situation unfolds.

The situation remains dynamic and there remains significant uncertainty as to the length and severity of the pandemic, the actions that may be taken by government authorities, the impact to the business of our customers and suppliers, the long-term economic implications and other factors identified in Section 1A, "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2019. We will continue to evaluate the nature and extent of the impact to our business, financial condition and operating results.

As of March 31, 2020, we had cash and cash equivalents of \$96.4 million. Since inception, we have incurred net losses. Our net loss was \$40.8 million, \$31.5 million, and \$27.0 million for the years ended December 31, 2019, 2018 and 2017, respectively, and \$11.6 million and \$9.4 million for the three months ended March 31, 2020 and 2019, respectively. As of March 31, 2020, we had an accumulated deficit of \$227.9 million and stockholders' equity of \$119.0 million. We expect to continue to incur significant expenses and operating losses at least through the next 24 months. We expect our expenses will increase substantially as we:

- expand our sales and marketing efforts to further commercialize our products;
- strategically acquire companies or technologies that may be complementary to our business;
- expand our research and development efforts to improve our existing products and develop and launch new products, particularly if any of our products are deemed by the United States Food and Drug Administration, or FDA, to be medical devices or otherwise subject to additional regulation by the FDA;

- seek premarket approval, or PMA, or 510(k) clearance from the FDA for our existing products or new products if or when we decide to market products for use in the prevention, diagnosis or treatment of a disease or other condition;
- hire additional personnel and continue to grow our employee headcount;
- enter into collaboration arrangements, if any, or in-license other products and technologies;
- add operational, financial and management information systems; and
- incur increased costs as a result of operating as a public company.

Results of Operations

Comparison of the Three Months Ended March 31, 2020 and March 31, 2019 (dollars in thousands):

	Three Months Ended March 31, 2020	% of revenue	Three Months Ended March 31, 2019	% of revenue	\$ change	% change
Product revenue	\$ 9,833	63 %	\$ 9,547	77 %	\$ 286	3 %
Service and other revenue	5,762	36 %	2,790	23 %	2,972	107 %
Collaboration and license revenue	132	1 %	—	— %	132	— %
Total revenue	15,727	100 %	12,337	100 %	3,390	27 %
Cost of goods sold:						
Cost of product revenue	6,186	39 %	4,248	34 %	1,938	46 %
Cost of service revenue	2,728	17 %	2,082	17 %	646	31 %
Total costs of goods sold and services	8,914	57 %	6,330	51 %	2,584	41 %
Gross profit	6,813	43 %	6,007	49 %	806	13 %
Operating expenses:						
Research and development	4,268	27 %	3,852	31 %	416	11 %
Selling, general and administrative	14,273	91 %	11,512	93 %	2,761	24 %
Total operating expense	18,541	118 %	15,364	125 %	3,177	21 %
Loss from operations	(11,728)	(75)%	(9,357)	(76)%	(2,371)	(25)%
Interest income (expense), net	161	1 %	21	— %	140	667 %
Other income (expense), net	(167)	(1)%	(47)	— %	(120)	(255)%
Loss before income taxes	(11,734)	(75)%	(9,383)	(76)%	(2,351)	(25)%
Income tax benefit (provision)	124	1 %	(22)	— %	146	(664)%
Net loss	\$ (11,610)	(74)%	\$ (9,405)	(76)%	\$(2,205)	(23)%

Revenue

Total revenue increased by \$3.4 million, or 27%, to \$15.7 million for the three months ended March 31, 2020 as compared to \$12.3 million for the three months ended March 31, 2019. Product revenue consisted primarily of sales of instruments totaling \$3.7 million and sales of consumables and other products of \$6.1 million for the three months ended March 31, 2020. Product revenue consisted of sales of instruments totaling \$3.4 million and sales of consumables and other products totaling \$6.1 million for the three months ended March 31, 2019. The increase in product revenue of \$0.3 million was primarily due to increased instruments sales in the three months ended March 31, 2020. Consumables revenue was flat year-over-year. Instrument revenue was impacted by limitations in our ability to access certain customer sites and complete instrument installations due to COVID-19, and consumables revenue was impacted by customers' transition from HD-1 to HD-X and later from interruptions in certain customer's laboratories due to COVID-19. The impact of COVID-19 on product revenue was offset in part by an increase in service and other revenue of \$3.0 million due to increased services performed in our Accelerator Laboratory. We had \$0.1 million in collaboration and license revenue in the three months ended March 31, 2020 related to licensing technology and intellectual property.

Cost of Goods Sold and Services

Cost of product revenue increased by \$1.9 million, or 46%, to \$6.2 million for the three months ended March 31, 2020 as compared to \$4.2 million for the three months ended March 31, 2019. The increase was primarily due to an increase in sales of instruments, along with costs incurred from the amortization of the Uman acquisition-related inventory valuation adjustment and acquired intangibles. Cost of service revenue increased to \$2.7 million for the three months ended March 31, 2020 from \$2.1 million for the three months ended March 31, 2019. The increase was primarily due to higher utilization of the Accelerator Laboratory, plus increased personnel costs from the build out of our field service organization. Overall cost of goods sold as a percentage of revenue increased to 57% of total revenue for the three months ended March 31, 2020 as compared to 51% for the three months ended March 31, 2019, primarily as a result of the amortization of acquisition-related acquired intangibles, and inventory valuation adjustments.

Research and Development Expense

Research and development expense increased by \$0.4 million, or 11%, to \$4.3 million for the three months ended March 31, 2020 as compared to \$3.9 million for the three months ended March 31, 2019. The increase was primarily due to the increased headcount in research and development.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by \$2.8 million, or 24%, to \$14.3 million for the three months ended March 31, 2020 as compared to \$11.5 million for the three months ended March 31, 2019. The increase was primarily due to headcount additions in various departments as we build out our organization to support future growth, the lease for the new headquarters, and stock compensation expense.

Interest Income and Other Expense, Net

Interest income and other expense, net increased by less than \$0.1 million for the three months ended March 31, 2020 as compared to same period in 2019, primarily due to the interest income earned on cash equivalents, which increased due to the at-the-market and underwritten public offerings completed during 2019.

Income Tax Benefit (Provision)

Income tax benefit was \$0.1 million for the three months ended March 31, 2020 as compared to a provision of less than \$0.1 million for the same period in 2019. The change is primarily due to certain state and international taxes in 2020.

Liquidity and Capital Resources

To date, we have financed our operations principally through equity offerings, borrowings from credit facilities and revenue from our commercial operations.

Equity Offerings

In December 2017, we completed our IPO in which we sold 4,916,480 shares of common stock at an initial public offering price of \$15.00 per share. The aggregate net proceeds received by us from the offering, net of underwriting discounts and commissions and offering expenses, were \$65.6 million. Prior to the IPO, we had raised capital through the sale of redeemable convertible preferred stock in private placement transactions.

On March 19, 2019, we entered into a Sales Agreement for an “at the market offering” arrangement with Cowen, which allows us to issue and sell shares of common stock pursuant to a shelf registration statement for total gross sales proceeds of up to \$50.0 million from time to time through Cowen, acting as our agent. During the 2019 fiscal year, we sold an aggregate of 2,186,163 shares of common stock pursuant to this agreement resulting in \$49.7 million in gross proceeds and \$48.0 million in net proceeds.

On August 8, 2019, we entered into an underwriting agreement with J.P. Morgan Securities LLC and SVB Leerink LLC, as representatives of the several underwriters, relating to an underwritten public offering of 2,732,673 shares of common stock at a public offering price of \$25.25 per share. We received \$69.0 million in gross proceeds and \$64.5 million in net proceeds.

Loan Facility with Hercules

On April 14, 2014, we executed a Loan Agreement with Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.). The Loan Agreement provided a total debt facility of \$10.0 million, which is secured by substantially all of our assets. At closing, we borrowed \$5.0 million in principal and had the ability to draw the

additional \$5.0 million over the period from November 1, 2014 to March 31, 2015. The interest rate on this term loan was variable based on a calculation of 8% plus the prime rate less 5.25%, with a minimum interest rate of 8%. Interest was to be paid monthly beginning the month following the borrowing date. Principal payments were scheduled to begin on September 1, 2015, unless we achieved certain milestones which would have extended this date to December 1, 2015 or March 1, 2016. In connection with the execution of the Loan Agreement, we issued Hercules a warrant to purchase up to 173,428 shares of our Series C Preferred Stock at an exercise price of \$3.3299 per share. Upon closing of the IPO, this warrant was automatically converted into a warrant to purchase up to 53,960 shares of our common stock at an exercise price of \$10.70 per share.

On March 4, 2015, we executed Amendment 1 to the Loan Agreement and drew the additional \$5.0 million available under the Loan Agreement at that time. The terms of the amendment deferred principal payments to start on December 1, 2015 or March 1, 2016 if we obtained at least \$10.0 million in equity financing before December 1, 2015. This equity financing did not occur before December 1, 2015.

In January 2016, we executed Amendment 2 to the Loan Agreement, which increased the total facility available by \$5.0 million to a total of \$15.0 million and further delayed the start of principal payments to July 1, 2016. Following the Series D Preferred Stock financing in March 2016, we could have elected to further delay the start of principal payments until January 1, 2017, however we voluntarily began paying principal on July 1, 2016. Upon signing this amendment, we drew an additional \$3.0 million under the debt facility. The remaining \$2.0 million available for borrowing expired unused in 2016, decreasing the amounts available under the debt facility to \$13.0 million.

In March 2017, we signed Amendment 3 to the Loan Agreement increasing the total facility available by \$5.0 million to a total of \$18.0 million. We did not draw any of this additional amount, which was available for us to draw until February 28, 2018. Additionally, we did not request an optional term loan for an incremental \$5.0 million which was available for us to request until September 3, 2018. Principal payments were delayed to September 1, 2018 and the loan maturity date was extended to March 1, 2019. We voluntarily made principal payments in the months of March, April, and May 2018. No principal payments were made in June, July or August 2018. The amendment did not affect the due date of the existing end of term fees (in aggregate \$0.5 million) which were due on February 1, 2018. In connection with this amendment, we issued Hercules a warrant to purchase up to 38,828 shares of our Series D Preferred Stock at an exercise price of \$3.67 per share. Upon closing of the IPO, this warrant was automatically converted into a warrant to purchase up to 12,080 shares of our common stock at an exercise price of \$11.80 per share.

In July 2017, we signed Amendment 4 to the Loan Agreement, which capped the "Term Loan Interest Rate" with respect to the 2017 Term Loan Advance only at 10%. Amendment 4 to the Loan Agreement did not change or affect any other element of the Loan Agreement or the Term Loan Advance.

In August 2018, we signed Amendment 5 to the Loan Agreement, which extends the interest only payment period through March 1, 2020 and also extends the loan maturity date to March 1, 2020. We accounted for the August 2018 amendment as a modification pursuant to ASC 470-50 and determined that no material change occurred as a result of the modification. In addition, the amendment deferred the payment of principal until the maturity date. \$0.1 million of end of term payments were paid in March 2020.

In October 2018, we signed Amendment 6 to the Loan Agreement, which amends the Loan Agreement's collateral clause to exclude the \$1 million certificate of deposit associated with the lease on our new headquarters in Billerica, Massachusetts. The Loan Agreement and amendments contain end of term payments and are recorded in the debt accounts. \$0.5 million of end of term payments were paid in the year ended December 31, 2018.

On April 15, 2019, we signed Amendment No. 7 to the Loan Agreement, which extends the interest only payment period through July 1, 2021 and also extends the loan maturity date to October 1, 2021. We are required to pay the loan principal in five equal installments starting July 1, 2021 with the final principal payment to be made on October 1, 2021.

On July 2, 2019, 66,041 warrants were exercised by Hercules on a net, non-cash, basis. Per the terms of the warrant agreement, we issued 45,690 shares of common stock with a value equal to Hercules' gain.

The Loan Agreement contains negative covenants restricting our activities, including limitations on dispositions, mergers or acquisitions, incurring indebtedness or liens, paying dividends or making investments and certain other business transactions. There are no financial covenants associated with the Loan Agreement. The obligations under the Loan Agreement are subject to acceleration upon the occurrence of specified events of default, including a material adverse change in our business, operations or financial or other condition, which is subjective in nature. We have determined that the risk of subjective acceleration under the material adverse events clause is not probable and therefore have classified the outstanding principal in current and long-term liabilities based on scheduled principal payments.

Debt principal repayments, including the end of term fees, due as of March 31, 2020 are (in thousands):

Years ending December 31,	
Remainder 2020	\$ —
2021	7,738
	<u>\$ 7,738</u>

Uman Acquisition

In August 2019, we completed the acquisition of Uman, in which we paid \$15.7 million in cash to the shareholders of Uman. We funded this payment through our existing cash balances. In addition, we issued \$5.5 million in stock in connection with the purchase of Uman. The acquisition closed with respect to 95% of the outstanding shares of capital stock of Uman on July 1, 2019 and with respect to the remaining 5% of the outstanding shares of capital stock of Uman on August 1, 2019.

Cash Flows

The following table presents our cash flows for each period presented (in thousands):

	Three Months Ended	
	March 31,	
	2020	2019
Net cash used in operating activities	\$ (13,179)	\$ (5,352)
Net cash used in investing activities	(426)	(5,917)
Net cash provided by financing activities	861	831
Net decrease in cash and cash equivalents	<u>\$ (12,744)</u>	<u>\$ (10,438)</u>

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from the sale of our products and services. Our cash flows from operating activities are also significantly influenced by our use of cash for operating expenses to support the growth of our business. We have historically experienced negative cash flows from operating activities as we have developed our technology, expanded our business and built our infrastructure and this may continue in the future.

Net cash used in operating activities was \$13.2 million during the three months ended March 31, 2020. The net cash used in operating activities primarily consisted of the net loss of \$11.6 million offset by non-cash charges of \$2.1 million of stock-based compensation expense and \$1.0 million of depreciation and amortization expense. Cash used as a result of changes in operating assets and liabilities of \$5.3 million was primarily due to an increase in accounts receivable of \$1.2 million, an increase in inventory of \$1.4 million, an increase in accounts payable of \$1.1 million, and an increase in accrued compensation and benefits, other accrued expenses and other current liabilities of \$1.7 million.

Net cash used in operating activities was \$5.4 million during the three months ended March 31, 2019. The net loss of \$9.4 million includes non-cash charges of \$1.3 million of stock-based compensation expense and \$0.4 million of

depreciation and amortization. Cash used as a result of changes in operating assets and liabilities of \$2.3 million was primarily due to an increase in inventory of \$1.8 million, a decrease in accounts payable of \$1.3 million and a decrease in accrued compensation and benefits, other accrued expenses and other current liabilities of \$0.3 million and an increase in accounts receivable of \$0.5 million. In addition, \$6.1 million increase due to changes in other noncurrent liabilities primarily related to our new lease.

Net Cash Used in Investing Activities

Historically, our primary investing activities have consisted of capital expenditures for the purchase of capital equipment to support our expanding infrastructure and work force. We expect to continue to incur additional costs for capital expenditures related to these efforts in future periods.

We used \$0.4 million of cash in investing activities during the three months ended March 31, 2020 for the purchase of property and equipment.

We used \$5.9 million of cash in investing activities during the three months ended March 31, 2019 consisting of cash paid in for purchases of capital equipment to support our infrastructure. The significant increase was related to the leasehold improvements for our new headquarters, which is a component of our lease agreement.

Net Cash Provided by Financing Activities

Historically, we have financed our operations principally through private placements of our convertible preferred stock and borrowings from credit facilities, the sale of shares of our common stock in our IPO and revenues from our commercial operations.

Financing activities provided \$0.9 million of cash during the three months ended March 31, 2020, primarily from \$0.5 million in proceeds from stock options exercised and \$0.4 million in proceeds from stock purchases through our 2017 ESPP.

Financing activities provided \$0.8 million of cash during the three months ended March 31, 2019, which was primarily from proceeds of common stock option exercises of \$0.5 million and stock purchases through our 2017 ESPP of \$0.3 million.

Capital Resources

We have not achieved profitability on a quarterly or annual basis since our inception, and we expect to continue to incur net losses in the future. We also expect that our operating expenses will increase as we continue to increase our marketing efforts to drive adoption of our commercial products. Additionally, as a public company, we have incurred and will continue to incur significant audit, legal and other expenses that we did not incur as a private company. Our liquidity requirements have historically consisted, and we expect that they will continue to consist, of sales and marketing expenses, research and development expenses, working capital, debt service and general corporate expenses.

We believe cash generated from commercial sales, our current cash and cash equivalents, and interest income we earn on these balances will be sufficient to meet our anticipated operating cash requirements for at least the next 12 months. In the future, we expect our operating and capital expenditures to increase as we increase headcount, expand our sales and marketing activities and grow our customer base. Our estimates of the period of time through which our financial resources will be adequate to support our operations and the costs to support research and development and our sales and marketing activities are forward-looking statements and involve risks and uncertainties and actual results could vary materially and negatively as a result of a number of factors, including the factors discussed in Item 1A, "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2019. We have based our estimates on assumptions that may prove to be wrong and we could utilize our available capital resources sooner than we currently expect. Our future funding requirements will depend on many factors, including:

- market acceptance of our products, including our SP-X and HD-X instruments;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost of our research and development activities;
- our ability to enter into collaborations in the future, and the success of any such collaborations;
- the cost and timing of potential regulatory clearances or approvals that may be required in the future for our products;
- the effects of the COVID-19 pandemic; and
- the effect of competing technological and market developments.

If the conditions for raising capital are favorable, we may seek to finance future cash needs through public or private equity or debt offerings or other financings. On March 19, 2019, we filed a universal shelf registration statement on Form S-3, which was declared effective by the SEC on May 10, 2019, and pursuant to which we registered for sale up to \$200 million of any combination of our common stock, preferred stock, debt securities, warrants, rights, and/or units from time to time and at prices and on terms that we may determine. After the sales of common stock in our “at-the-market” offering during June 2019, and the sale of 2,732,673 shares of common stock in our underwritten public offering in August 2019, approximately \$81.3 million of securities remained available for issuance under this shelf registration statement. This registration statement will remain in effect up to May 10, 2022. We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. If we raise additional funds by issuing equity or equity-linked securities, our stockholders may experience dilution. Future debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we do not have or are not able to obtain sufficient funds, we may have to delay development or commercialization of our products. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations.

Contractual Obligations and Commitments

As of March 31, 2020, there have been no material changes to our contractual obligations and commitments from those described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in our Annual Report on Form 10-K for the year ended December 31, 2019.

Off-Balance Sheet Arrangements

We did not have, during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under applicable SEC rules.

Critical Accounting Policies, Significant Judgements and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States, or U.S. GAAP, requires management to make estimates and assumptions that impact the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of assets and liabilities in our financial statements and accompanying notes. The most significant assumptions used in the financial statements are the underlying assumptions used in revenue recognition and stock-compensation. We base estimates and assumptions on historical experience when available and on various factors that we determined to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

Our critical accounting policies and significant estimates that involve a higher degree of judgment and complexity are described under “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies, Significant Judgements and Estimates” included in our Annual Report on Form 10-K for the year ended December 31, 2019. There have been no material changes to our critical accounting policies and estimates as disclosed therein, with the exception of our adoption of recent accounting pronouncements, as discussed below.

Recent Accounting Pronouncements

We adopted ASC 842 and its related amendments. See Notes 2 and 10 to our unaudited financial statements included elsewhere in this Quarterly Report on Form 10-Q for more information.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

At March 31, 2020, there have been no material changes to the market risk information described under “Quantitative and Qualitative Disclosures About Market Risk” included in the Annual Report on Form 10-K for the year ended December 31, 2019.

Item 4. Controls and Procedures

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q, have concluded that, based on such evaluation, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in Internal Control over Financial Reporting.* There were no changes in our internal control over financial reporting identified in connection with the evaluation of such internal control that occurred during the three months ended March 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently a party to any material legal proceedings.

Item 1A. Risk Factors

There have been no material changes to the risk factors described in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 13, 2020, except with respect to the impact of COVID-19 on our operations as set forth herein under “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Not applicable.

Item 6. Exhibits

The following is a list of exhibits filed as part of this Quarterly Report on Form 10-Q.

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Filed Herewith</u>	<u>Incorporated by Reference herein from Form or Schedule</u>	<u>Filing Date</u>	<u>SEC File/Reg. Number</u>
31.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X			
31.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X			
32.1	Certifications of the Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X			
101	.INS XBRL Instance Document.	X			
	.SCH XBRL Taxonomy Extension Schema Document.	X			
	.CAL XBRL Taxonomy Extension Calculation Linkbase Document.	X			
	.DEF XBRL Taxonomy Extension Definition.	X			
	.LAB XBRL Taxonomy Extension Label Linkbase Document.	X			
	.PRE XBRL Taxonomy Extension Presentation Linkbase Document.	X			

SIGNATURES

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

QUANTERIX CORPORATION

Dated: May 7, 2020

By: /s/ E. Kevin Hrusovsky
E. Kevin Hrusovsky
Chairman, President and Chief Executive
Officer
(principal executive officer)

Dated: May 7, 2020

By: /s/ Amol Chaubal
Amol Chaubal
Chief Financial Officer
(principal financial officer and principal
accounting officer)

CERTIFICATIONS UNDER SECTION 302

I, E. Kevin Hrusovsky, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quanterix Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 7, 2020

/s/ E. Kevin Hrusovsky

E. Kevin Hrusovsky
Chairman, President and Chief Executive Officer
(principal executive officer)

CERTIFICATIONS UNDER SECTION 302

I, Amol Chaubal, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Quanterix Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 7, 2020

/s/ Amol Chaubal

Amol Chaubal

Chief Financial Officer

(principal financial officer and principal accounting officer)

CERTIFICATIONS UNDER SECTION 906

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), each of the undersigned officers of Quanterix Corporation, a Delaware corporation (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report for the period ended March 31, 2020 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 7, 2020

/s/ E. Kevin Hrusovsky

E. Kevin Hrusovsky

Chairman, President and Chief Executive Officer

Dated: May 7, 2020

/s/ Amol Chaubal

Amol Chaubal

Chief Financial Officer
