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 June 30, 2019

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	**20-8957988**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
900 Middlesex Turnpike Billerica, MA	**01821**
(Address of principal executive offices)	(Zip Code)

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

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

Title of each class:	Trading Symbol(s)	Name of each exchange on which registered:
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	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
		Emerging growth company	☒

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 July 31, 2019, the registrant had 25,165,086 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, 2018 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-1,” “SR-X,” “HD-1 Analyzer,” “SP-X” 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) June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 72,025	$ 44,429
Accounts receivable (less reserve for doubtful accounts of $59 and $36 as of June 30, 2019 and December 31, 2018, respectively; including $95 and $48 from related parties as of June 30, 2019 and December 31, 2018, respectively)	9,134	6,792
Inventory	8,850	5,945
Prepaid expenses and other current assets	2,377	2,330
Total current assets	92,386	59,496
Restricted cash	1,026	1,000
Property and equipment, net	12,082	2,923
Intangible assets, net	2,054	2,348
Goodwill	1,308	1,308
Other non-current assets	552	536
Total assets	$ 109,408	$ 67,611
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable (including $11 and $36 to related parties as of June 30, 2019 and December 31, 2018, respectively)	$ 3,510	$ 5,110
Accrued compensation and benefits	4,150	4,449
Other accrued expenses (including $207 and $226 to related parties as of June 30, 2019 and December 31, 2018, respectively)	4,019	3,129
Deferred revenue (including $17 and $33 with related parties as of June 30, 2019 and December 31, 2018, respectively)	5,186	5,437
Current portion of long term debt	75	—
Other current liabilities	78	—
Total current liabilities	17,018	18,125
Deferred revenue, net of current portion	374	520
Long term debt, net of current portion	7,544	7,623
Other non-current liabilities	9,727	278
Total liabilities	34,663	26,546
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Common stock, $0.001 par value:		
Authorized—120,000,000 shares as of June 30, 2019 and December 31, 2018; issued and outstanding — 24,894,019 and 22,369,036 shares as of June 30, 2019 and December 31, 2018, respectively	25	22
Additional paid-in capital	270,136	216,931
Accumulated deficit	(195,416)	(175,888)
Total stockholders' equity	74,745	41,065
Total liabilities and stockholders' equity	$ 109,408	$ 67,611

See accompanying notes

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Product revenue (including related party activity of $126 and $43 for the three months ended June 30, 2019 and 2018, respectively, and $205 and $136 for the six months ended June 30, 2019 and 2018, respectively)	$ 8,776	$ 5,200	$ 18,322	$ 9,945
Service and other revenue (including related party activity of $19 and $58 for the three months ended June 30, 2019 and 2018, respectively, and $42 and $97 for the six months ended June 30, 2019 and 2018, respectively)	4,760	3,174	7,550	5,682
Collaboration and license revenue (including related party activity of $0 and $269 for the three months ended June 30, 2019 and 2018, respectively, and $0 and $537 for the six months ended June 30, 2019 and 2018, respectively)	—	269	—	537
Total revenue	13,536	8,643	25,872	16,164
Costs of goods sold:				
Cost of product revenue (including related party activity of $35 and $47 for the three months ended June 30, 2019 and 2018, respectively, and $70 and $122 for the six months ended June 30, 2019 and 2018, respectively; including stock compensation of $27 and $19 for the three months ended June 30, 2019 and 2018, respectively, and $44 and $29 for the six months ended June 30, 2019 and 2018, respectively)	4,455	2,945	8,704	5,718
Cost of services and other revenue (including stock compensation of $57 and $51 for the three months ended June 30, 2019 and 2018, respectively, and $117 and $83 for the six months ended June 30, 2019 and 2018, respectively)	2,150	1,725	4,232	3,301
Total costs of goods sold and services	6,605	4,670	12,936	9,019
Gross profit	6,931	3,973	12,936	7,145
Operating expense:				
Research and development (including stock compensation of $180 and $138 for the three months ended June 30, 2019 and 2018, respectively, and $348 and $209 for the six months ended June 30, 2019 and 2018, respectively)	4,016	3,705	7,868	7,349
Selling, general and administrative (including stock compensation of $1,337 and $682 for the three months ended June 30, 2019 and 2018, respectively, and $2,376 and $1,205 for the six months ended June 30, 2019 and 2018, respectively)	13,429	7,579	24,941	14,271
Total operating expenses	17,445	11,284	32,809	21,620
Loss from operations	(10,514)	(7,311)	(19,873)	(14,475)
Interest income (expense), net	42	16	64	(9)
Other income (expense), net	(68)	(48)	(115)	(61)
Loss before income tax	(10,540)	(7,343)	(19,924)	(14,545)
Income tax provision	23	—	44	—
Net loss	$ (10,563)	$ (7,343)	$ (19,968)	$ (14,545)
Net loss per share, basic and diluted	$ (0.46)	$ (0.34)	$ (0.88)	$ (0.67)
Weighted-average common shares outstanding, basic and diluted	23,213,653	21,890,978	22,820,502	21,840,074

See accompanying notes

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

	Six Months Ended June 30,	
	2019	2018
Operating activities		
Net loss	$ (19,968)	$ (14,545)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization expense	953	609
Stock-based compensation expense	2,885	1,526
Non-cash interest expense	46	99
Loss on disposal of fixed assets	14	—
Changes in operating assets and liabilities:		
Accounts receivable	(2,296)	2,223
Prepaid expenses and other assets	302	(681)
Inventory	(2,905)	(1,087)
Other non-current assets	2	—
Accounts payable	(1,600)	(626)
Accrued compensation and benefits, other accrued expenses and other current liabilities	669	(957)
Contract acquisition costs	(60)	—
Other non-current liabilities	9,448	—
Deferred revenue	(310)	(531)
Net cash used in operating activities	(12,820)	(13,970)
Investing activities		
Purchases of property and equipment	(9,830)	(690)
Acquisitions, net of cash acquired	—	(3,001)
Net cash used in investing activities	(9,830)	(3,691)
Financing activities		
Proceeds from sale of common stock, net of issuance costs	—	(53)
Proceeds from stock options exercised	1,910	381
Net proceeds from at-the-market offering	48,019	—
Proceeds from ESPP purchase	393	—
Payments on notes payable	(50)	(1,875)
Net cash provided by (used in) financing activities	50,272	(1,547)
Net increase (decrease) in cash and cash equivalents	27,622	(19,208)
Cash, restricted cash, and cash equivalents at beginning of period	45,429	79,682
Cash, restricted cash, and cash equivalents at end of period	$ 73,051	$ 60,474
Supplemental cash flow information		
Cash paid for interest	$ 160	$ 347
Purchases of property and equipment included in accounts payable	$ 279	$ 29
Purchases of property and equipment included in other non-current liabilities	$ 8,057	$ —
Reconciliation of cash, cash equivalents, and restricted cash:		
Cash and cash equivalents	$ 72,025	$ 60,474
Restricted cash	$ 1,026	$ —
Total cash, cash equivalents, and restricted cash	$ 73,051	$ 60,474

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 deficit	Total stockholders’ equity
Balance at March 31, 2019	**22,491,447**	**$ 23**	**$ 219,045**	**$ (184,853)**	**$ 34,215**
Exercise of common stock warrants	—	—	—	—	—
Exercise of common stock options and vesting of restricted stock	216,409	—	1,408	—	1,408
Sale of common stock in at-the-market offering	2,186,163	2	48,017	—	48,019
ESPP stock purchase	—	—	65	—	65
Stock-based compensation expense	—	—	1,601	—	1,601
Net loss	—	—	—	(10,563)	(10,563)
Balance at June 30, 2019	**24,894,019**	**$ 25**	**$ 270,136**	**$ (195,416)**	**$ 74,745**

	Common stock shares	Common stock value	Additional paid-in capital	Accumulated deficit	Total stockholders’ equity
Balance at March 31, 2018	**21,823,282**	**22**	**210,863**	**(151,554)**	**59,331**
Exercise of common stock options and vesting of restricted stock	157,399	—	297	—	297
Stock-based compensation expense	—	—	890	—	890
Net loss	—	—	—	(7,343)	(7,343)
Balance at June 30, 2018	**21,980,681**	**$ 22**	**$ 212,050**	**$ (158,897)**	**$ 53,175**

	Common stock shares	Common stock value	Additional paid-in capital	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	318,770	1	1,910	—	1,911
Shares sold in ATM Offering	2,186,163	2	48,017	—	48,019
ESPP stock purchase	20,050	—	393	—	393
Stock-based compensation expense	—	—	2,885	—	2,885
Net loss	—	—	—	(19,968)	(19,968)
Balance at June 30, 2019	**24,894,019**	**$ 25**	**$ 270,136**	**$ (195,416)**	**$ 74,745**

	Common stock shares	Common stock value	Additional paid-in capital	Accumulated deficit	Total stockholders’ equity
Balance at December 31, 2017	**21,707,041**	**22**	**210,196**	**(144,352)**	**65,866**
Exercise of common stock warrants	16,718	—	—	—	—
Exercise of common stock options and vesting of restricted stock	256,922	—	381	—	381
Sale of common stock in at-the-market offering	—	—	(53)	—	(53)
Stock-based compensation expense	—	—	1,526	—	1,526
Net loss	—	—	—	(14,545)	(14,545)
Balance at June 30, 2018	**21,980,681**	**$ 22**	**$ 212,050**	**$ (158,897)**	**$ 53,175**

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, but is also developing its bead-based technology to detect nucleic acids in biological samples.

The Company currently markets the Simoa HD-1, 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. This compact instrument has the ability to reach a 10 plex and has custom assay capability. 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 believes that its existing unrestricted cash and cash equivalents of approximately $73.1 million at June 30, 2019 will be sufficient to allow the Company to fund its current operating plan through at least twelve months from the filing of the Company’s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2019. The Company may require additional financing in the future to fund working capital and pay its obligations as they come due. Additional financing might include issuance of equity securities, debt, cash from collaboration agreements or a combination of these. However, there can be no assurance that the Company will be successful in acquiring additional funding at levels sufficient to fund its operations or on terms favorable to the Company.

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.

Basis of presentation

The interim condensed consolidated financial statements are unaudited. The unaudited condensed consolidated financial statements reflect, in the opinion of our 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 our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission on March 18, 2019 (the 2018 Annual Report on Form 10-K). The consolidated financial information as of December 31, 2018 has been derived from the audited 2018 consolidated financial statements included in the Company’s 2018 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, and stock-based compensation. Actual results could differ from those estimates.

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 new headquarters. The restricted cash is long term in nature as the Company will not have access to the funds until more than one year from June 30, 2019.

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.

On January 1, 2019, the Company adopted Accounting Standards Codification (ASC) Topic 606, *Revenue from Contracts with Customers* (ASC 606), using the modified retrospective method. Under ASC 606, revenue is recognized upon the transfer of control of goods or services to customers and reflects the amount of consideration to which an entity expects to be entitled in exchange for those goods or services. The adoption of ASC 606 has been applied to customer contracts that were not completed as of January 1, 2019, and did not materially change the pattern of revenue recognition for its current customer contracts. The Company's consolidated financial statements for the prior-year period have not been revised and are reflective of the revenue recognition requirements which were in effect for that period.

The Company recorded an adjustment to the accumulated deficit of $0.4 million as of January 1, 2019 for the cumulative effect primarily related to the deferral of sales commissions.

In accordance with the reporting requirements of ASC 606, the disclosure of the impact on the Company's consolidated balance sheet and statement of operations, as a result of adopting the provisions of ASC 606, was as follows (in thousands):

	As reported December 31, 2018	Adjustments	Adjusted under ASC 606 January 1, 2019	As reported June 30, 2019	Adjustments	Prior to adoption of ASC 606 June 30, 2019
Assets:						
Accounts receivable	$ 6,792	$ 47	$ 6,839	$ 9,134	$ —	$ 9,134
Prepaid expenses and other current assets	2,330	288	2,618	2,377	35	2,342
Other non-current assets	536	19	555	552	—	552
Liabilities:						
Deferred revenue	5,437	43	5,394	5,186	234	5,420
Deferred revenue, net of current portion	520	43	477	374	33	407
Stockholders' equity:						
Accumulated deficit	$ (175,888)	$ (440)	$ (175,448)	$ (195,416)	$ (302)	$ (195,718)

	For the Three Months Ended June 30, 2019			For the Six Months Ended June 30, 2019		
	Under ASC 606	Adjustment	Under ASC 605	Under ASC 606	Adjustment	Under ASC 605
Product revenue	$ 8,776	$ (16)	$ 8,760	$ 18,322	$ (49)	$ 18,273
Service revenue	4,760	26	4,786	7,550	131	7,681
COGS	6,605	2	6,607	12,936	3	12,939
Gross profit	6,931	8	6,939	12,936	79	13,015
Selling general and administrative expenses	13,429	35	13,464	24,941	59	25,000
Net loss	$ (10,563)	$ (27)	$ (10,590)	$ (19,968)	$ 20	$ (19,948)

The adoption of ASC 606 is discussed in further detail in Note 3.

The Company adopted accounting standards update (ASU) 2016-01, which requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. For equity investments without readily determinable fair values that do not qualify for the practical expedient to estimate fair value using the net asset value per share or its equivalent, the Company has elected to measure these investments at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer. This election is made for each investment separately and is reassessed at each reporting period as to whether the investment continues to qualify for this election. Additionally, at each reporting period, the Company makes a qualitative assessment considering impairment indicators to evaluate whether the investment is impaired. The adoption of this standard did not have a material effect.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842): Recognition and Measurement of Financial Assets and Financial Liabilities* (ASU 2016-02), which establishes principles that lessees and lessors shall apply to report useful information to users of financial statements about the amount, timing and uncertainty of cash flows arising from a lease. Under ASU 2016-02, lessees will be required to recognize a lease liability and a right-of-use asset for all leases (with the exception of short term leases) at the commencement date. ASU 2016-02 is effective for the Company for the year ending December 31, 2020. Early adoption is permitted. In 2018, the FASB modified ASU 2016-02 by issuing ASU 2018-01 and ASU 2018-11, which collectively added two practical expedients, provided a second modified retrospective transition method which does not require retrospective adjustment of prior periods, and provided certain narrow scope improvements to ASU 2016-02. The Company is currently evaluating the expected impact of ASU 2016-2 on its financial statements.

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 2020, with early adoption permitted. The Company is currently evaluating the expected impact of ASU 2016-13 on its financial statements.

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. This ASU is effective for annual periods beginning after December 15, 2019 and interim periods within those annual periods. Early

adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company does not expect adoption of this ASU to be material to its financial statements.

There have been no other material changes to the significant accounting policies and recent accounting pronouncements previously disclosed in the 2018 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 ASC 606 on January 1, 2019, using the modified retrospective method for all contracts not completed as of the date of adoption. The reported results for 2019 reflect the application of ASC 606 guidance, while the reported results for 2018 were prepared under ASC 605, *Revenue Recognition*.

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 exceeds 200 customers and 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 has not recognized any revenues from royalties.

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 with no discounts for early payment. The Company does not provide extended payment terms or 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:

	Three Months Ended June 30, 2019				Six Months Ended June 30, 2019			
(in thousands)	**NA**	**EMEA**	**Asia Pacific**	**Total**	**NA**	**EMEA**	**Asia Pacific**	**Total**
Product revenues								
Instruments	$ 1,159	$ 893	$ 651	$ 2,703	$ 2,556	$ 2,038	$ 1,525	$ 6,119
Consumable and other products	3,655	2,095	323	6,073	7,274	4,183	747	12,204
Totals	$ 4,814	$ 2,988	$ 974	$ 8,776	$ 9,830	$ 6,221	$ 2,271	$ 18,322
Service and other revenues								
Service-type warranties	$ 814	$ 300	$ 28	$ 1,142	$ 1,503	$ 534	$ 65	$ 2,102
Research services	2,771	223	213	3,207	4,275	223	213	4,711
Other services	200	209	2	411	401	317	19	737
Totals	$ 3,785	$ 732	$ 243	$ 4,760	$ 6,179	$ 1,074	$ 297	$ 7,550

The Company's contracts with customers may include promises to transfer multiple products and services to a customer. The Company will combine 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 not recorded any sales- or usage-based royalty revenue for the three and six months ended June 30, 2019.

The aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied or are partially satisfied as of June 30, 2019 is $5.6 million. Of the performance obligations not yet satisfied or are partially satisfied, $5.2 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 $5.6 million principally consists of $3.0 million 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 12 below).

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

	Six Months Ended June 30, 2019
Balance at December 31, 2018	$ 5,957
606 adoption adjustment	(86)
Deferral of revenue	1,791
Recognition of deferred revenue	(2,102)
Balance at June 30, 2019	$ 5,560

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):

	Six Months Ended June 30, 2019
Balance at December 31, 2018	$ —
606 adoption adjustment	307
Deferral of costs to obtain a contract	450
Recognition of costs to obtain a contract	(392)
Balance at June 30, 2019	$ 365

The Company has classified the balance of capitalized costs to obtain a contract as a component of prepaid expenses and other current assets as of January 1, 2019 and June 30, 2019 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 January 1, 2019 or June 30, 2019.

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):

	June 30,	
	2019	2018
Unvested restricted common stock and restricted stock units	436,985	150,843
Outstanding stock options	2,640,072	2,543,478
Outstanding warrants	76,041	76,041
Total	3,153,098	2,770,362

As of June 30, 2019 and 2018, 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 June 30, 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	$ 43,266	$ 43,266	$ —	$ —
Note receivable	150	—	—	150
	$ 43,416	$ 43,266	$ —	$ 150

Fair value measurements as of December 31, 2018 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	$ 42,608	$ 42,608	—	$ —
Note receivable	150	—	—	150
	$ 42,758	$ 42,608	—	$ 150

6. Inventory

Inventory consists of the following (in thousands):

	June 30, 2019	December 31, 2018
Raw materials	$ 3,717	$ 1,546
Work in process	2,334	2,331
Finished goods	2,799	2,068
Total	$ 8,850	$ 5,945

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 six months ended June 30, 2019 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

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

	June 30, 2019	December 31, 2018
Accrued inventory	$ 1,320	$ 599
Accrued royalties	472	323
Accrued professional services	884	723
Accrued development costs	733	795
Accrued other	610	689
Total accrued expenses	$ 4,019	$ 3,129

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

Warrants

The Company issued no warrants during the six months ended June 30, 2019 and had 76,041 warrants outstanding as of June 30, 2019.

Stock-based compensation

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

	Three Months Ended June 30, 2019	Three Months Ended June 30, 2018	Six Months Ended June 30, 2019	Six Months Ended June 30, 2018
Cost of product revenue	$ 27	$ 19	$ 44	$ 29
Cost of service and other revenue	57	51	117	83
Research and development	180	138	348	209
General and administrative	1,337	682	2,376	1,205
Total	$ 1,601	$ 890	$ 2,885	$ 1,526

As of June 30, 2019, under the 2007 Stock Option and Grant Plan (the 2007 Plan), options to purchase 1,383,218 shares of common stock were outstanding and no shares of common stock were available for future awards. In connection with the completion of the IPO, 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. As of June 30, 2019, the 2017 Plan allowed for the issuance of up to 1,042,314 shares or options to purchase 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 becomes effective. As of June 30, 2019, under the 2017 Plan, options to purchase 1,256,854 shares of common stock were outstanding. 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 894,761 on January 1, 2019 due to this provision. As of June 30, 2019, 304,488 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 223,690 on January 1, 2019 due to this provision. As of June 30, 2019, the 2017 ESPP allowed for the issuance of up to 649,233 shares of common stock and 629,173 shares were available for grant 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, 2018	2,476,911	$ 9.65	7.73	22,108
Granted	643,732	$ 22.58		
Exercised	(261,872)	$ 7.29		
Cancelled	(218,699)	$ 11.44		
Outstanding at June 30, 2019	2,640,072	$ 12.88	7.79	55,180
Vested and expected to vest at June 30, 2019	1,182,029	$ 7.25	6.35	31,373
Exercisable at June 30, 2019	2,640,072	$ 12.88	7.79	55,180

Using the Black-Scholes option pricing model, the weighted-average fair value of options granted to employees and directors during the six months ended June 30, 2019 and 2018 was $8.64 and $8.43 per share, respectively. The expense related to awards granted to employees were $0.9 million and $1.6 million for the three and six months ended June 30, 2019, respectively. The expense related to awards granted to employees were $0.6 million and $1.1 million for the three and six months ended June 30, 2018, respectively. The intrinsic value of stock options exercised was $2.9 million and $4.1 million for the three and six months ended June 30, 2019, respectively. The intrinsic value of stock options exercised was $1.5 million and $2.5 million for the three and six months ended June 30, 2018, respectively. Activity related to non-employee awards was not material to the three and six months ended June 30, 2019 and 2018.

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 stock common stock awards were granted or vested during the six months ended June 30, 2019.

Restricted stock units

Restricted stock units (RSUs) represent the right to receive shares of common stock upon meeting specified vesting requirements. In the six months ended June 30, 2019, the Company issued 184,556 RSUs to employees of the Company under the 2017 Plan. Under the terms of the agreements, 104,965 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; 34,149 of the RSUs vest on December 31, 2019; 8,900 of the RSUs vested in equal amounts annually over four years; 31,732 of the RSUs vested equally over four years; and 4,810 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, 2018	321,662	$ 15.84
Granted	184,556	$ 23.09
Vested	(55,088)	$ 16.61
Cancelled	(14,145)	$ 18.94
Unvested RSUs as of June 30, 2019	436,985	$ 18.69

The expense related to awards granted to employees and directors was $0.7 million and $1.2 million for the three and six months ended June 30, 2019, respectively, and $0.1 million and $0.3 million for the three and six months ended June 30, 2018, respectively.

At June 30, 2019, there was $7.6 million of total unrecognized compensation cost related to unvested restricted stock, which is expected to be recognized over the remaining weighted-average vesting period of 2.88 years.

10. 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 sub licensable, 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 the three months ended June 30, 2019 and 2018, and six months ended June 30, 2019 and 2018, the Company recorded royalty expense of $0.2 million, $0.2 million, $0.4 million and $0.3 million, respectively, in cost of product revenue on the consolidated statements of operations and comprehensive loss.

License commitment

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 third party's 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. The Company must pay the greater of calculated royalties on net sales or an annual minimum royalty of $50,000. During each of the three months ended June 30, 2019 and 2018, and six months ended June 30, 2019 and 2018, the Company recorded royalty expense of less than $0.1 million in cost of product revenue on the consolidated statements of operations.

Lease commitments

During the year ended December 31, 2014, the Company entered into a lease agreement for the Company's corporate headquarters in Lexington, Massachusetts with a lease term that was to expire in June 2020; however, in

November 2018, the Company agreed to terminate the lease with the lessor effective May 31, 2019. The lease was terminated in connection with the Company signing a new lease in Billerica, Massachusetts. On October 2, 2018, the Company entered into a 137-month operating lease for the Company's new headquarters in Billerica, Massachusetts. 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. The amount of the Letter of Credit will be reduced at 41 and 65 months after the commencement date of the lease to $750,000 and then $250,000, respectively. The $1.0 million Letter of Credit is recorded as restricted cash on the balance sheet.

In connection with the acquisition of Aushon in January 2018, the Company assumed the existing Aushon lease for facilities in Billerica, Massachusetts. In August 2018, the Company terminated the Aushon lease effective September 1, 2019. The Company was required to pay a termination fee no later than July 1, 2019 in consideration for the early termination, which was paid in February 2019.

Rent expense is recognized straight-line over the course of the lease term. As of June 30, 2019, $1.9 million of deferred rent expense was recorded in other non-current liabilities, and less than $0.1 million was recorded in other accrued expenses. The table below includes committed lease expenditures related to the Company’s leases.

As of June 30, 2019, the minimum future rent payments under the lease agreements are as follows (in thousands):

2019	$	565
2020		2,013
2021		3,290
2022		3,372
2023 and Forward		29,207
	$	38,447

The Company recorded $0.9 million, $0.4 million, $1.9 million and $0.7 million in rent expense for the three months ended June 30, 2019 and 2018, and the six months ended June 30, 2019 and 2018, respectively.

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 are expected to continue through the second 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 June 30, 2019, assuming no additional commercial units were purchased, this fee would equal $10.7 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 June 30, 2019 and December 31, 2018 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.

11. Notes payable

Loan agreement

On April 14, 2014, the Company executed a Loan Agreement with a lender, as subsequently amended multiple times, most recently in April 2019. As of June 30, 2019, 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 8.25%. 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.

No end of term charges or principal payments were paid during the six months ended June 30, 2019. 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 Fee” 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 June 30, 2019, 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 June 30, 2019, debt payment obligations due based on principal payments are as follows (in thousands):

2019	$	—
2020		—
2021		7,688
	$	7,688

Non-cash interest expense related to debt discount amortization and accretion of end of term fees was less than $0.0 million, $0.1 million, $0.0 million and $0.1 million for the three months ended June 30, 2019 and 2018, and six months ended June 30, 2019 and 2018, respectively.

12. Collaboration and license arrangements

Joint development and license agreement

The JDLA with bioMérieux, a related party, was amended in 2016 (the Amended JDLA). Following the amendment, a total of $3.2 million of consideration was assigned to the deliverables and collaboration activities outlined in the Amended JDLA. The consideration of $3.2 million will be recognized over the performance period which began in the fourth quarter 2016. On September 6, 2018, bioMérieux notified the Company that it was terminating the Amended JDLA, forfeiting any future IVD licensing rights to the Company’s Simoa technology and enabling the Company to consolidate and regain control of all Simoa IVD licensing and IP rights. As a result of the termination, the Company immediately recognized $1.6 million in deferred revenue related to the agreement.

Evaluation and option agreements and license agreement

In 2015, the Company entered into three agreements, for three separate fields, with a diagnostic company for the evaluation of the Company’s Simoa technology. These agreements each allowed for the option to negotiate a license agreement. In return, the Company received non-refundable payments totaling $2.0 million. In December 2016, the diagnostic company exercised one of its options and the parties entered into a non-exclusive license agreement in one of the fields. This agreement has a one-time non-refundable license fee of $1.0 million and the right to receive running low single digit royalties on licensed products. The negotiation periods for the other two agreements were extended and the negotiations remain ongoing.

Upon execution of the license in one of the fields in December 2016, the $1.0 million license fee, in addition to the $0.8 million allocated to the option for this field, resulted in a total of $1.8 million of consideration being recognized as revenue as there were no remaining undelivered performance obligations. In December 2018, the Company entered into an option agreement for the rights to negotiate an exclusive license in this field with the diagnostic company. In exchange for the rights to negotiate an exclusive agreement, the Company will receive $0.5 million in consideration. As the right to negotiate with the Company has not been executed, the consideration from this agreement is deferred until the sooner of the execution of the contract or the end of the option period. Because the negotiations remain ongoing with respect to the other two fields and the options have not been exercised, the consideration allocated to these options of $1.7 million has been deferred and is recorded as deferred revenue as of June 30, 2019 and December 31, 2018.

13. 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 and six months ended June 30, 2019, the Company made contributions of $0.1 million and $0.3 million, respectively. During the six months ended June 30, 2018, the Company did not make any contribution.

14. Goodwill and Acquired Intangible Assets

As of June 30, 2019, the carrying amount of goodwill was $1.3 million. The following is a rollforward of the Company’s goodwill balance (in thousands):

		Goodwill
Balance as of December 31, 2018	$	1,308
Goodwill acquired		—
Balance as of June 30, 2019	$	1,308

Purchased intangible assets consist of the following (in thousands):

		June 30, 2019		
	Estimated Useful Life (in years)	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Developed technology	7	$ 1,650	$ (560)	$ 1,090
Customer relationships	10	1,250	(313)	938
Trade names	3	50	(24)	26
Total		$ 2,950	$ (896)	$ 2,054

The Company recorded amortization expense of $0.1 million and $0.3 million for the three and six months ended June 30, 2019, respectively, and $0.2 million and $0.3 million for the three and six months ended June 30, 2018, respectively. Amortization relating to developed technology is recorded within research and development expense, amortization of customer relationships is recorded within sales and marketing expenses, and amortization of trade names is recorded within general and administrative expenses.

Future estimated amortization expense of acquired intangibles as of June 30, 2019 is as follows (in thousands):

For the Years Ended December 31,	Estimated Amortization Expense
2019	$ 287
2020	500
2021	403
2022	320
2023	238
Thereafter	306
	$ 2,054

15. At-the-market offering

On March 19, 2019, the Company entered into the Sales Agreement with 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, 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.

16. Related party transactions

bioMérieux is a customer and also a holder of the Company's common stock. bioMérieux formerly also had a designee on the Company's Board of Directors. On September 6, 2018, bioMérieux notified the Company that it was terminating the Amended JDLA. The termination of the agreement resulted in the immediate recognition of the remaining deferred revenue. The Company recognized revenue from bioMérieux related to the Amended JDLA of less than $0.1 million, $0.3 million, less than $0.1 million and $0.5 million in the three months ended June 30, 2019 and 2018 and the six months ended June 30, 2019 and 2018, respectively.

The Company entered into the License Agreement for certain intellectual property with Tufts. 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 June 30, 2019 and 2018 and the six months ended June 30, 2019 and 2018, the Company recorded royalty expense of $0.2 million, $0.2 million, $0.4 million and $0.3 million, respectively, in cost of product revenue on the consolidated statements of operations and comprehensive loss.

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 $0.1 million and $0.1 million for the three and six months ended June 30, 2019, respectively.

17. Subsequent events

On August 1, 2019, the Company completed its acquisition of UmanDiagnostics AB, a Swedish company located in Umea, Sweden (Uman), for an aggregate contractual purchase price of $22.5 million, comprised of (i) $16.0 million in cash plus (ii) 191,154 shares of common stock (representing $6.5 million based on the average closing price of the Company's common stock on the Nasdaq Global Market for the ten (10) trading days prior to June 26, 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 neurofiliment 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.

The Company will account for the acquisition of Uman as a purchase of a business under U.S. GAAP. Under the acquisition method of accounting, the assets of Uman will be recorded as of the acquisition date, at their respective fair values, and consolidated with those of the Company.

As of August 6, 2019, the preliminary purchase price allocation related to the acquisition of Uman is incomplete. The Company has retained an independent valuation firm to assess the fair value of the identified intangible assets and certain tangible assets acquired and liabilities assumed and plans to file pro forma financial information with the SEC within the applicable time period. During the three and six months ended June 30, 2019, the Company incurred approximately $0.9 million in costs associated with the acquisition of Uman, which are recorded as selling, general, and administrative expenses within the consolidated statements of operations.

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, 2018, 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, 2018 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, we are also developing our Simoa bead-based technology to detect nucleic acids in biological samples.

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, Czech Republic, China, India, Israel, Japan, Mexico, South Korea, Lebanon, Qatar, Singapore 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 HD-1 instrument 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 Analyzer in a compact benchtop form with a lower price point, more flexible assay preparation, and a wider range of applications. While we expect the SR-X to generate lower consumables revenue per instrument than the Simoa HD-1 Analyzer due to its lower throughput, 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 Biosystems, Inc. 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 $22.5 million, comprised of (i) $16.0 million in cash plus (ii) 191,154 shares of our common stock (representing $6.5 million based on the average closing price of our common stock on the Nasdaq Global Market for the ten (10) trading days prior to June 26, 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 neurofiliment 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.

As of June 30, 2019, we had cash and cash equivalents of $72.0 million. Since inception, we have incurred net losses. Our net loss was $31.5 million, $27.0 million, and $23.2 million for the years ended December 31, 2018, 2017 and 2016, respectively, and $20.0 million and $14.5 million for the six months ended June 30, 2019 and 2018, respectively. As of June 30, 2019, we had an accumulated deficit of $195.4 million and stockholders' equity of $74.7 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;
- build out our new facility as we continue to grow our employee headcount;
- hire additional personnel;
- 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 June 30, 2019 and June 30, 2018 (dollars in thousands):

	Three Months Ended June 30, 2019	% of revenue	Three Months Ended June 30, 2018	% of revenue	$ change	% change
Product revenue	$ 8,776	64.8 %	$ 5,200	60.2 %	$ 3,576	68.8 %
Service and other revenue	4,760	35.2 %	3,174	36.7 %	1,586	50.0 %
Collaboration and license revenue	—	0.0 %	269	3.1 %	(269)	(100.0)%
Total revenue	13,536	100.0 %	8,643	100.0 %	4,893	56.6 %
Cost of goods sold:						
Cost of product revenue	4,455	32.9 %	2,945	34.1 %	1,510	51.3 %
Cost of service revenue	2,150	15.9 %	1,725	20.0 %	425	24.6 %
Total costs of goods sold and services	6,605	48.8 %	4,670	54.0 %	1,935	41.4 %
Gross profit	6,931	51.2 %	3,973	46.0 %	2,958	74.5 %
Operating expense:						
Research and development	4,016	29.7 %	3,705	42.9 %	311	8.4 %
Selling, general and administrative	13,429	99.2 %	7,579	87.7 %	5,850	77.2 %
Total operating expense	17,445	128.9 %	11,284	130.6 %	6,161	54.6 %
Loss from operations	(10,514)	(77.7)%	(7,311)	(84.6)%	(3,203)	43.8 %
Interest income (expense), net	42	0.3 %	16	0.2 %	26	162.5 %
Other income (expense), net	(68)	(0.5)%	(48)	(0.6)%	(20)	41.7 %
Loss before income tax	(10,540)	(77.9)%	(7,343)	(85.0)%	(3,197)	43.5 %
Income tax provision	23	0.2 %	—	0.0 %	23	100.0 %
Net loss	$ (10,563)	(78.0)%	$ (7,343)	(85.0)%	$(3,220)	43.9 %

Revenue

Revenue increased by $4.9 million, or 56.6%, to $13.5 million for the three months ended June 30, 2019 as compared to $8.6 million for the three months ended June 30, 2018. Product revenue consisted of primarily sales of instruments totaling $2.7 million and sales of consumables and other products of $6.1 million for the three months ended June 30, 2019. Product revenue consisted of sales of instruments totaling $1.8 million and sales of consumables and other products totaling $3.4 million for the three months ended June 30, 2018. The increase in product revenue of $3.6 million was primarily due to increased instruments sales and increased consumables sales in the three months ended June 30, 2019. The installed base of instruments increased from June 30, 2018 to June 30, 2019, and as these additional instruments were used by customers, the consumable sales increased. The increase in service and other revenue of $1.6 million was due to increased services performed in our Accelerator Laboratory. We had no collaboration and license revenue in the three months ended June 30, 2019 as compared to the $0.3 million of revenue related to the collaboration arrangement with bioMérieux in the three months ended June 30, 2018. We adopted ASC 606 as of January 1, 2019, which did not have a material impact on revenue in the second quarter of 2019.

Cost of Goods Sold and Services

Cost of product revenue increased by $1.5 million, or 51.3%, to $4.5 million for the three months ended June 30, 2019 as compared to $2.9 million for the three months ended June 30, 2018. The increase was primarily due to increased sales of consumables and instruments. Cost of service revenue increased to $2.2 million for the three months

ended June 30, 2019 from $1.7 million for the three months ended June 30, 2018. 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 decreased to 48.8% of total revenue for the three months ended June 30, 2019 as compared to 54.0% for the three months ended June 30, 2018, primarily as a result of decreased costs associated with the decrease in cost to produce products.

Research and Development Expense

Research and development expense increased slightly by $0.3 million, or 8.4%, to $4.0 million for the three months ended June 30, 2019 as compared to $3.7 million for the three months ended June 30, 2018. The increase was primarily due to the further development of consumables and the SP-X instrument for which development was completed in the second quarter of 2019, as well as the further develop of the HD-X instrument. In addition, the increased headcount in research and development contributed to the increase in research and development expense.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by $5.9 million, or 77.2%, to $13.4 million for the three months ended June 30, 2019 as compared to $7.6 million for the three months ended June 30, 2018. The increase was primarily due to headcount additions in various departments as we build out our organization to support future growth, public company costs, the lease for the new headquarters, transaction fees and amortization of intangibles associated with the Aushon acquisition, and stock compensation expense. In addition, we incurred approximately $0.9 million in costs associated with the acquisition of Uman.

Interest and Other Expense, Net

Interest and other expense, net increased slightly to less than $0.1 million for the three months ended June 30, 2019 as compared to less than $0.1 million for the same period in 2018, primarily due to the interest income earned on cash equivalents.

Comparison of the Six Months Ended June 30, 2019 and June 30, 2018 (dollars in thousands):

	Six Months Ended June 30, 2019	% of revenue	Six Months Ended June 30, 2018	% of revenue	$ change	% change
Product revenue	$ 18,322	70.8 %	$ 9,945	61.5 %	$ 8,377	84.2 %
Service and other revenue	7,550	29.2 %	5,682	35.2 %	1,868	32.9 %
Collaboration and license revenue	—	— %	537	3.3 %	(537)	(100.0)%
Total revenue	25,872	100.0 %	16,164	100.0 %	9,708	60.1 %
Costs of Goods sold:						
Cost of product revenue	8,704	33.6 %	5,718	35.4 %	2,986	52.2 %
Cost of services revenue	4,232	16.4 %	3,301	20.4 %	931	28.2 %
Total Costs of Goods sold and services	12,936	50.0 %	9,019	55.8 %	3,917	43.4 %
Gross Profit	12,936	50.0 %	7,145	44.2 %	5,791	81.0 %
Operating Expenses:						
Research and development	7,868	30.4 %	7,349	45.5 %	519	7.1 %
Selling, general and administrative	24,941	96.4 %	14,271	88.3 %	10,670	74.8 %
Total operating expenses	32,809	126.8 %	21,620	133.8 %	11,189	51.8 %
Loss from operations	(19,873)	(76.8)%	(14,475)	(89.6)%	(5,398)	37.3 %
Interest income (expense), net	64	0.2 %	(9)	(0.1)%	73	(811.1)%
Other income (expense), net	(115)	(0.4)%	(61)	(0.3)%	(54)	88.5 %
Loss before income tax	(19,924)	(77.0)%	(14,545)	(90.0)%	(5,379)	37.0 %
Income tax provision	44	0.2 %	—	— %	44	100.0 %
Net loss	$ (19,968)	(77.2)%	$ (14,545)	(90.0)%	$ (5,423)	37.3 %

Revenue

Revenue increased by $9.7 million, or 60.1%, to $25.9 million for the six months ended June 30, 2019 as compared to $16.1 million for the six months ended June 30, 2018. Product revenue consisted of primarily sales of instruments totaling $6.1 million and sales of consumables and other products of $12.2 million for the six months ended June 30, 2019. Product revenue consisted of sales of instruments totaling $3.7 million and sales of consumables and other products totaling $6.2 million for the six months ended June 30, 2018. The increase in product revenue of $8.4 million was primarily due to the sale of more instruments and increased sales of consumables in the six months ended June 30, 2019. The installed base of instruments increased from June 30, 2018 to June 30, 2019, and as these additional instruments were used by customers, the consumable sales increased. The increase in service and other revenue of $1.9 million was due to increased services performed in our Accelerator Laboratory. We had no collaboration and license revenue in the six months ended June 30, 2019 as compared to the $0.5 million of revenue related to the collaboration arrangement with bioMérieux in the six months ended June 30, 2018. We adopted ASC 606 as of January 1, 2019, which did not have a material impact on revenue in the same period of 2019.

Cost of Goods Sold and Services

Cost of product revenue increased by $3.0 million, or 52.2%, to $8.7 million for the six months ended June 30, 2019 as compared to $5.7 million for the six months ended June 30, 2018. The increase was primarily due to increased

sales of consumables and instruments. Cost of service revenue increased to $4.2 million for the six months ended June 30, 2019 from $3.3 million for the six months ended June 30, 2018. 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 decreased to 50.0% of total revenue for the six months ended June 30, 2019 as compared to 55.8% for the six months ended June 30, 2018, primarily as a result of decreased costs associated with the decrease in cost to produce products.

Research and Development Expense

Research and development expense increased slightly by $0.5 million, or 7.1%, to $7.9 million for the six months ended June 30, 2019 as compared to $7.3 million for the six months ended June 30, 2018. The increase was primarily due to the further development of consumables and the SP-X instrument for which development was completed in the same period of 2019. In addition, the increased headcount in research and development contributed to the increase in research and development expense.

Selling, General and Administrative Expense

Selling, general and administrative expense increased by $10.7 million, or 74.8%, to $24.9 million for the six months ended June 30, 2019 as compared to $14.3 million for the six months ended June 30, 2018. The increase was primarily due to headcount additions in various departments as we build out our organization to support future growth, public company costs, the lease for the new headquarters, transaction fees and amortization of intangibles associated with the Aushon acquisition, and stock compensation expense. In addition, we incurred approximately $0.9 million in costs associated with the acquisition of Uman.

Interest and Other Expense, Net

Interest and other expense, net decreased slightly for the six months ended June 30, 2019 as compared to the same period in 2018, primarily due to the interest income earned on cash equivalents.

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.

At-the-Market Offering

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 three months ended June 30, 2019, 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.

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 are due 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 entered into 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.

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 June 30, 2019 are (in thousands):

Years ending December 31,	
Remainder 2019	$ —
2020	—
2021	7,813
	$ 7,813

Uman Acquisition

In August 2019, we closed the acquisition of Uman, in which we paid $16 million in cash to the shareholders of Uman. We funded this payment through our existing cash balances.

Cash Flows

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

	Six Months Ended June 30,	
	2019	2018
Net cash used in operating activities	$ (12,820)	$ (13,970)
Net cash used in investing activities	(9,830)	(3,691)
Net cash provided by (used in) financing activities	50,272	(1,547)
Net increase (decrease) in cash and cash equivalents	$ 27,622	$ (19,208)

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 $12.8 million during the six months ended June 30, 2019. The net cash used in operating activities primarily consisted of the net loss of $20.0 million including non-cash charges of $2.9 million of stock-based compensation expense and $1.0 million of depreciation and amortization. Cash used as a result of changes in operating assets and liabilities of $3.3 million was primarily due to a $9.4 million increase in other non current liabilities primarily related to our new lease, an increase in accounts receivable of $2.3 million, an increase in inventory of $2.9 million, and a decrease in accounts payable of $1.6 million.

Net cash used in operating activities was $14.0 million during the six months ended June 30, 2018. Net cash used in operating activities primarily consisted of the net loss of $14.5 million, and a decrease in accounts payable and accrued expenses of $1.6 million. Other cash outflows including an increase in inventory of $1.1 million, an increase of prepaid and other expenses of $0.7 million and decrease in deferred revenue of $0.5 million are primarily offset by a decrease in accounts receivable of $2.2 million, non-cash stock compensation expense of $1.5 million and other non-cash adjustments of $0.7 million.

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 $9.8 million of cash in investing activities during the six months ended June 30, 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 new headquarters, which is a component of our lease agreement.

We used $3.7 million of cash in investing activities during the six months ended June 30, 2018 consisting of cash paid in the acquisition of Aushon, net of cash acquired, and for purchases of capital equipment to support our infrastructure.

Net Cash Provided by (Used in) 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 $50.3 million of cash during the six months ended June 30, 2019, primarily from proceeds of our “at-the-market” offering during the second quarter of 2019.

We used $1.5 million of cash in financing activities during the six months ended June 30, 2018, which was primarily used in payments of outstanding debt of $1.9 million, partially offset by proceeds of common stock option exercises of $0.4 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 into the third quarter of 2020. 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, 2018. 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 instrument;
- 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; 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 initially filed a universal shelf registration statement on Form S-3, which was declared effective by the SEC on May 10, 2019, on 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 shares of common stock in our "at-the-market" offering during the three months ended June 30, 2019, approximately $150 million of securities remain 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 June 30, 2019, 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 the Annual Report on Form 10-K for the year ended December 31, 2018, except that, on April 15, 2019, we signed Amendment 7 to the Loan Agreement, which extends the interest only payment period through July 1, 2021 and also extends the loan the maturity date until 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.

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, 2018. 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 606, "*Revenue Recognition — Revenue from Contracts with Customers*" and its related amendment. See Notes 2 and 3 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 June 30, 2019, 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, 2018.

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 Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this 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 June 30, 2019 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, 2018, filed with the SEC on March 18, 2019, except for the addition of the following risk factors:

The anticipated benefits of the acquisition of Uman may not be realized.

The success of our acquisition of Uman will depend on, among other things, the ability to realize anticipated cost savings and to combine the businesses of Quanterix and Uman in a manner that does not materially disrupt existing relationships. If these objectives are not achieved, the anticipated benefits of the merger may not be realized fully or at all or may take longer to realize than expected. It is possible that the integration process could result in the disruption of Quanterix's or Uman's ongoing businesses that could adversely affect the ability of the combined company to maintain relationships with third parties and employees or to achieve the anticipated benefits of the merger. In addition, the integration may result in additional and unforeseen expenses, and the anticipated benefits of the integration plan may not be realized. Actual cost synergies, if achieved at all, may be lower than expected and may take longer to achieve than anticipated. Integration efforts between the two companies may also divert management's attention and resources. If these challenges are not adequately addressed, we may be unable to successfully integrate Uman's operations, or to realize the anticipated benefits of the integration of the two companies. An inability to realize the full extent of, or any of, the anticipated benefits of the merger, as well as any delays encountered in the integration process, could have an adverse effect on the combined company's business and results of operations.

Our future results may be adversely impacted if we do not effectively manage our expanded operations.

Following the completion of the Aushon Biosystems, Inc. and Uman acquisitions, the size of our business has increased significantly in the past two years. Our ability to continue to successfully manage this expanded business will depend, in part, upon management's ability to design and implement strategic initiatives that address not only the integration of the acquired companies, but also the increased scale and scope of the combined business with its associated increased costs and complexity. There can be no assurances that we will be successful or that we will realize the expected operating efficiencies, cost savings and other benefits currently anticipated from these acquisitions.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds from Initial Public Offering of Common Stock

On December 11, 2017, we completed the initial public offering of our common stock, which resulted in the sale of 4,916,480 shares, including 641,280 shares sold by us pursuant to the exercise in full by the underwriters of their option to purchase additional shares in connection with the initial public offering, at a price to the public of $15.00 per share. The offer and sale of all of the shares in our initial public offering was registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-221475), which was declared effective by the SEC on December 6, 2017, and a registration statement on Form S-1 (File No. 333-221932) under Rule 462(b) of the Securities Act that became effective upon its filing. Following the sale of all of the shares in connection with the closing of our initial public offering, the offering terminated. J.P. Morgan Securities LLC, Leerink Partners LLC and Cowen and Company, LLC acted as joint book-running managers for the initial public offering. BTIG, LLC and Evercore Group L.L.C. acted as co-managers.

We received approximately $65.6 million in net proceeds after deducting underwriting discounts and commissions and offering costs payable by us. As of June 30, 2019, we had used approximately $54.3 million of the net proceeds from the offering for: operating expenses, capital investments, debt payments and the acquisition of Aushon. None of the offering expenses consisted of direct or indirect payments made by us to directors, officers or persons owning 10% or more of our common stock or to their associates, or to our affiliates, and we have not used any of the net proceeds from the offering to make payments, directly or indirectly, to any such persons. There has been no material change in the planned use of the net proceeds from our initial public offering as described in our final prospectus filed with the SEC on December 7, 2017 pursuant to Rule 424(b)(4) under the Securities Act.

Issuer Purchases of Equity Securities

None.

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.

Exhibit Number		Exhibit Description	Filed Herewith	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
2.1		Share Purchase Agreement, dated as of June 26, 2019, by and among the Registrant, Inro Biomedtek Aktiebolag, Norsun konsult AB, Management och Skog i Umeå AB and Niklas Norgren.		8-K	6/26/2019	001-38319
10.1		Amendment No. 7 to Loan and Security Agreement, dated April 15, 2019, by and between the Registrant and Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.).		8-K	4/15/2019	001-38319
10.2*		Letter Agreement, dated May 31, 2019, between the Registrant and John Fry.	X			
10.3		Consulting agreement between Jackson Streeter, M.D. and Quanterix Corporation.		8-K	8/1/2019	001-38319
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

*Management contract or compensating plan or arrangement

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: August 6, 2019	By: /s/ E. Kevin Hrusovsky E. Kevin Hrusovsky Chairman, President and Chief Executive Officer (principal executive officer)
Dated: August 6, 2019	By: /s/ Amol Chaubal Amol Chaubal Chief Financial Officer (principal financial officer and principal accounting officer)

Exhibit 10.2

113 Hartwell Ave
Lexington, MA 02421
tel: 617.301.9400
fax: 617.301.9401
www.quanterix.com

Revised May 31, 2019

John Fry

Dear John:

Quanterix Corporation (the "Company") is pleased to offer you the full-time position of General Counsel and Corporate Secretary, reporting to me, pending Board approval. Your effective date of hire will be June 10, 2019. We are excited about the prospect of you joining our team.

Salary: The Company will pay you a salary at an annual rate of $340,000, paid at a bi-weekly rate of $13,076.92 (subject to periodic review and adjustment at the discretion of the Company).

Bonus: You will be eligible to receive an annual performance bonus. The Company will target the bonus at up to 50% of your annual base salary earnings. The actual bonus percentage is discretionary and will be subject to your achievement of the metrics and goals established by and agreed to with Kevin Hrusovsky. The bonus also will be subject to your employment for the full period covered by the bonus, approval by and adjustment at the discretion of the Company and Company's Board of Directors, and the terms of any applicable bonus plan. You must be actively employed by Quanterix on the date the bonus is paid to receive a performance bonus.

Benefits: You will be eligible to participate in the employee benefits and insurance programs generally made available to its full-time employees, including medical insurance, dental insurance, 401K Plan and match, ESPP, Flexible Spending Account, term life insurance, and short and long term disability insurance. Details of these benefits programs, including mandatory employee contributions, will be made available to you when you start. You also will be eligible to receive paid vacation time. You will be eligible for up to 20 days of paid vacation per year, which shall accrue on a prorated basis. Other provisions of the Company's vacation policy are set forth in the policy itself.

Stock Options & RSUs: You will be eligible to participate in the Company's stock option program, subject to approval by the Compensation Committee. We will recommend to the Compensation Committee to approve that you be granted a new hire award of 22,502 Restricted Stock Units ("RSUs") and an option to purchase 51,177 shares ("Options") of the Company's common stock at the stock's fair market value on the later of (i) approval by the compensation committee or (ii) your effective date of employment. The RSUs and Options will vest over four years, with 25% vesting on the first anniversary of your start date, and the remaining vesting ratably on a monthly basis over the next three years. Notwithstanding the foregoing, in the event of the Company's consummation of a Sale Event (as defined below) within the first eighteen (18) months after your effective date of employment and while you remain employed by the Company, then: (1) you immediately will vest in fifty percent (50%) of any unvested outstanding portion of the RSUs and Options (with any such vesting, as stated below, pursuant to the terms and conditions of the Quanterix 2017 Employee, Director and Consultant Equity Incentive Plan and any associated agreement required to be entered into by you and the Company), and (2) any remaining unvested RSUs and Options (after giving effect to the aforementioned vesting acceleration) will vest on the original vesting schedule applicable to the RSUs and Options, with the vesting amounts to be reduced and pro-rated to reflect the above-described acceleration.

You will also be eligible to receive an annual equity grant subject to approval by the Compensation Committee and in the same manner as the awards provided to other senior executive officers of the Company. The Company will target a grant date fair value of the annual equity awards of up to $600,000 based upon Black Scholes Value. The actual value of the awards will be discretionary and will be subject to your achievement of the metrics and goals established by and agreed to with Kevin Hrusovsky.

Your eligibility for equity awards will be governed by the Quanterix 2017 Employee, Director and Consultant Equity Incentive Plan and any associated agreement required to be entered into by you and the Company.

At-Will Employment; Accrued Obligations; Severance.

Your employment is "at will," meaning you or the Company may terminate it at any time for any or no reason. In the event of the termination of your employment for any reason, the Company shall pay you the "Accrued Obligations," defined as (1) your base salary through the date of termination, (2) an amount equal to the value of your accrued unused vacation days, and (3) the amount of any expenses properly incurred by you on behalf of the Company prior to any such termination and not yet reimbursed. In addition, in the event the Company terminates your employment without Cause or you resign for Good Reason (both as defined below), the Company shall provide you with the following termination benefits (the "Termination Benefits"):

(i) continuation of your base salary for a period of six (6) months after the date of termination at the salary rate then in effect ("Salary Continuation Payments") (solely for purposes of Section 409A of the Internal Revenue Code of 1986, as amended, each Salary Continuation Payment is considered a separate payment). RSU's and Options that otherwise would have vested during this severance period will vest and will not be forfeited;

(ii) continuation of group health plan benefits to the extent authorized by and consistent with 29 U.S.C. § 1161 et seq. (commonly known as "COBRA"), with the cost of the regular premium for such benefits shared in the same relative proportion by the Company and you as in effect on the date of termination until the earlier of (i) six (6) months from the termination date; or (ii) the date you become eligible for health benefits through another employer or otherwise become ineligible for COBRA ("Health Benefits Continuation Payments"). Notwithstanding the above, if the Company determines in its sole discretion that it cannot provide the foregoing Health Benefits Continuation Payments without potentially violating applicable law (including but not limited to the 2010 Patient Protection and Affordable Care Act, as amended by the 2010 Health Care and Education Reconciliation Act), the Company shall in lieu thereof provide to you a taxable monthly payment in an amount equal to the Company's portion of the monthly COBRA premium (as described above) that you would be required to pay to continue your group health coverage in effect on the date of your termination (which amount shall be based on the premium for the first month of COBRA coverage), which payments shall be made on the last day of each month regardless of whether you elect COBRA continuation coverage and shall end on the earlier of (y) the date upon which you obtain other employment; or (z) the last day of the sixth (6th) calendar month following your termination date;

(iii) if the date of termination occurs within the twelve (12) month period immediately following a Sale Event (such a termination a "Sale Event Termination"), then your Salary Continuation Payments and Health Benefits Continuation Payments shall continue for a period of twelve (12) months after the date of termination (such 12 month continuation period to be *in lieu* of, and not in addition to, the 6-month period referenced in (i) and (ii) above); and

(iv) if a Sale Event Termination occurs after the first eighteen (18) months after your effective date of employment, you will receive additional vesting of all outstanding equity awards held by you (including the Options and RSUs) equal to an amount that would have vested during the twelve (12) month Salary Continuation Payments period.

Notwithstanding anything to the contrary in this agreement, you shall not be entitled to any Termination Benefits unless you first (i) enter into, do not revoke, and comply with

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the terms of a separation agreement in a form acceptable to the Company, which shall include a general release in favor of the Company and related persons and entities (the "Release"); (ii) resign from any and all positions, including, without implication of limitation, as a director, trustee, and officer, that you then hold with the Company and any affiliate of the Company; (iii) comply with the terms of your Non-Competition, Non-Solicitation, Confidentiality and Assignment Agreement; and (iv) return all Company property and comply with any instructions related to deleting and purging duplicates of such Company property. The Salary Continuation Payments shall commence within 60 days after the date of termination and shall be made on the Company's regular payroll dates; provided, however, that if the 60-day period begins in one calendar year and ends in a second calendar year, the Salary Continuation Payments shall begin to be paid in the second calendar year. In the event you miss a regular payroll period between the date of termination and first Salary Continuation Payment, the first Salary Continuation Payment shall include a "catch up" payment.

For purposes of this section:

> "*Cause*" means the occurrence of any of the following (and, if applicable, that the Company has complied with the Cause Process (hereinafter defined) following the occurrence of a circumstance subject to the Cause Process): (i) theft, fraud, embezzlement, misappropriation of assets or property of the Company; (ii) dishonesty, gross negligence, misconduct, neglect of duties, or breach of fiduciary duty to the Company; (iii) violation of federal or state securities laws; (iv) breach of an employment, consulting or other agreement with the Company; (v) the conviction of a felony, or any crime involving moral turpitude, including a plea of guilty or *nolo contendere*; or (vi) continued non-performance or unsatisfactory performance of your responsibilities hereunder. "Cause Process" means that (1) the Company has reasonably determined in good faith that a "Cause" condition has occurred; (2) the Company has notified you in writing of the first occurrence of the Cause condition within 60 days of the first occurrence of such condition; (3) you are provided a period of 30 days following such notice (the "Cause Cure Period") to remedy the condition; (4) notwithstanding such efforts, the Company reasonably and in good faith determines at the end of the Cause Cure Period that the Cause condition continues to exist; and (5) the Company terminates your employment within 30 days after the end of the Cause Cure Period. If you cure the Cause condition during the Cause Cure Period, Cause shall be deemed not to have occurred. The Company shall not be required to follow the Cause Process as to those conditions which it reasonably determines in good faith cannot be cured within the Cause Cure Period. For the avoidance of doubt, you and the Company acknowledge and agree that clauses (i), (iii) and (v) cannot be cured, and shall not be subject to the requirements of the Cause Process.

"*Good Reason*" means that you have complied with the "Good Reason Process" (hereinafter defined) following the occurrence of any of the following actions undertaken by the Company without your express prior written consent: (i) the material diminution in your responsibilities, authority and function; (ii) a material reduction in your base salary, provided, however, that Good Reason shall not be deemed to have occurred in the event of a reduction in your base salary that is pursuant to a salary reduction program affecting substantially all of the senior level employees of the Company and that does not adversely affect you to a greater extent than other similarly situated employees; (iii) a material change in the geographic location at which you must regularly report to work and perform services, except for required travel on the Company's business; or (iv) a material breach by the Company of any of its obligations to you under its agreements with you. "Good Reason Process" means that (1) you have reasonably determined in good faith that a "Good Reason" condition has occurred; (2) you have notified the Company in writing of the first occurrence of the Good Reason condition within 30 days of the first occurrence of such condition; (3) the Company is provided with a period of 30 days following such notice (the "Cure Period") to remedy the condition; (4) notwithstanding such efforts, you reasonably and in good faith determine at the end of the Cure Period that the Good Reason condition continues to exist; and (5) you terminate your employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

"*Sale Event*" means the consummation of: (i) the sale of all or substantially all of the assets of the Company and its Subsidiaries on a consolidated basis to an unrelated person or entity; or (ii) a merger, reorganization or consolidation in which the outstanding shares of Stock are converted into or exchanged for securities of the successor entity and the holders of the Company's outstanding voting power immediately prior to such transaction do not own at least a majority of the outstanding voting power of the successor entity immediately upon completion of such transaction (taking into account only ownership interests resulting from pre-transaction interests in the Company).

Section 280G:

Notwithstanding any other provision of this Agreement or any other plan, arrangement or agreement to the contrary, if any of the payments or benefits provided or to be provided by the Company or its affiliates to you or for your benefit pursuant to the terms of this Agreement or otherwise ("Covered Payments") constitute parachute payments ("Parachute Payments") within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and would, but for this Section be subject to the excise tax imposed under Section 4999 of the Code (or any successor provision thereto)

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or any similar tax imposed by state or local law or any interest or penalties with respect to such taxes (collectively, the "Excise Tax"), then prior to making the Covered Payments, a calculation shall be made comparing (A) the Net Benefit (as defined below) to you of the Covered Payments after payment of the Excise Tax to (B) the Net Benefit to you if the Covered Payments are limited to the extent necessary to avoid being subject to the Excise Tax. Only if the amount calculated under (A) above is less than the amount under (B) above will the Covered Payments be reduced to the minimum extent necessary to ensure that no portion of the Covered Payments is subject to the Excise Tax (that amount, the "Reduced Amount"). "Net Benefit" shall mean the present value of the Covered Payments net of all federal, state, local, foreign income, employment and excise taxes.

If there is a reduction pursuant to this Agreement, the Covered Payment reduction contemplated by the preceding paragraph shall be implemented by determining the "Parachute Payment Ratio" (as defined below) for each "parachute payment" and then reducing the "parachute payments" in order beginning with the "parachute payment" with the highest Parachute Payment Ratio. For "parachute payments" with the same Parachute Payment Ratio, such "parachute payments" shall be reduced based on the time of payment of such "parachute payments," with amounts having later payment dates being reduced first. For "parachute payments" with the same Parachute Payment Ratio and the same time of payment, such "parachute payments" shall be reduced on a pro rata basis (but not below zero) prior to reducing "parachute payments" with a lower Parachute Payment Ratio. The term "Parachute Payment Ratio" shall mean a fraction the numerator of which is the value of the applicable "parachute payment" that must be taken into account by Executive for purposes of Section 4999(a) of the Code, and the denominator of which is the actual amount to be received by Executive in respect of the applicable "parachute payment". For example, in the case of an equity grant that is treated as contingent on the change in control because the time at which the payment is made or the payment vests is accelerated, the denominator shall be determined by reference to the fair market value of the equity at the acceleration date, and not in accordance with the methodology for determining the value of accelerated payments set forth in Treasury Regulation Section 1.280G-1Q/A-24(b) or (c).

Section 409A:

Anything in this Employment Agreement to the contrary notwithstanding, if at the time of your separation from service within the meaning of Section 409A of the Code, the Company determines that you are a "specified employee" within the meaning of Section 409A(a)(2)(B)(i) of the Code, then to the extent any payment or benefit that you becomes entitled to under this Employment Agreement on account of your separation from service would be considered deferred compensation subject to the 20 percent additional tax imposed pursuant to Section 409A(a) of the Code as a result of the application of Section 409A(a)(2)(B)(i) of the Code, such payment shall not be payable and such benefit shall not be provided until the date that is the earlier of (A) six months and one day after your separation from service, or (B) your death. If any such delayed

cash payment is otherwise payable on an installment basis, the first payment shall include a catch-up payment covering amounts that would otherwise have been paid during the six-month period but for the application of this provision, and the balance of the installments shall be payable in accordance with their original schedule. All in-kind benefits provided and expenses eligible for reimbursement under this Employment Agreement shall be provided by the Company or incurred by you during the time periods set forth in this Employment Agreement. All reimbursements shall be paid as soon as administratively practicable, but in no event shall any reimbursement be paid after the last day of the taxable year following the taxable year in which the expense was incurred. The amount of in-kind benefits provided or reimbursable expenses incurred in one taxable year shall not affect the in-kind benefits to be provided or the expenses eligible for reimbursement in any other taxable year. Such right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit. To the extent that any payment or benefit described in this Employment Agreement constitutes “non-qualified deferred compensation” under Section 409A of the Code, and to the extent that such payment or benefit is payable upon your termination of employment, then such payments or benefits shall be payable only upon your “separation from service.” The determination of whether and when a separation from service has occurred shall be made in accordance with the presumptions set forth in Treasury Regulation Section 1.409A-1(h). The Company and you intend that this Employment Agreement will be administered in accordance with Section 409A of the Code. To the extent that any provision of this Employment Agreement is ambiguous as to its compliance with Section 409A of the Code, the provision shall be read in such a manner so that all payments hereunder comply with Section 409A of the Code. The Company makes no representation or warranty and shall have no liability to you or any other person if any provisions of this Employment Agreement are determined to constitute deferred compensation subject to Section 409A of the Code but do not satisfy an exemption from, or the conditions of, such Section.

Representation Regarding Other Obligations: This offer is conditioned on your representation that you are not subject to any confidentiality, non-competition agreement or any other similar type of restriction that may affect your ability to devote full time and attention to your work at the Company. If you have entered into any agreement that may restrict your activities on behalf of the Company, please provide me with a copy of the agreement as soon as possible.

Other Terms: Your employment with the Company shall be on an at-will basis. In other words, you or the Company may terminate employment for any reason and at any time, with or without notice. Similarly, the terms of employment outlined in this letter are subject to change at any time. You also will be required to sign the Company’s standard “Employee Non-Competition, Non-Solicitation, Confidentiality and Assignment Agreement” as a condition of your employment. A copy of that Agreement is enclosed. In addition, as with all employees, our offer to you is contingent on your submission of

satisfactory proof of your identity and your legal authorization to work in the United States.

We are excited about the opportunity to work with you at Quanterix. If you have any questions about this information, please do not hesitate to call. Otherwise, please confirm your acceptance of this offer of employment by signing below and returning a copy to me no later than June 1, 2019.

We are confident that with your background and skills, you will have an immediate positive impact on our organization.

Sincerely,

/s/ Kevin Hrusovsky
CEO and Executive Chairman

Offer accepted:

/s/ John Fry	May 31, 2019
John Fry	Date

Exhibit 31.1

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: August 6, 2019

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

Exhibit 31.2

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: August 6, 2019

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

Exhibit 32.1

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 June 30, 2019 (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: August 6, 2019	/s/ E. Kevin Hrusovsky
	E. Kevin Hrusovsky Chairman, President and Chief Executive Officer
Dated: August 6, 2019	/s/ Amol Chaubal
	Amol Chaubal Chief Financial Officer