UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2020
OR

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

For the transition period from ____ to ____

Commission File: Number 001-35980

NANOSTRING TECHNOLOGIES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**20-0094687**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

530 Fairview Avenue North
Seattle, Washington 98109
(Address of principal executive offices)
(206) 378-6266
(Registrant's telephone number, including area code)

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

Title of each class	**Trading Symbol(s)**	**Name of each exchange on which registered**
Common Stock, $0.0001 par value per share	NSTG	The Nasdaq Stock Market LLC (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 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 August 5, 2020 there were 37,986,039 shares of registrant's common stock outstanding.

NANOSTRING TECHNOLOGIES, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED June 30, 2020
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PART 1. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

NanoString Technologies, Inc.
Condensed Consolidated Balance Sheets
(in thousands, except par value)
(Unaudited)

	June 30, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 168,443	$ 29,033
Short-term investments	80,266	127,822
Accounts receivable, net	22,016	27,153
Inventory, net	25,988	19,781
Prepaid expenses and other	3,198	8,818
Total current assets	299,911	212,607
Property and equipment, net	20,837	20,184
Operating lease right-of-use assets	23,511	24,648
Other assets	2,243	2,315
Total assets	$ 346,502	$ 259,754
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 5,205	$ 10,282
Accrued liabilities	5,012	4,973
Accrued compensation and other employee benefits	12,546	15,579
Customer deposits	3,289	6,389
Deferred revenue, current portion	5,008	3,997
Operating lease liabilities, current portion	4,319	3,766
Total current liabilities	35,379	44,986
Deferred revenue, net of current portion	1,040	976
Other long-term liabilities	—	322
Long-term debt, net	167,308	79,951
Operating lease liabilities, net of current portion	28,087	29,368
Total liabilities	231,814	155,603
Commitment and contingencies (Note 11)		
Stockholders' equity:		
Preferred stock, $0.0001 par value, 15,000 shares authorized; none issued	—	—
Common stock, $0.0001 par value, 150,000 shares authorized; 37,937 and 36,298 shares issued and outstanding at June 30, 2020 and December 31, 2019, respectively	4	4
Additional paid-in capital	611,955	535,954
Accumulated other comprehensive income	438	145
Accumulated deficit	(497,709)	(431,952)
Total stockholders' equity	114,688	104,151
Total liabilities and stockholders' equity	$ 346,502	$ 259,754

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

NanoString Technologies, Inc.
Condensed Consolidated Statements of Operations
(in thousands, except per share amounts)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Revenue:				
Product and service	$ 21,144	$ 22,370	$ 45,640	$ 43,720
Collaboration	1,460	7,975	3,569	14,313
Total revenue	22,604	30,345	49,209	58,033
Costs and expenses:				
Cost of product and service revenue	10,712	9,605	21,729	18,314
Research and development	15,739	17,029	33,241	33,056
Selling, general and administrative	19,912	22,499	45,633	45,935
Total costs and expenses	46,363	49,133	100,603	97,305
Loss from operations	(23,759)	(18,788)	(51,394)	(39,272)
Other income (expense):				
Interest income	479	828	1,183	1,351
Interest expense	(4,116)	(1,889)	(6,999)	(3,637)
Other income (expense), net	332	(120)	(1,275)	(230)
Loss on extinguishment of debt and termination of revolving loan facility	—	—	(7,143)	—
Total other expense, net	(3,305)	(1,181)	(14,234)	(2,516)
Net loss before provision for income tax	(27,064)	(19,969)	(65,628)	(41,788)
Provision for income tax	(69)	(68)	(129)	(147)
Net loss	$ (27,133)	$ (20,037)	$ (65,757)	$ (41,935)
Net loss per share - basic and diluted	$ (0.72)	$ (0.57)	$ (1.76)	$ (1.26)
Weighted average shares used in computing basic and diluted net loss per share	37,785	35,174	37,392	33,382

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

NanoString Technologies, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(in thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Net loss	$ (27,133)	$ (20,037)	$ (65,757)	$ (41,935)
Change in unrealized gain on available-for-sale debt securities	353	183	292	244
Comprehensive loss	$ (26,780)	$ (19,854)	$ (65,465)	$ (41,691)

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

NanoString Technologies, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity
(in thousands)
(Unaudited)

	Common Stock		Additional Paid-in Capital	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2019	30,913	$ 3	$ 428,162	$ (40)	$ (391,256)	$ 36,869
Common stock issued in public offering, net of $4.7 million of issuance costs	3,175	—	68,273	—	—	68,273
Warrants issued for common stock	—	—	698	—	—	698
Common stock issued for stock options and restricted stock units	805	—	8,075	—	—	8,075
Common stock issued for employee stock purchase plan	151	—	939	—	—	939
Tax payments from shares withheld for equity awards	—	—	(1,299)	—	—	(1,299)
Stock-based compensation	—	—	2,882	—	—	2,882
Net loss	—	—	—	—	(21,898)	(21,898)
Other comprehensive income	—	—	—	61	—	61
Balance at March 31, 2019	35,044	3	507,730	21	(413,154)	94,600
Warrants issued for common stock	—	—	1,575	—	—	1,575
Common stock issued for stock options and restricted stock units	323	1	4,590	—	—	4,591
Stock-based compensation	—	—	5,076	—	—	5,076
Net loss	—	—	—	—	(20,037)	(20,037)
Other comprehensive income	—	—	—	183	—	183
Balance at June 30, 2019	35,367	$ 4	$ 518,971	$ 204	$ (433,191)	$ 85,988

NanoString Technologies, Inc.
Condensed Consolidated Statements of Changes in Stockholders' Equity *(continued)*
(in thousands)
(Unaudited)

	Common Stock		Additional Paid-in Capital	Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2020	36,298	$ 4	$ 535,954	$ 145	$ (431,952)	$ 104,151
Equity component of convertible notes, net	—	—	58,543	—	—	58,543
Warrants issued for common stock	—	—	737	—	—	737
Common stock issued for stock options and restricted stock units	948	—	6,969	—	—	6,969
Common stock issued for employee stock purchase plan	50	—	1,122	—	—	1,122
Exercise of common stock warrants, net	407	—	—	—	—	—
Tax payments from shares withheld for equity awards	—	—	(2,006)	—	—	(2,006)
Stock-based compensation	—	—	4,303	—	—	4,303
Net loss	—	—	—	—	(38,624)	(38,624)
Other comprehensive income	—	—	—	(61)	—	(61)
Balance at March 31, 2020	37,703	4	605,622	84	(470,576)	135,134
Common stock issued for stock options and restricted stock units	234	—	2,673	—	—	2,673
Stock-based compensation	—	—	3,660	—	—	3,660
Net loss	—	—	—	—	(27,133)	(27,133)
Other comprehensive income	—	—	—	354	—	354
Balance at June 30, 2020	37,937	$ 4	$ 611,955	$ 438	$ (497,709)	$ 114,688

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

NanoString Technologies, Inc.
Condensed Consolidated Statements of Cash Flows *(in thousands)*
(Unaudited)

	Six Months Ended June 30,	
	2020	**2019**
Operating activities		
Net loss	$ (65,757)	$ (41,935)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	8,094	7,958
Depreciation and amortization	2,814	2,377
Payment of accrued interest of long-term debt	(2,593)	—
Loss on extinguishment of long-term debt	7,143	—
Amortization of debt discount and deferred financing costs	3,454	343
Loss on equity securities	300	—
Amortization of premium (discount) on short-term investments	(150)	236
Non-cash operating lease expense	1,596	1,332
Conversion of accrued interest to long-term debt	—	941
Provision for inventory obsolescence and bad debts	14	592
Changes in operating assets and liabilities:		
Accounts receivable	5,129	(1,752)
Inventory	(6,559)	(4,361)
Prepaid expenses and other assets	5,493	(3,488)
Accounts payable	(2,835)	(2,551)
Accrued liabilities	47	(200)
Accrued compensation and other employee benefits	(3,117)	(2,306)
Customer deposits	(3,100)	(798)
Deferred revenue	1,075	(4,624)
Operating lease liabilities	(1,187)	(920)
Net cash used in operating activities	(50,139)	(49,156)
Investing activities		
Purchases of property and equipment	(5,365)	(1,147)
Proceeds from sale of short-term investments	17,218	—
Proceeds from maturity of short-term investments	69,284	60,120
Purchases of short-term investments	(38,804)	(102,579)
Net cash provided by (used in) investing activities	42,333	(43,606)
Financing activities		
Proceeds from issuance of 2025 convertible senior notes	230,000	20,000
Fees paid for issuance of 2025 convertible senior notes	(7,403)	(100)
Repayment of long-term debt	(80,000)	—
Fees paid upon extinguishment of debt	(4,845)	—
Proceeds from sale of common stock, net	—	68,273
Proceeds from issuance of common stock warrants	737	1,306
Tax withholdings related to net share settlements of restricted stock units	(2,006)	(1,299)
Proceeds from issuance of common stock for employee stock purchase plan	1,122	939
Proceeds from exercise of stock options	9,641	12,665
Net cash provided by financing activities	147,246	101,784
Net increase in cash and cash equivalents	139,440	9,022
Effect of exchange rate changes on cash and cash equivalents	(30)	(7)
Cash and cash equivalents		
Beginning of period	29,033	24,356
End of period	$ 168,443	$ 33,371
Supplemental disclosures		
Operating lease right-of-use assets obtained in exchange for lease obligations	$ 449	$ 27,880

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

NanoString Technologies, Inc.
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Description of the Business

NanoString Technologies, Inc. (the "Company") was incorporated in the state of Delaware on June 20, 2003. The Company's headquarters is located in Seattle, Washington. The Company's proprietary optical barcoding chemistry enables direct detection, identification, and quantification of individual target molecules in a biological sample by attaching a unique color coded fluorescent reporter to each target molecule of interest. The Company currently markets and sells two platforms based on its proprietary technology, its nCounter Analysis System, and its GeoMx Digital Spatial Profiler, or GeoMx DSP system, both consisting of instruments and consumables, to academic, government, biopharmaceutical, and clinical laboratory customers.

The Company has incurred losses to date and expects to incur additional losses for the foreseeable future. The Company continues to invest the majority of its resources in the development and growth of its business, including significant investments in new product development and sales and marketing efforts. The Company's activities have been financed to date primarily through the sale of equity securities, the incurrence of indebtedness and through cash received by the Company pursuant to certain product development collaborations.

In March 2020, the Company issued $230.0 million in aggregate principal amount of 2.625% Convertible Senior Notes due 2025 ("Convertible Notes") in a private offering. The Convertible Notes are governed by an indenture dated March 9, 2020 between the Company and U.S. Bank, National Association, as trustee. The Company received net proceeds from the offering of $222.6 million. The Company used $88.6 million to repay in full all outstanding amounts borrowed and fees owed with the termination of the Company's amended and restated term loan agreement ("2018 Term Loan") with Capital Royalty Group, and the fees owed in connection with the termination of the Company's revolving credit facility with Silicon Valley Bank. The Company intends to use the remainder of the net proceeds for general corporate purposes, including the continued development and commercialization of its GeoMx DSP system, the continued commercialization of its portfolio of nCounter-based products and for working capital needs. See Note 9. Long-term Debt, Net for more information.

In March 2019, the Company completed an underwritten public offering of 3,175,000 shares of its common stock, including the exercise in full by the underwriters of their option to purchase 675,000 additional shares of common stock. An additional 2,000,000 shares were sold by a related party stockholder. The Company's total gross proceeds were $73.0 million. The Company did not receive any proceeds from the sale of shares of common stock by the related party stockholder. After underwriter's commissions and other expenses of the offering, the Company's aggregate net proceeds were approximately $68.3 million.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements reflect the accounts of the Company and its wholly-owned subsidiaries. The unaudited condensed consolidated balance sheet at December 31, 2019 has been derived from the audited consolidated financial statements at that date but does not include all information and disclosures required by generally accepted accounting principles in the United States of America ("U.S. GAAP") for annual financial statements. These unaudited condensed consolidated financial statements and notes should be read in conjunction with the Company's audited consolidated financial statements and accompanying notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2019. The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") and U.S. GAAP for unaudited condensed consolidated financial information. Accordingly, they do not include all information and footnotes required by U.S. GAAP for complete financial statements. The accompanying unaudited condensed consolidated financial statements reflect all adjustments consisting of normal recurring adjustments which, in the opinion of management, are necessary for a fair statement of the Company's financial position and results of its operations as of and for the periods presented.

Unless indicated otherwise, all amounts presented in financial tables are presented in thousands, except for per share and par value amounts.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and accompanying notes. Actual results could differ from those estimates. Given the global economic climate and additional or unforeseen effects from the COVID-19 pandemic, certain estimates are becoming more challenging, and actual results could differ materially from

those estimates. The results of the Company's operations for the three and six month periods ended June 30, 2020 are not necessarily indicative of the results to be expected for the full year or for any other period.

Revenue Recognition

The Company recognizes revenue when control of the promised goods or services is transferred to its customers, in an amount that reflects the consideration expected to be received in exchange for those products and services. This process involves identifying the contract with a customer, determining the performance obligations in the contract, determining the contract price, allocating the contract price to the distinct performance obligations in the contract, and recognizing revenue when the performance obligations have been satisfied. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. Performance obligations are considered satisfied once the Company has transferred control of a product or service to the customer, meaning the customer has the ability to use and obtain the benefit of the product or service. The Company recognizes revenue for satisfied performance obligations only when there are no uncertainties regarding payment terms or transfer of control.

The Company generates the majority of its revenue from the sale of its proprietary nCounter Analysis System and GeoMx DSP System, and related consumables. Services consist of instrument service contracts and service fees for assay processing.

The Company at times may enter into collaboration agreements that may generate upfront fees, and in some cases subsequent milestone payments that may be earned upon completion of certain product development milestones or other designated activities. For collaboration agreements of this type, the Company estimates the expected total cost of product development and other services under these arrangements and recognizes collaboration revenue using a contingency-adjusted proportional performance model. The Company may also recognize revenue from collaboration agreements that do not include upfront or milestone-based payments and generally recognizes revenue on these types of agreements based on the timing and amount of development activities. Expenses incurred in relation to research activities conducted in conjunction with our collaboration partners are recognized when the related activities have occurred and are classified in the statement of operations, generally as research and development expense. From period to period, collaboration revenue can fluctuate substantially based on the level of product development activities devoted to these collaborations, based on achievement or probable achievement of product development or other milestones, or as estimates of total expected collaboration product development or other costs are changed or updated.

Convertible Senior Notes

In accordance with accounting guidance for debt with conversion and other options, the Company separately accounted for the liability and equity components of the 2.625% Convertible Senior Notes due 2025 ("Convertible Notes") by allocating the proceeds between the liability component and the embedded conversion feature, or the equity component, due to the Company's ability to settle the Convertible Notes in cash, common stock or a combination of cash and common stock, at its option. The Company's current intent is to settle the principal amount of the Convertible Notes in cash upon conversion, with any remaining conversion value being delivered in shares of its common stock. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected the Company's non-convertible debt borrowing rate for similar debt. The equity component of the Convertible Notes was recognized as a debt discount and represents the difference between the proceeds from the issuance of the Convertible Notes and the fair value of the liability of the Convertible Notes on their respective dates of issuance. The excess of the principal amount of the liability component over its carrying amount is the debt discount and is amortized to interest expense using the effective interest method over five years. The equity component is not remeasured as long as it continues to meet the conditions for equity classification. In connection with the issuance of the Convertible Notes, the Company also incurred certain financing costs associated directly with the issuance of the Convertible Notes. These issuance costs will be deferred, and a portion of the deferred issuance costs have been deemed attributable to the equity component and have been allocated to additional paid-in capital. The remaining deferred issuance costs will also be amortized to interest expense over five years using the effective interest method. See Note 9. Long-term Debt, Net for additional information regarding the Convertible Notes.

Leases

The Company determines if an arrangement is a lease at inception of a contract. The Company's leasing portfolio is comprised of operating leases primarily for general office, manufacturing, and research and development purposes. Operating lease liabilities and the corresponding right-of-use assets are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. The operating lease right-of-use asset is reduced by lease incentives included in the agreement. As the existing leases do not contain an implicit interest rate, the Company estimates its incremental borrowing rate based on information available at commencement date in determining the present value of future payments. The

Company includes options to extend the lease in the lease liability and right-of-use asset when it is reasonably certain that the option will be exercised. Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term. For our short-term leases, we recognize lease payments as an expense on a straight-line basis over the lease term.

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued "ASU 2016-13, Financial Instruments: Credit Losses." The standard requires disclosure regarding expected credit losses on financial instruments at each reporting date, and changes how other than temporary impairments on investment securities are recorded. The Company adopted the ASU on January 1, 2020 using the modified retrospective transition approach and the adoption did not have a material impact on its condensed consolidated results of operations, financial condition, cash flows and financial statement disclosures for the three or six month periods ended June 30, 2020.

In August 2018, the FASB issued "ASU 2018-15, Intangibles — Goodwill and other — Internal-use software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The standard aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The Company adopted the standard, on a prospective basis, on January 1, 2020. Historically, the Company has had a practice of expensing the implementation costs related to cloud computing arrangements. Upon adoption of the standard, the Company may capitalize certain implementation costs for new cloud computing arrangements in other assets, and amortize the costs over the related service contract period for the hosted arrangement. The amortization of the implementation costs and the related service contract costs will be presented in its results of operations. The adoption did not have a material impact to the condensed consolidated results of operations, financial condition, cash flows, and financial statement disclosures for the three or six month periods ended June 30, 2020.

In November 2018, the FASB issued "ASU 2018-18, Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606." The new guidance clarifies when certain transactions between collaborative arrangement participants which should be accounted for as revenue under Topic 606. The Company adopted the standard on January 1, 2020. The Company has assessed its collaborative arrangements and concluded no adjustment is necessary, based on guidance in the standard.

In December 2019, the FASB issued "ASU 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." The new guidance simplifies the accounting for income taxes, eliminates certain exceptions within ASC 740, Income Taxes, and clarifies certain aspects of the current guidance to promote consistency among reporting entities. ASU 2019-12 is effective for fiscal years beginning after December 15, 2021, with early adoption permitted. Most amendments within the standard are required to be applied on a prospective basis, while certain amendments must be applied on a retrospective or modified retrospective basis. The Company adopted this ASU effective January 1, 2020 and, as a result, was able to determine the effect of income or loss from continuing operations using a computation that does not consider the tax effects of items that are not included in continuing operations. As such, for the three and six month periods ended June 30, 2020, the Company did not record a tax expense or benefit in its net loss from operations related to deferred tax assets and liabilities associated with its Convertible Notes. See to Note 9. Long-term Debt, Net for additional information.

Recent Accounting Pronouncements

In August 2020, the FASB issued "ASU 2020-06, Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40) Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40)." The new guidance simplifies the number of accounting models for convertible instruments; and as a result, under the remaining available models, removes the requirement to separately account for conversion features between liability and equity components. The ASU will become effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, with adoption as of the beginning of the annual fiscal year. The Company is currently assessing the impact of the standard to its condensed consolidated results of operations, financial condition, cash flows, and financial statement disclosures.

3. Revenue from Contracts with Customers

The Company operates as a single reportable segment. The Company has one sales force that sells the Company's nCounter and GeoMx DSP instruments, consumables and related services.

Disaggregated Revenues

The following table of total revenue is based on the geographic location of end users or distributors who purchase products and services, and of our collaborators. For sales to distributors, their geographic location may be different from the geographic location of the ultimate end user. For collaboration agreements, revenues are derived from partners located primarily in the United States. Americas consists of the United States, Canada, Mexico, and South America; and Asia Pacific includes Japan, China, South Korea, Singapore, Malaysia, India, and Australia.

The following table provides information about disaggregated revenue by major product line and primary geographic market (in thousands):

	Three Months Ended June 30, 2020				Six Months Ended June 30, 2020			
	Americas	Europe and Middle East	Asia Pacific	Total	Americas	Europe and Middle East	Asia Pacific	Total
Product revenue:								
Instruments	$ 6,577	$ 2,475	$ 748	$ 9,800	$ 13,658	$ 4,263	$ 1,713	$ 19,634
Consumables	5,375	2,406	588	8,369	13,747	4,909	1,213	19,869
Total product revenue	11,952	4,881	1,336	18,169	27,405	9,172	2,926	39,503
Service revenue	1,922	878	175	2,975	3,960	1,752	425	6,137
Total product and service revenue	13,874	5,759	1,511	21,144	31,365	10,924	3,351	45,640
Collaboration revenue	1,460	—	—	1,460	3,569	—	—	3,569
Total revenues	$ 15,334	$ 5,759	$ 1,511	$ 22,604	$ 34,934	$ 10,924	$ 3,351	$ 49,209

	Three Months Ended June 30, 2019				Six Months Ended June 30, 2019			
	Americas	Europe and Middle East	Asia Pacific	Total	Americas	Europe and Middle East	Asia Pacific	Total
Product revenue:								
Instruments	$ 3,596	$ 960	$ 384	$ 4,940	$ 5,786	$ 2,490	$ 982	$ 9,258
Consumables	8,840	4,666	882	14,388	17,444	9,723	1,681	28,848
Total product revenue	12,436	5,626	1,266	19,328	23,230	12,213	2,663	38,106
Service revenue	2,167	682	193	3,042	3,962	1,295	357	5,614
Total product and service revenue	14,603	6,308	1,459	22,370	27,192	13,508	3,020	43,720
Collaboration revenue	7,975	—	—	7,975	14,313	—	—	14,313
Total revenues	$ 22,578	$ 6,308	$ 1,459	$ 30,345	$ 41,505	$ 13,508	$ 3,020	$ 58,033

Total revenue in the United States was $33.8 million and $40.4 million for the six months ended June 30, 2020 and 2019, respectively. The Company's assets are primarily located in the United States and not allocated to any specific geographic region. Substantially all of the Company's long-lived assets are located in the United States.

Contract balances and remaining performance obligations

Contract liabilities are comprised of the current and long-term portions of deferred revenue of $6.0 million and $5.0 million as of June 30, 2020 and December 31, 2019, respectively, and customer deposits of $3.3 million and $6.4 million as of June 30, 2020 and December 31, 2019, respectively, included within the condensed consolidated balance sheets. Total contract liabilities decreased by $2.0 million for the six months ended June 30, 2020 as a result of the recognition of previously deferred revenue and customer deposits of $6.8 million for the completion of certain performance obligations during the period, partially offset by an increase of $4.8 million related to additional deferred revenue associated primarily with new or extended service contracts. The Company did not record any contract assets as of June 30, 2020.

As of June 30, 2020, unsatisfied or partially unsatisfied performance obligations related to the collaboration agreement with Lam Research Corporation ("Lam") were $1.9 million. Performance obligations related to undelivered products and

service contracts as of June 30, 2020 were $7.5 million and are expected to be completed over the term of the related contract or as products are delivered.

4. Net Loss Per Share

Net loss per share is computed by dividing the net loss by the weighted average number of shares of common stock outstanding. Outstanding stock options, restricted stock units, and warrants have not been included in the calculation of diluted net loss per share because to do so would be anti-dilutive. Accordingly, the numerator and the denominator used in computing both basic and diluted net loss per share for each period are the same.

The following shares underlying outstanding options, restricted stock units, and warrants were excluded from the computation of basic and diluted net loss per share for the periods presented (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30, 2020	
	2020	2019	2020	2019
Options to purchase common stock	3,501	4,765	3,724	4,801
Restricted stock units	1,578	1,641	1,515	1,578
Common stock warrants	479	1,013	538	960
Stock appreciation rights	13	—	7	—

5. Concentration of Risks

Financial instruments that potentially expose the Company to concentrations of credit risk consist principally of cash and cash equivalents, short-term investments and accounts receivable. Cash is invested in accordance with the Company's investment policy, which includes guidelines intended to minimize and diversify credit risk. Most of the Company's investments are not federally insured. The Company has credit risk related to the collectability of its accounts receivable. The Company performs initial and ongoing evaluations of its customers' credit history or financial position and generally extends credit on account without collateral. Additionally, the Company evaluates collectability risk over the life of its receivables in order to establish an appropriate reserve for certain receivables that may become uncollectible in future periods. The Company has not experienced significant credit losses to date.

During the six months ended June 30, 2020, the Company had no customers or collaborators that individually represented more than 10% of total revenue. The Company had one collaborator, Lam, that individually represented 16% of total revenue during the three and six months ended June 30, 2019. The Company had no customers or collaborators that represented more than 10% of total product and service revenue for the six months ended June 30, 2020 and 2019, respectively. The Company had no customers or collaborators that represented more than 10% of total accounts receivable as of June 30, 2020 or December 31, 2019.

The Company is also subject to supply chain risks related to the outsourcing of the manufacturing and production of its instruments to sole suppliers. Although there are a limited number of manufacturers for instruments of this type, the Company believes that other suppliers could provide similar products on comparable terms. Similarly, the Company sources certain raw materials used in the manufacture of consumables from certain sole suppliers. The impact of the COVID-19 global pandemic has not had a significant impact on the Company's ability to source raw materials or its instruments to date. However, a change in or loss of suppliers could cause a delay in manufacturing and a possible loss of sales, which would adversely affect operating results. Should COVID-19 continue to impact the global economy at the same or heightened levels during future periods, or if certain geographies where the Company's key suppliers or manufacturing facilities are located are more severely impacted than others, this could negatively impact our ability to manufacture new products, fulfill customer orders, and collect from customers, which could adversely affect future operating results.

6. Short-term Investments

Short-term investments consisted of available-for-sale and equity securities as follows (in thousands):

Type of securities as of June 30, 2020	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Corporate debt securities	$ 50,859	$ 291	$ —	$ 51,150
U.S. government-related debt securities	20,009	118	—	20,127
Asset-backed securities	8,960	29	—	8,989
Total available-for-sale debt securities	$ 79,828	$ 438	$ —	$ 80,266

Type of securities as of December 31, 2019	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Corporate debt securities	$ 78,243	$ 89	$ (2)	$ 78,330
U.S. government-related debt securities	26,966	37	—	27,003
Asset-backed securities	11,950	21	—	11,971
Total available-for-sale debt securities	$ 117,159	$ 147	$ (2)	$ 117,304
Corporate equity securities	9,893	625	—	10,518
Total short-term investment securities	$ 127,052	$ 772	$ (2)	$ 127,822

The fair values of available-for-sale debt securities by contractual maturity were as follows (in thousands):

	June 30, 2020	December 31, 2019
Maturing in one year or less	$ 80,266	$ 101,751
Maturing in one to three years	—	15,553
Total available-for-sale debt securities	$ 80,266	$ 117,304

7. Fair Value Measurements

The Company establishes the fair value of its assets and liabilities using the price that would be received to sell an asset or paid to transfer a financial liability in an orderly transaction between market participants at the measurement date. A fair value hierarchy is used to measure fair value. The three levels of the fair value hierarchy are as follows:

- Level 1 — Quoted prices in active markets for identical assets and liabilities.
- Level 2 — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.
- Level 3 — Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The recorded amounts of certain financial instruments, including cash, accounts receivable, prepaid expenses and other, accounts payable and accrued liabilities, approximate fair value due to their relatively short-term maturities.

The Company's investments by level within the fair value hierarchy were as follows (in thousands):

As of June 30, 2020	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market fund	$ 160,982	$ —	$ —	$ 160,982
Short-term investments:				
Corporate debt securities	—	51,150	—	51,150
U.S. government-related debt securities	—	20,127	—	20,127
Asset-backed securities	—	8,989	—	8,989
Total	$ 160,982	$ 80,266	$ —	$ 241,248

As of December 31, 2019	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market fund	$ 22,152	$ —	$ —	$ 22,152
Short-term investments:				
Corporate debt securities	—	78,330	—	78,330
U.S. government-related debt securities	—	27,003	—	27,003
Asset-backed securities	—	11,971	—	11,971
Corporate equity securities	10,518	—	—	10,518
Total	$ 32,670	$ 117,304	$ —	$ 149,974

In March 2020, the Company issued $230.0 million of Convertible Notes. As of June 30, 2020, the fair value of the Convertible Notes was $211.9 million. The estimated fair value of the Convertible Notes, which are classified as Level 2 financial instruments, was determined based on the estimated or actual bid prices of the Convertible Notes in an over-the-counter market. See Note 9. Long-term Debt, Net for more information.

8. Inventory

Inventory, net of related allowances, consisted of the following as of the date indicated (in thousands):

	June 30, 2020	December 31, 2019
Raw materials	$ 6,996	$ 4,620
Work in process	5,930	4,617
Finished goods	13,062	10,544
Total inventory, net	$ 25,988	$ 19,781

9. Long-term Debt, Net

Convertible Notes

In March 2020, the Company issued $230.0 million in aggregate principal amount of 2.625% Convertible Senior Notes due 2025 (“Convertible Notes”) in a private offering. The Convertible Notes are governed by an indenture dated March 9, 2020 between the Company and U.S. Bank, National Association, as trustee.

The Company received net proceeds from the offering of $222.6 million. The Company used $88.6 million to repay in full all outstanding amounts borrowed and fees owed in connection with the termination of the Company’s amended and restated term loan agreement (“2018 Term Loan”) with Capital Royalty Group, and the fees owed in connection with the termination of the Company’s revolving credit facility with Silicon Valley Bank. The Company intends to use the remainder of the net proceeds for general corporate purposes, including the continued development and commercialization of its GeoMx DSP system, the continued commercialization of its portfolio of nCounter-based products and for working capital needs.

The Convertible Notes bear interest at a rate of 2.625% per year, payable semi-annually in arrears on March 1 and September 1, beginning on September 1, 2020. The Convertible Notes may bear additional interest under specified circumstances relating to the Company’s failure to comply with its reporting obligations under, or if the Convertible Notes are not freely tradeable as required by, the indenture governing the Convertible Notes. Upon conversion, the Convertible Notes will be convertible into cash, shares of common stock or a combination of cash and shares of common stock, at the Company’s election. The Company’s current intent is to settle the principal amount of the Convertible Notes in cash upon conversion, with any remaining conversion value being delivered in shares of its common stock.

The Convertible Notes are general unsecured senior obligations and will mature on March 1, 2025, unless earlier repurchased, redeemed or converted, subject to satisfaction of certain conditions and during the periods described below. The initial conversion rate for the Convertible Notes is 20.9161 shares of common stock, par value $0.0001 per share, per $1,000 principal amount of Convertible Notes (which is equivalent to an initial conversion price of approximately $47.81 per share). The conversion rate will be subject to adjustment in some events but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that may occur prior to the maturity date or if the Company issues a notice of redemption, the Company will increase the conversion rate for a holder who elects to convert its Convertible Notes in connection with such corporate event or in connection with such redemption, as the case may be, in certain circumstances.

Prior to the close of business on the business day immediately preceding December 1, 2024, the Convertible Notes will be convertible only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of the common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business-day period after any five consecutive trading-day period in which the trading price per $1,000 principal amount of Convertible Notes for each trading day of such period was less than 98% of the product of the last reported sale price of the common stock and the conversion rate on each such trading day; (3) if the Company calls any or all of the Convertible Notes for redemption, the Convertible Notes called for redemption (or, in the case of a partial redemption, if the Company makes an election to redeem all Convertible Notes, irrespective of whether they are called for redemption, to be convertible, all Convertible Notes) may be submitted for conversion at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date as set forth in the related redemption notice; or (4) upon the occurrence of specified corporate events. On or after December 1, 2024, until the close of business on

the business day immediately preceding the maturity date, holders of the Convertible Notes may convert all or any portion of their Convertible Notes at any time, regardless of the foregoing circumstances.

The Company may not redeem the Convertible Notes prior to March 5, 2023, and no sinking fund is provided for the Convertible Notes. On or after March 5, 2023, the Company may redeem for cash all or any portion of the Convertible Notes, at its option, if the last reported sale price of the common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading-day period (including the last trading day of such period) ending on, and including, the trading day immediately preceding the date on which the Company provides a notice of redemption at a redemption price equal to 100% of the principal amount of the Convertible Notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date.

Upon the occurrence of a fundamental change (as defined in the indenture governing the Convertible Notes) prior to the maturity date, subject to certain conditions, holders may require the Company to repurchase all or a portion of the Convertible Notes in increments of $1,000 for cash at a price equal to 100% of the principal amount of the Convertible Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Convertible Notes do not contain any financial or operating covenants or any restrictions on the issuance of other indebtedness or the issuance or repurchase of securities by the Company. The Convertible Notes indenture contains customary events of default, including that upon certain events of default, 100% of the principal and accrued and unpaid interest on the Convertible Notes will automatically become due and payable.

As the Company has the ability to settle the Convertible Notes in cash, common stock or a combination thereof, the Company separately accounted for the embedded conversion feature of the Convertible Notes by allocating proceeds between a liability and an equity component. The initial amount of the liability component of $169.5 million was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The borrowing rate was determined to be 9.35% based on the market rates for nonconvertible debt instruments issued by other companies with publicly available credit ratings considered to be comparable to the Company. The residual between the proceeds from the issuance of $230.0 million and the fair value of the liability component of $169.5 million is allocated to the equity component (residual method), which was recorded at $60.5 million and recognized as a debt discount. The Company incurred approximately $7.4 million of debt issuance costs, which primarily consisted of underwriting, legal and other professional fees directly associated with the issuance. The issuance costs were allocated to the liability and equity component proportionately based on the allocation of total proceeds. The equity component, net of issuance costs of $1.9 million, was recorded in additional paid-in capital in the Company’s condensed consolidated balance sheets and will not be remeasured as long as it continues to meet the conditions for equity classification. The liability component, net of issuance costs of $5.5 million, was recorded as long-term debt, net in the Company’s condensed consolidated balance sheets. The debt discount and debt issuance costs allocated to the liability component will be amortized to interest expense using the effective interest method over five years, the term of the Convertible Notes.

While the Convertible Notes are classified on the Company’s condensed consolidated balance sheet at June 30, 2020 as long-term, the resulting balance sheet classification of this liability will be monitored at each quarterly reporting date and will be analyzed dependent upon whether the Convertible Notes are convertible or subject to an event triggering potential redemption during the prescribed measurement periods. In the event that the holders of the Convertible Notes have the election to convert the Convertible Notes or the Convertible Notes become redeemable at any time during the prescribed measurement period, the Convertible Notes would then be considered a current obligation and classified as such.

While for GAAP purposes, the Convertible Notes are allocated between the liability component and the equity component, for U.S. tax purposes there is no allocation, and a deferred tax liability is recognized related to such difference. Because the Company has a full valuation allowance recorded against its net deferred tax assets, there is no net impact on the Company’s condensed consolidated balance sheets or condensed consolidated statements of operations as a result of establishing this deferred tax liability.

All future principal payments related to the Convertible Notes are due in March 2025. The outstanding balances of the Company's Convertible Notes and previously outstanding term loan consisted of the following (in thousands):

	June 30, 2020	December 31, 2019
Outstanding principal of Convertible Note	$ 230,000	$ —
Borrowings under term loan agreement	—	80,000
Paid-in-kind interest on term loan agreement	—	2,593
Less: unamortized debt discounts and issuance costs	(62,692)	(2,642)
Long-term debt, net	$ 167,308	$ 79,951
Fair value of outstanding Convertible Notes	$ 211,888	
Amount by which the Convertible Notes if-converted value exceeds their principal amount	$ —	
Net carrying amount of equity component of Convertible Notes	$ 58,543	

The following table sets forth total interest expense recognized related to the Convertible Notes (in thousands):

	June 30, 2020	
	Three Months Ended	Six Months Ended
Contractual interest expense	$ 1,509	$ 1,895
Amortization of debt discount and issuance costs	2,604	3,254
Total interest expense	$ 4,113	$ 5,149

Term Loan Agreement

In October 2018, the Company entered into an amended and restated term loan agreement with Capital Royalty Group (the "2018 Term Loan"), under which it could borrow up to $100.0 million, which was due and payable in September 2024. The 2018 Term Loan accrued interest at a rate of 10.5%, payable quarterly, of which 3.0% could be deferred, at the Company's election, during the six-year term and repaid at maturity together with the principal. The Company paid an upfront fee of 0.5% of the aggregate principal amount of the initial borrowing under the 2018 Term Loan, and was required to pay a facility fee equal to 2.0% of the total amount borrowed including any deferred interest at the time the principal is repaid. The Company borrowed a total of $80.0 million under the 2018 Term Loan and obligations were collateralized by substantially all of the Company's assets.

In connection with entry into the 2018 Term Loan, warrants to purchase an aggregate of 341,578 shares of common stock with an exercise price per share of $21.12 were issued to the lenders. In June 2019, in connection with the borrowing of an additional $20.0 million principal amount, warrants to purchase an aggregate of 128,932 shares of common stock with an exercise price per share of $34.20 were issued to the lenders.

In March 2020, the Company terminated the 2018 Term Loan agreement. The Company used $88.6 million of the proceeds from the Convertible Notes to repay in full all outstanding principle, interest and fees associated with termination of the loan.

For the three and six month periods ended June 30, 2020, the Company incurred interest expense of $4.1 million and $7.0 million, respectively, related to the 2018 Term Loan and the Convertible Notes. For the three and six month period ended June 30, 2019, the Company incurred interest expense of $1.9 million and $3.6 million, respectively, associated with the 2018 Term Loan.

The terminations of the previous debt facilities were accounted for as debt extinguishment and the Company recorded a charge of $6.6 million associated with the elimination of previously deferred financing costs, and for fees and penalties incurred upon termination of the facilities and other costs. These costs have been included as a Loss on extinguishment of debt and termination of revolving loan facility in the Company's condensed consolidated statements of operations.

2018 Revolving Loan Facility

In January 2018, the Company entered into a $15.0 million secured revolving loan facility, with availability subject to a borrowing base consisting of eligible accounts receivable. In November 2018, the Company entered into an amended and restated loan and security agreement to increase the borrowing capacity under the facility to $20.0 million, amend the borrowing base to include finished goods inventory, and extend the final maturity under the facility to November 2021.

In March 2020, the Company terminated the revolving loan facility and paid termination fees of $0.5 million. There were no amounts outstanding under the revolving loan facility at the time of termination. These costs have been included as a

Loss on extinguishment of debt and termination of revolving loan facility in the Company's condensed consolidated statements of operations.

10. Collaboration Agreements

Lam Research Corporation

In August 2017, the Company entered into a collaboration agreement with Lam with respect to the development of the Company's Hyb & Seq platform product candidate and related assays. Pursuant to the terms of the collaboration agreement, Lam contributed up to an aggregate of $50.0 million towards the project. Lam is eligible to receive certain single-digit percentage royalty payments from the Company on net sales of certain products and technologies developed under the collaboration agreement, if any such net sales are ever recorded. The maximum amount of royalties payable to Lam will be capped at an amount up to three times the amount of development funding actually provided by Lam.

During the three and six months ended June 30, 2020, the Company recognized revenue related to the Lam agreement of $1.1 million and $2.9 million, respectively. During the three and six months ended June 30, 2019, the Company recognized revenue related to the Lam agreement of $4.4 million and $9.2 million, respectively. The Company received development funding of $2.7 million for the three and six months ended June 30, 2019. At June 30, 2020, the Company had recorded customer deposits of $1.9 million representing amounts received in advance. As of December 31, 2019, Lam had provided the full development funding commitment of $50.0 million and the Company does not expect to receive any further funding from Lam in future periods.

In January 2020, having received the full commitment of development funding from Lam, the remaining warrants for shares of the Company's common stock became exercisable and Lam elected to net exercise, in full, its warrant for 1.0 million shares of common stock, for which the Company issued an aggregate of 407,247 shares to Lam. In connection with Lam's exercise of the warrant, the Company agreed to waive certain restrictions associated with the sale of the common stock in exchange for commitments by Lam related to the method and timing of Lam's sale of the shares.

Celgene Corporation

In March 2014, the Company entered into a collaboration agreement with Celgene Corporation ("Celgene") to develop, seek regulatory approval for, and commercialize a companion diagnostic using the nCounter Analysis System to identify a subset of patients with Diffuse Large B-Cell Lymphoma. In February 2018, the Company and Celgene entered into an amendment to their collaboration agreement in which Celgene agreed to provide the Company additional funding for work intended to enable a subtype and prognostic indication for the test being developed under the agreement for Celgene's drug REVLIMID. Pursuant to its collaboration with Celgene, the Company had been developing an *in vitro* diagnostic test, LymphMark, as a potential companion diagnostic to aid in identifying patients with diffuse large B-cell lymphoma (DLBCL) for treatment. In April 2019, Celgene announced that the trial evaluating REVLIMID for the treatment of DLBCL did not meet its primary endpoint. In May 2019, the Company's collaboration agreement with Celgene was terminated effective July 2019, with substantially all the remaining deferred revenue from the agreement recognized in the three months ended June 30, 2019. In addition, the Company does not intend to file a pre-market approval for LymphMark as a companion diagnostic for REVLIMID.

During the six months ended June 30, 2019, the Company recognized revenue related to the Celgene agreement of $4.4 million. The Company received development funding of $0.2 million related to the Celgene collaboration for the three months ended June 30, 2019. As of December 31, 2019, the Company does not expect to receive any further funding from Celgene in future periods.

11. Commitments and Contingencies

From time to time, the Company may become involved in litigation relating to claims arising from the ordinary course of business. Additionally, the Company operates in various states and local jurisdictions for which sales, occupation, or franchise taxes may be payable to certain taxing authorities. Management believes that there are no claims or actions pending against the Company currently, the ultimate disposition of which would have a material adverse effect on the Company's consolidated results of operations, financial condition or cash flows.

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

Special Note Regarding Forward-Looking Information

This Quarterly Report on Form 10-Q contains forward-looking statements that are based on our management's beliefs and assumptions and on information currently available. This section should be read in conjunction with our unaudited condensed consolidated financial statements and related notes included in Part I, Item 1 of this report. The statements contained in this Quarterly Report on Form 10-Q that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended.

Forward-looking statements can be identified by words such as "believe," "anticipate," "could," "continue," "depends," "expect," "expand," "forecast," "intend," "predict," "plan," "rely," "should," "will," "may," "seek," or the negative of these terms and other similar expressions, although not all forward-looking statements contain these words. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. These forward-looking statements include, but are not limited to:

- our expectations regarding our future operating results and capital needs, including our expectations regarding instrument, consumable and total revenue, operating expenses, sufficiency of cash on hand and operating and net loss;
- our expectations regarding the impact of the COVID-19 global pandemic as it relates to our ongoing operations, including our customer order activity levels and key supplier requirements;
- our ability to successfully commercialize our GeoMx DSP platform;
- our ability to successfully develop our Hyb & Seq platform and pursue potential commercial applications and partnerships;
- the success, costs and timing of implementation of our business model, strategic plans for our business and future product development plans;
- the regulatory regime and our ability to secure and maintain regulatory clearance or approval or reimbursement for the clinical use of our products, domestically and internationally;
- our strategic relationships, including with patent holders of our technologies, manufacturers and distributors of our products, and collaboration partners;
- our intellectual property position;
- our ability to attract and retain key scientific or management personnel;
- our expectations regarding the competitive position, market size and growth potential for our business; and
- our ability to sustain and manage growth, including our ability to expand our customer base, develop new products, enter new markets, and hire and retain key personnel.

These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this report in Part II, Item 1A — "Risk Factors," and elsewhere in this report. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. In this report, "we," "our," "us," "NanoString," and "the Company" refer to NanoString Technologies, Inc. and its subsidiaries.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report on Form 10-Q, and although we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted a thorough inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to unduly rely upon these statements.

Overview

We develop, manufacture, and sell products that unlock scientifically valuable and clinically actionable information from minute amounts of biological material. Our core technology is a unique, proprietary optical barcoding chemistry that enables the labeling and counting of single molecules. This proprietary chemistry may reduce the number of steps required to conduct certain types of scientific experiments and allow for multiple experiments to be conducted at once. As a result, we are able to develop tools that are easier for researchers to use and that may generate faster and more consistent scientific results.

We use our technology to develop tools for scientific and clinical research, primarily in the fields of genomics and proteomics. We currently have two commercially available product platforms, our nCounter Analysis System and our GeoMx Digital Spatial Profiler, or GeoMx DSP System, both of which include instruments and related consumables.

nCounter can be used to analyze the activity of up to 800 genes in a single experiment. nCounter is also used by clinicians to analyze gene activity relevant for diagnostic applications. GeoMx DSP, which was made commercially available in 2019, is designed to enable the field of spatial genomics. While nCounter and other existing technologies analyze gene activity as a whole throughout the totality of a biological sample, GeoMx DSP is used to analyze specifically selected regions of a biological sample in order to see how gene activity or protein levels might vary across those regions or in certain cell types. GeoMx DSP operates by enabling users to prepare and select certain regions of a sample in which to study gene activity, and then use nCounter to subsequently evaluate, or read out, the activity of up to 96 genes in each of the selected regions. In August 2020 we announced the commercial availability of the Cancer Transcriptome Atlas, or CTA, the first GeoMx DSP product optimized for read-out on next generation sequencing, or NGS, technology. The CTA is designed to allow for the simultaneous analysis, in selected regions of interest, of approximately 1,800 well characterized cancer related genes. We expect an additional product, our Whole Transcriptome Assay, to become commercially available in 2021.

We market and sell our instruments and related consumables to researchers in academic, government and biopharmaceutical laboratories for research use, both through our direct sales force and through selected distributors in certain markets. As of June 30, 2020, we had an installed base of approximately 890 nCounter systems, compared with approximately 865 as of March 31, 2020 and approximately 840 as of December 31, 2019. Our customers have used these nCounter systems to publish more than 3,500 peer-reviewed papers. As of June 30, 2020, we had received over 125 orders for GeoMx DSP systems, we had shipped approximately 93 GeoMx DSP systems to customer sites. As of June 30, 2020, our customers have used GeoMx DSP systems to publish 23 peer-reviewed publications. In addition, we continue to provide access to the GeoMx DSP's capabilities by offering selected potential customers the opportunity to send biological samples to our Seattle facility to be processed in our lab prior to purchasing a GeoMx DSP system. To date, we have completed nearly 300 projects for approximately 160 customers pursuant to this Technology Access Program, or TAP.

We derive a substantial majority of our revenue from the sale of our products, which consist of our nCounter and GeoMx DSP instruments and related proprietary consumables. Our instruments are designed to work only with our consumable products. Accordingly, as the installed base of instruments grows, we expect recurring revenue from consumable sales to become an increasingly important driver of our operating results. Our consumables include our standardized nCounter and GeoMx DSP panel products, nCounter custom codeset products that contain a specific set of targets for scientific analysis as requested by a customer, and the Prosigna breast cancer assay which is manufactured for our partner Veracyte Inc. We also derive revenue from processing fees related to proof-of-principle studies, including from our GeoMx DSP TAP, which we conduct for potential customers. For both nCounter and GeoMx DSP, we offer extended service contracts and generate service revenue accordingly.

We use third-party contract manufacturers to produce the instruments comprising nCounter and GeoMx DSP. We manufacture consumables at our greater Seattle, Washington area facilities.

We focus a substantial portion of our resources on developing new technologies, products, and solutions. We invested $33.2 million and $33.1 million for the six months ended June 30, 2020 and 2019, respectively, in research and development and intend to continue to make significant investments in research and development to support our existing instrument platforms and related consumable offerings, as well as research and development of new technologies.

In December 2019, we entered into a License and Asset Purchase Agreement, or LAPA, and service and supply agreements, or SSAs, with Veracyte Inc., or Veracyte. Pursuant to the LAPA, we completed a license of intellectual property and a sale of certain assets to Veracyte relating to our nCounter FLEX System for use in clinical diagnostic applications. Veracyte also acquired certain intellectual property rights and worldwide distribution rights relating to our Prosigna Breast Cancer Assay and our LymphMark assay and certain clinical diagnostic assay software modules that operate with nCounter FLEX. Pursuant to the SSAs, we agreed to supply to Veracyte nCounter FLEX Systems, and to manufacture and supply Prosigna kits, LymphMark kits, and any additional clinical diagnostic tests that Veracyte may develop in the future for nCounter for a period of at least four years subsequent to the transaction date. Pursuant to the SSAs, Veracyte will pay the designated transfer prices for nCounter FLEX, Prosigna kits, LymphMark kits, and any other nCounter-based diagnostic tests developed by Veracyte.

Our product and service revenue increased 4.4% to $45.6 million for the six months ended June 30, 2020, compared to $43.7 million for the first six months of 2019. Our total revenue was $49.2 million for the six months ended June 30, 2020, compared to $58.0 million for the first six months of 2019. We have never been profitable and had net losses of $65.8 million and $41.9 million for the six months ended June 30, 2020 and 2019, respectively. As of June 30, 2020, our accumulated deficit was $497.7 million.

Results of Operations

Revenue

Our product revenue consists of sales of nCounter and GeoMx DSP, including instruments and related consumables. Service revenue consists of fees associated with service contracts and conducting proof-of-principle studies, including programs in which we offer customers early access to technologies under development for which we generate data and perform analysis services on their behalf. Our customer base is primarily comprised of academic institutions, government laboratories, biopharmaceutical companies and clinical laboratories that perform analyses or testing using nCounter and GeoMx DSP. Collaboration revenue is derived primarily from our now concluded collaboration with Lam and also, historically, our terminated collaboration with Celgene. We do not expect to receive further development funding from Lam in future periods, and the original commitment from Lam to provide up to $50.0 million in development funding has been fully satisfied. Collaboration revenue also includes revenue recognized under smaller collaborations.

The following table reflects total revenue by geography based on the geographic location of our customers, distributors, and collaborators. For sales to distributors, their geographic location may be different from the geographic locations of the ultimate end customer.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(In thousands)			(In thousands)		
Americas	$ 15,334	$ 22,578	(32)%	$ 34,934	$ 41,505	(16)%
Europe & Middle East	5,759	6,308	(9)%	10,924	13,508	(19)%
Asia Pacific	1,511	1,459	4 %	3,351	3,020	11 %
Total revenue	$ 22,604	$ 30,345	(26)%	$ 49,209	$ 58,033	(15)%

The following table reflects the breakdown of our revenue into the primary components of our products, services, and collaborations.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(In thousands)			(In thousands)		
Product revenue:						
Instruments	$ 9,800	$ 4,940	98 %	$ 19,634	$ 9,258	112 %
Consumables	8,369	14,388	(42)%	19,869	28,848	(31)%
Total product revenue	18,169	19,328	(6)%	39,503	38,106	4 %
Service revenue	2,975	3,042	(2)%	6,137	5,614	9 %
Total product and service revenue	21,144	22,370	(5)%	45,640	43,720	4 %
Collaboration revenue	1,460	7,975	(82)%	3,569	14,313	(75)%
Total revenue	$ 22,604	$ 30,345	(26)%	$ 49,209	$ 58,033	(15)%

Instrument revenue during the three and six month periods ended June 30, 2020 increased as compared to the same periods in 2019 due primarily to commercial shipments of our GeoMx DSP system, which began during the third quarter of 2019 and contributed $6.3 million of revenue during the current three month period. The increase in instrument revenue related to GeoMx DSP was partially offset by lower revenue from sales of nCounter instruments as compared to the same period in 2019. For the three and six month periods ended June 30, 2020, our nCounter instrument shipments declined as compared to the same period in the prior year, primarily as a result of the impact of the COVID-19 pandemic on certain of our customers, including full or partial closures of their operations or facilities and being unable to complete purchases or receive product shipments for a substantial portion of the current year. This impact was more significant during the current three month period,

during which the COVID-19 pandemic had a greater impact on customer operations and activity in North America as compared to the first three months of 2020.

Consumables revenue includes sales of consumables for both nCounter and GeoMx DSP and also includes sales of Prosigna *in vitro* diagnostic kits to our partner Veracyte. Consumables revenue decreased for the three and six month periods ended June 30, 2020, with multiple factors impacting consumables revenue as compared to the same periods of 2019. Sales of consumables for GeoMx DSP added to consumables revenue in the periods, as compared to the same periods of 2019 where no GeoMx consumables revenue was recorded. GeoMx DSP consumable revenue contribution was offset by substantially lower nCounter consumables revenue as compared to the same periods of 2019, due primarily to the impact of the COVID-19 pandemic on our customer's ability to access their laboratories to conduct research, complete purchases and receive product shipments. The impact of the COVID-19 pandemic on nCounter consumable revenue and GeoMx DSP consumable revenue was more significant during the current three month period, during which the COVID-19 pandemic had a greater impact on customer operations and activity in North America as compared to the first three months of 2020. In addition, while greater unit sales of Prosigna kits were recorded as compared to the same period of 2019, our revenue recorded from sale of Prosigna kits were lower, as our Prosigna supply agreement entered into as part of the transaction with Veracyte completed in December 2019 reduced our average selling price received on Prosigna kits, which in prior periods had been sold directly to end user customers or distributors.

Service revenue increased for the six month period ended June 30, 2020 as compared to the same period of 2019, primarily due to increases in service revenue generated from our GeoMx DSP technology access program, or TAP. However, for the three month period ended June 30, 2020, service revenues were lower as compared to the same period of 2019 due to the effects of the COVID-19 pandemic on customer activity, which led to a lower volume of samples received and processed under our GeoMx TAP program.

The COVID-19 pandemic has impacted our ability to solicit and fulfill customer orders, and record related product and service revenue, at levels comparable to historical periods. To the extent the COVID-19 pandemic continues to have a negative impact on our customers' ability to conduct research, or our ability to actively engage with our customers or to receive and fulfill customer orders, we expect our near term revenues will continue to be negatively impacted. We expect consumables revenue to be more severely impacted by COVID-19, as consumables revenue more closely correlates with day-to-day customer research activity. We cannot predict with any certainty if, or how quickly, our customers will return to previous activity or product order levels, or our ability to resume our activities and operations at levels consistent with past performance. Until the effects of the COVID-19 pandemic subside, we expect our near-term revenues to continue to be negatively impacted. With consideration to these near-term negative impacts on our business, we expect our product and service revenue may continue to increase in future periods, as a result of the growth in sales of GeoMx DSP instruments and consumables, the introduction of new nCounter and GeoMx DSP consumable products and the introduction of new capabilities for GeoMx DSP, including the ability to use GeoMx DSP together with NGS systems.

Collaboration revenue decreased for the three and six month periods ended June 30, 2020 as compared to the same period in 2019, due primarily to decreased activity levels after our receipt of the full commitment of development funding of $50.0 million from Lam during 2019 and our terminated collaboration with Celgene. Our collaboration agreement with Lam represented $2.9 million and $9.2 million of our collaboration revenue for the three and six months ended June 30, 2020 and June 30, 2019, respectively.

Cost of Product and Service Revenue; Gross Profit; and Gross Margin

Cost of product and service revenue consists primarily of costs incurred in the production process including costs of purchasing instruments from third-party contract manufacturers, consumable component materials and assembly labor and overhead, installation, warranty, service and packaging, and delivery costs. In addition, cost of product and service revenue includes royalty costs for licensed technologies included in our products, provisions for slow-moving and obsolete inventory, and stock-based compensation expense. We provide a one-year warranty for both nCounter and GeoMx DSP and establish a reserve for warranty repairs based on historical warranty repair costs incurred.

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(Dollars in thousands)			(Dollars in thousands)		
Cost of product and service revenue	$ 10,712	$ 9,605	12 %	$ 21,729	$ 18,314	19 %
Product and service gross profit	$ 10,432	$ 12,765	(18)%	$ 23,911	$ 25,406	(6)%
Product and service gross margin	49 %	57 %		52 %	58 %	

For the three and six month periods ended June 30, 2020, cost of product and service revenue increased as compared to the same periods of 2019 due primarily to increased costs associated with commercial shipments of GeoMx DSP and investments made to support the growth, installation, and service of our product lines, including investments to expand our production and distribution capacity in late 2019 and early 2020 in consideration of the commercial launch of GeoMx DSP.

Our gross margin on product and service revenue for the three and six month periods ended June 30, 2020 was lower as compared to the same period of 2019, primarily as a result of greater instrument revenue as a percent of our total sales mix, with instrument sales generally contributing lower gross margins as compared to consumables sales. Our gross margins were also impacted by our lower consumables revenue as compared to the same period of 2019 due to the negative impacts of COVID-19, given certain fixed costs in our consumables manufacturing operations. In addition, gross margins have been negatively impacted in the current year due to the investments made in additional production capacity, as well as the Prosigna supply agreement with Veracyte pursuant to which we sell Prosigna for a lower realized price while our production costs have generally remained unchanged from prior periods.

With consideration to the potential near term and uncertain negative impact of the COVID-19 pandemic on our business, which may impact our product and service revenue growth and the related costs incurred, we expect our cost of product and service revenue to increase in future periods. These potential increases would be coincident with anticipated growth in sales of GeoMx DSP instruments, continued sales growth of nCounter and GeoMx consumables and our GeoMx DSP TAP service. We also expect to make investments in our operations to support the growth of our business.

We expect our gross margin on product and service revenue may fluctuate in future periods. Variability will depend in part on the uncertain impact of COVID-19 on our product and service revenue, in particular on our consumables revenue for which we operate the manufacturing process directly, as well on as our mix of instrument sales, for which typically have lower gross margins, as compared to our sales of consumable products or services. In addition, our gross margins may vary depending on potential expenses we may incur for regulatory compliance, quality assurance or activities related to the expansion of our manufacturing capacity. Costs related to collaboration revenue are included in research and development expense.

Research and Development Expense

Research and development expenses consist primarily of salaries and benefits, occupancy, laboratory supplies, engineering services, consulting fees, costs associated with licensing molecular diagnostics rights and clinical study expenses to support the regulatory approval or clearance of diagnostic products. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products and applications.

Given the size of our research and development staff and the number of active projects at any given time, we have found that it has been effective for us to manage our research and development activities on a departmental basis. Accordingly, other than for collaborations and certain major technology development programs, we have neither required employees to report their time by project nor allocated our research and development costs to individual projects. Research and development expense by functional area was as follows:

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(In thousands)			(In thousands)		
Platform technology	$ 7,453	$ 7,994	(7)%	$ 16,308	$ 15,482	5 %
Manufacturing process development	2,246	1,664	35 %	4,652	2,895	61 %
Life sciences products and applications	3,307	3,110	6 %	6,713	5,784	16 %
Diagnostic product development	243	1,267	(81)%	435	3,201	(86)%
Clinical, regulatory and medical affairs	182	1,326	(86)%	719	2,508	(71)%
Facility allocation	2,308	1,668	38 %	4,414	3,186	39 %
Total research and development expense	$ 15,739	$ 17,029	(8)%	$ 33,241	$ 33,056	1 %

For the three month period ended June 30, 2020, our research and development expenses decreased, while research and development expenses for the six month period ended June 30, 2020 increased slightly. The main drivers decreasing research and development expenses related to activities associated with diagnostic and clinical research, due to the termination of certain of our previous collaboration agreements and as a result of the License and Asset Purchase Agreement, or LAPA, with Veracyte which has subsequently reduced the ongoing diagnostic research and support associated with the Prosigna *in*

vitro diagnostic kits. These decreases were partially offset by continued platform technology development activities associated with our GeoMx DSP platform, including design and development of consumable content and software.

We expect research and development expense may remain relatively constant in future periods, reflecting the impact of the reductions in research and development resources in connection with the Veracyte transaction, offset by continued investments in GeoMx DSP and other future projects and technologies. In future periods, we may experience moderating research and development costs related to GeoMx DSP instruments and consumables as we transition to sustaining levels of activity. As of December 31, 2019, Lam had provided the full development funding commitment of $50.0 million and we do not expect to receive any further funding from Lam in future periods. With the completion of Lam's development funding, we are working to identify the key applications for our Hyb & Seq platform and pursuing potential commercial applications and partnerships that can support our emerging commercial strategy.

Selling, General and Administrative Expense

Selling, general and administrative expense consists primarily of costs for our sales and marketing, finance, human resources, information technology, business development, legal, and general management functions as well as professional fees for legal, consulting, and accounting services. Our sales force includes roles which are focused mainly on sales of consumables to our existing instrument base, which enables our sales representatives to focus on instrument sales and support the growth of our installed instrument base. Legal, accounting, and compliance costs have increased as a result of our being a public company and we expect them to continue to increase as our business grows.

Selling, general, and administrative expense was as follows:

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(In thousands)			(In thousands)		
Selling, general and administrative expense	$ 19,912	$ 22,499	(11)%	$ 45,633	$ 45,935	(1)%

The decrease in selling, general, and administrative expense for the three month period ended June 30, 2020 as compared to the same period in 2019, is due in part to a reduction of selling related expenses associated with the sale of the Prosigna assets to Veracyte, which also included the transfer of substantially all of our sales and marketing team dedicated to this business. Additionally, during the three month period ended June 30, 2020, the COVID-19 pandemic has reduced certain commercial activities, including lower travel and trade-show related costs, and has also resulted in estimates for lower variable compensation expenses, including changes to certain estimates associated with the vesting of shares under our performance-based stock awards which have been granted to our employees and executive and resulted in reducing our stock-based compensation expense during the current period. These decreases were partially offset by continued investment in GeoMx-related commercial initiatives, in particular investments made in our customer experience and service group, as well as in certain digital marketing and related initiatives. For the six month period ended June 30, 2020 as compared to the same period in 2019, selling, general, and administrative expenses have decreased due primarily to lower costs resulting from the elimination of the Prosigna sales and marketing team in December 2019 coincident with the completion of the transaction with Veracyte, and lower stock-based compensation expense, resulting from a change in estimate related to certain vesting assumptions associated with performance-based stock awards which have been granted to our employees and executives. This decrease was partially offset by higher professional service fees from our audit firm and external advisors relating to our compliance with the Sarbanes Oxley Act and increased investment in sales and marketing personnel associated with our GeoMx DSP commercial launch.

With consideration to the potential near term and uncertain negative impact of the COVID-19 pandemic on our business, which may impact our product and service revenue growth and the related costs incurred, we expect selling, general and administrative expenses to increase in future periods as the number of sales, technical support, marketing, and administrative personnel grows to support the expected growth in our business and the introduction of new products and product platforms.

Other Income (Expense)

	Three Months Ended June 30,			Six Months Ended June 30,		
	2020	2019	% Change	2020	2019	% Change
	(In thousands)			(In thousands)		
Interest income	$ 479	$ 828	(42)%	$ 1,183	$ 1,351	(12)%
Interest expense	(4,116)	(1,889)	118 %	(6,999)	(3,637)	92 %
Other income (expense), net	332	(120)	(377)%	(1,275)	(230)	454 %
Loss on extinguishment of debt and termination of revolving loan facility	—	—	N/A	(7,143)	—	N/A
Total other expense, net	$ (3,305)	$ (1,181)	180 %	$ (14,234)	$ (2,516)	466 %

Interest expense increased for the three and six month periods ended June 30, 2020 due primarily to an increase in our average outstanding debt balance during the period. The average balance of long-term debt outstanding for the six month periods ended June 30, 2020 and 2019 was $181.5 million and $64.3 million, respectively, which reflects the increase in our long-term debt related to our recently completed convertible debt financing. During March 2020, we successfully concluded a convertible debt offering totaling $230.0 million. In conjunction with closing our convertible debt financing, we terminated our existing term loan facility with Capital Royalty Group and our revolving credit facility with Silicon Valley Bank, and as a result we recorded a charge of $7.1 million representing certain fees and prepayment penalties associated with these facilities. After taking into consideration the repayment of outstanding term debt, accrued interest expense and termination fees associated with these facilities, net proceeds from our convertible debt financing totaled approximately $130.0 million. The increases in interest expense during the three and six month periods ended June 30, 2020 were partially offset by increased interest income resulting from higher average cash and investment balances on hand during the period as compared to the same period of 2019. For the six month period ended June 30, 2020, other expense, net includes certain expenses for pending state and local tax obligations, as well as the unfavorable impact of fair value declines related to our equity securities. As of June 30, 2020, the Company's holdings of Veracyte common stock equity securities have been sold pursuant to certain terms and conditions included within the LAPA and all net proceeds from the sale of the common stock have been included in our cash and cash equivalents.

Liquidity and Capital Resources

As of June 30, 2020, we had cash, cash equivalents and short-term investments of $248.7 million. While we believe our existing cash, cash equivalents, and short-term investments will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months, we may need to raise additional capital to expand the commercialization of our products, fund our operations, and further our research and development activities.

In addition, the COVID-19 pandemic has impacted our ability to solicit and fulfill customer orders and record related product and service revenue at levels comparable to historical periods. To the extent the COVID-19 pandemic continues to have a negative impact on our customers' ability to conduct research or our ability to actively engage with our customers and take or fulfill customer orders, we expect our revenues, and consequently our liquidity and capital resources, in the near term to be negatively impacted. We cannot predict with any certainty if, or how quickly, our customers will return to previous levels of activity or product order levels, or our ability to resume our activities and operations at levels consistent with past performance. Until the effects of the COVID-19 pandemic subside, we expect our near term revenues, as well as our use of our liquidity and capital resources, to be negatively impacted.

Our future funding requirements will depend on many factors, including: the duration of the COVID-19 pandemic and the impact on our customer and operational activity; market acceptance and the level of sales of our existing products and new product candidates; the nature and timing of any additional research, product development or other partnerships or collaborations we may establish; the cost and timing of establishing additional sales, marketing, and distribution capabilities; the cost of our research and development activities; the cost and timing of regulatory clearances or approvals; the effect of competing technological and market developments; and the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions. We may require additional funds in the future and we may not be able to obtain such funds on acceptable terms, or at all. If we raise additional funds by issuing equity or equity-linked securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through partnership, collaboration or 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 are unable to raise adequate funds we

may have to liquidate some or all of our assets; delay, reduce the scope or eliminate some or all of our research and development programs, launch activities, or commercialization of our products; license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize; or reduce marketing, customer support, or other resources devoted to our products; or cease operations.

Sources of Funds

Since inception, we have financed our operations primarily through the sale of equity securities, borrowings under term loan agreements and convertible notes, licensing of intellectual property, and, to a lesser extent, sales of certain assets. Our cash used in operations for the six months ended June 30, 2020 was $50.1 million.

Debt Instruments

2.625% Convertible Senior Notes due 2025

In March 2020, we issued $230.0 million in aggregate principal amount of 2.625% Convertible Senior Notes due 2025, or the Convertible Notes, in a private offering. The Convertible Notes are governed by an indenture dated March 9, 2020 between us and U.S. Bank, National Association, as trustee.

We received net proceeds from the offering of $222.6 million. We used $88.6 million to repay in full all outstanding amounts borrowed, accrued interest and fees owed in connection with the termination of the amended and restated term loan agreement, or the 2018 Term Loan, with Capital Royalty Group, and the fees owed in connection with the termination of our revolving credit facility with Silicon Valley Bank. We intend to use the remainder of the net proceeds for general corporate purposes, including the continued development and commercialization of GeoMx DSP, the continued commercialization of our portfolio of nCounter based products, and for working capital needs.

The Convertible Notes bear interest at a rate of 2.625% per year, payable semi-annually in arrears on March 1 and September 1, beginning on September 1, 2020. The Convertible Notes may bear additional interest under specified circumstances relating to the Company's failure to comply with its reporting obligations under, or if the Convertible Notes are not freely tradeable as required by, the indenture governing the Convertible Notes. Upon conversion, the Convertible Notes will be convertible into cash, shares of common stock, or a combination of cash and shares of common stock, at our election. Our current intent is to settle the principal amount of the Convertible Notes in cash upon conversion, with any remaining conversion value being delivered in shares of our common stock.

The Convertible Notes are general unsecured senior obligations and will mature on March 1, 2025, unless earlier repurchased, redeemed, or converted, subject to satisfaction of certain conditions and during the periods described below. The initial conversion rate for the Convertible Notes is 20.9161 shares of common stock, par value $0.0001 per share, per $1,000 principal amount of Convertible Notes (which is equivalent to an initial conversion price of approximately $47.81 per share). The conversion rate will be subject to adjustment in some events but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that may occur prior to the maturity date or if we issue a notice of redemption, we will increase the conversion rate for a holder who elects to convert our Convertible Notes in connection with such corporate event or in connection with such redemption, as the case may be, in certain circumstances.

Prior to the close of business on the business day immediately preceding December 1, 2024, the Convertible Notes will be convertible only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of the common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business-day period after any five consecutive trading-day period in which the trading price per $1,000 principal amount of Convertible Notes for each trading day of such period was less than 98% of the product of the last reported sale price of the common stock and the conversion rate on each such trading day; (3) if we call any or all of the Convertible Notes for redemption, the Convertible Notes called for redemption (or, in the case of a partial redemption, if we make an election to deem all Convertible Notes, irrespective of whether they are called for redemption, to be convertible, all Convertible Notes) may be submitted for conversion at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date as set forth in the related redemption notice; or (4) upon the occurrence of specified corporate events. On or after December 1, 2024, until the close of business on the business day immediately preceding the maturity date, holders of the Convertible Notes may convert all or any portion of their Convertible Notes at any time, regardless of the foregoing circumstances.

We may not redeem the Convertible Notes prior to March 5, 2023, and no sinking fund is provided for the Convertible Notes. On or after March 5, 2023, we may redeem for cash all or any portion of the Convertible Notes, at our option, if the last reported sale price of the common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading-day period (including the last trading day of such period)

ending on, and including, the trading day immediately preceding the date on which we provide a notice of redemption at a redemption price equal to 100% of the principal amount of the Convertible Notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date.

Upon the occurrence of a fundamental change (as defined in the indenture governing the Convertible Notes) prior to the maturity date, subject to certain conditions, holders may require us to repurchase all or a portion of the Convertible Notes in increments of $1,000 for cash at a price equal to 100% of the principal amount of the Convertible Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Convertible Notes do not contain any financial or operating covenants or any restrictions on the issuance of other indebtedness or the issuance or repurchase of securities by us. The Convertible Notes indenture contains customary events of default, including that upon certain events of default, 100% of the principal and accrued and unpaid interest on the Convertible Notes will automatically become due and payable.

Term Loan Agreement

In October 2018, we entered into an amended and restated term loan agreement, or the 2018 Term Loan, with Capital Royalty Group under which we could borrow up to $100.0 million, which was due and payable in September 2024.

In March 2020, the Company terminated the 2018 Term Loan agreement. The Company used $88.6 million of the proceeds from the Convertible Notes to repay in full all outstanding principle, interest and fees owed associated with termination of the loan.

2018 Revolving Loan Facility

In January 2018, we entered into a $15.0 million secured revolving loan facility, with availability subject to a borrowing base consisting of eligible accounts receivable. In November 2018, we entered into an amended and restated loan and security agreement to increase the borrowing capacity under the facility to $20.0 million, amend the borrowing base to include finished goods inventory, and extend the final maturity under the facility to November 2021.

In March 2020, we terminated the revolving loan facility and paid termination fees of $0.5 million. There were no amounts outstanding under the revolving loan facility at the time of termination.

Equity Financings

In March 2019, we completed an underwritten public offering of 3,175,000 shares of our common stock, including the exercise in full by the underwriters of their option to purchase 675,000 additional shares of common stock. Our total gross proceeds were $73.0 million. After underwriter's commissions and other expenses of the offering, and net of proceeds received by the related party stockholder, our aggregate net proceeds were approximately $68.3 million.

Use of Funds

Our principal uses of cash are funding our operations, capital expenditures, working capital requirements, and satisfaction of any outstanding obligations under our debt agreements, respectively. Over the past several years, our revenue has increased from year to year and, as a result, our cash flows from customer collections have increased. Our operating expenses have also increased as we have invested in our sales and marketing activities and in research and development of new product platforms and technologies that we believe have the potential to drive the long-term growth of our business.

Our operating cash requirements may increase in the future as we invest in research and development related to existing or new product platforms, as well as in sales and marketing activities. We cannot be certain our revenue will grow sufficiently to offset our operating expense increases. As a result, we may need to raise additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all. If we are unable to raise additional funds when needed, our operations and ability to execute our business strategy could be adversely affected.

Historical Cash Flow Trends

The following table shows a summary of our cash flows for the periods indicated (in thousands):

	Six Months Ended June 30,	
	2020	2019
Cash used in operating activities	$ (50,139)	$ (49,156)
Cash provided by (used in) investing activities	42,333	(43,606)
Cash provided by financing activities	147,246	101,784

Operating Cash Flows

We derive operating cash flows from cash collected from the sale of our products and services and, historically, from collaborations. These cash flows received are offset 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, with such negative cash flows likely to continue for the foreseeable future.

For the six month period ended June 30, 2020, net cash used in operating activities consisted of our net loss of $65.8 million, and net increases in our operating assets and liabilities of $5.1 million, partially offset by $20.7 million of net non-cash income and expense items, such as the loss on extinguishment of debt, payment of accrued interest on the 2018 Term Loan, stock-based compensation, depreciation and amortization, amortization of our right-of-use assets and deferred financing costs.

For the six months ended June 30, 2019, net cash used in operating activities consisted of our net loss of $41.9 million, and net increases in our operating assets and liabilities of $21.0 million, partially offset by $13.8 million of net non-cash income and expense items, such as stock-based compensation, depreciation and amortization, amortization of our right-of-use assets, deferred interest converted to principal pursuant to the 2018 Term Loan, and provisions for inventory obsolescence.

Investing Cash Flows

Our most significant investing activities for the six month periods ended June 30, 2020 and 2019 were related to the purchase, maturity and sale of short-term investments. Because we manage our cash usage with respect to our total cash, cash equivalents and short-term investments, we do not consider these cash flows to be important to an understanding of our liquidity and capital resources.

During the six month periods ended June 30, 2020 and 2019, we purchased property and equipment totaling $5.4 million and $1.1 million, respectively. The equipment purchased during the six month period ended June 30, 2020 includes costs incurred for construction, furniture and fixtures, and manufacturing equipment utilized in our new production facility in the greater Seattle, Washington area. We believe the investments we have made to date in expanding our manufacturing capabilities will be sufficient to support the growth and expansion of our operations for the foreseeable future.

Financing Cash Flows

Historically, we have funded our operations through the issuance of equity securities and various forms of debt facilities.

Net cash provided by financing activities for the six month period ended June 30, 2020 consisted primarily of net proceeds of from the issuance of 2.625% Convertible Senior Notes of $230.0 million and $8.8 million of net proceeds from the exercise of stock options and other equity awards and our Employee Stock Purchase Plan. These cash inflows were partially offset by payments related to the termination of our term loan agreement and revolving loan facility of $84.8 million.

Net cash provided by financing activities for the six months ended June 30, 2019 consisted of net proceeds of $68.3 million from an underwritten public offering of our common stock, borrowings of $20.0 million under our term loan agreement, and $12.3 million of net proceeds from the exercise of stock options and other equity awards and our Employee Stock Purchase Plan.

Contractual Obligations and Commitments

The following table reflects a summary of our contractual obligations as of June 30, 2020.

	Payments due by period				
Contractual Obligations[1]	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
			(In thousands)		
Convertible notes[2]	$ 230,000	$ —	$ —	$ 230,000	$ —
Lease obligations[3]	40,399	$ 3,198	$ 19,524	$ 13,569	$ 4,108
Purchase obligations[4]	21,398	21,398	—	—	—
Total	$ 291,797	$ 24,596	$ 19,524	$ 243,569	$ 4,108

[1] Excludes royalty obligations based on net sales of products as any such amounts are not currently determinable.

[2] Includes principal on our convertible notes.

[3] Lease costs are primarily for office, laboratory and manufacturing space.

[4] Purchase obligations consist of contractual and legally binding commitments under outstanding purchase orders to purchase long lead time inventory and other research and development items.

Critical Accounting Policies and Significant Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements which have been prepared in accordance with U.S. generally accepted accounting principles, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates.

Critical accounting policies and significant estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our critical accounting policies and estimates include those related to:

- revenue recognition;
- lease recognition;
- convertible senior notes valuation;
- inventory valuation;
- fair value measurements; and
- income taxes.

For additional information, see Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of our Annual Report on Form 10-K for the year ended December 31, 2019, as filed with the SEC on March 2, 2020 and Note 2 of the Notes to the Condensed Consolidated Financial Statements under Item 1 of this report.

Recent Accounting Pronouncements

For information regarding recent accounting pronouncements, see Note 2 of the Notes to the Condensed Consolidated Financial Statements under Item 1 of this report.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

We are subject to certain risks that may affect our results of operations, cash flows and fair values of assets and liabilities, including volatility in foreign currency exchange rates, interest rate movements and pricing pressures worldwide, as well as changes in economic conditions in the markets in which we operate as a result of the COVID-19 pandemic.

Interest Rate Risk

Generally, our exposure to market risk has been primarily limited to interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because the majority of our investments are in short-term debt securities. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. To minimize risk, we maintain our portfolio of cash, cash equivalents and short-term investments in a variety of interest-bearing instruments, which have included U.S. government and agency securities, high-grade U.S. corporate bonds, asset-backed securities, and money market funds. Declines in interest rates, however, would reduce future investment income. A 10% decline in interest rates, occurring on July 1, 2020 and sustained throughout the period ended June 30, 2021, would not be material.

Our Convertible Notes are based on a fixed rate; accordingly, we do not have economic interest rate exposure on the Convertible Notes. However, changes in interest rates could impact the fair market value of the Convertible Notes. Generally, the fair market value of the fixed interest rate of the Convertible Notes will increase as interest rates fall and decrease as interest rates rise. In addition, the fair market value of the Convertible Notes fluctuates when the market price of our common stock fluctuates. As of June 30, 2020, the fair market value of the Convertible Notes was $211.9 million and was determined based on the estimated or actual bid prices of the Convertible Notes in an over-the-counter market.

Foreign Currency Exchange Risk

As we continue to expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Historically, a majority of our revenue has been denominated in U.S. dollars, although we sell our products and services directly in certain markets outside of the United States denominated in local currency, principally the Euro. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables would not have been material for the periods presented. As our operations in countries outside of the United States grow, our results of operations and cash flows are and will be subject to potentially greater fluctuations due to foreign currency exchange rate fluctuations, including the impact of the COVID-19 pandemic. To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could adversely affect our business, financial condition and results of operations.

Item 4. Controls and Procedures.

(a) *Evaluation of disclosure controls and procedures.* Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, have evaluated our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) prior to the filing of this quarterly report. Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, as of the end of the period covered by this quarterly report, certain of our disclosure controls and procedures were not effective due to material weaknesses in internal control over financial reporting, specifically with respect to the following: not having sufficient resources with an appropriate level of controls knowledge, expertise and training, commensurate with the Company's financial reporting requirements, as well as not designing and maintaining effective information technology general controls, controls related to creating and posting journal entries, controls related to customer order entry, price and quantity during the product and services billing and revenue processes, and controls related to periodic inventory counts, receiving of inventory, and recording adjustments to inventory quantities. These material weaknesses were disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

(b) *Changes in internal control over financial reporting.* There were no changes in our internal control over financial reporting during the quarter ended June 30, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, other than the continued remediation efforts disclosed in (c) below.

(c) *Remediation Efforts.* We continue to implement and execute the material weakness remediation plan previously described in Part II, Item 9A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019. During the quarter ended June 30, 2020, our continued remediation actions included: (i) significant evaluation of certain design considerations related to improving how our information technology key controls are designed to function, ultimately supporting the operation of certain process level key controls in the impacted areas; (ii) improved the consistency of execution steps associated with the performance of control activities in the impacted areas, including the precision of documentation that is prepared and retained to support the performance and reviews of our key controls; (iii) conducted training sessions for key control owners and other key participants that perform activities which are tied to our key controls over financial reporting to ensure they are trained in a manner such that they have sufficient knowledge and understanding of our internal control environment, their impact to those controls, and our expectations around adherence to processes and procedures as it relates to performing control activities; (iv) developed and delivered training content on a company-wide basis regarding public company requirements around internal control environments, including management certification requirements and external auditor opinion related to our internal control environment; and (v) evaluated and revised certain design considerations associated with internal controls to ensure the completeness, occurrence and accuracy of customer order entry processes, including validation of price and quantity during our customer billing and revenue recognition procedures. We believe the above actions that were undertaken during the quarter ended June 30, 2020 support our continued efforts to remediate the previously identified and disclosed material weaknesses. The material weaknesses will not be considered remediated until internal controls have been designed, or redesigned, and implemented which specifically address the material weaknesses, and these internal controls must operate for a sufficient period of time and management must then conclude, through testing, that these controls are operating effectively.

Inherent limitation on the effectiveness of internal control over financial reporting.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

We are not engaged in any material legal proceedings. From time to time, we may become involved in litigation relating to claims arising from the ordinary course of business. We believe that there are no claims or actions pending against us currently, the ultimate disposition of which would have a material adverse effect on our consolidated results of operation, financial condition or cash flows.

Item 1A. Risk Factors.

You should carefully consider the following risk factors, in addition to the other information contained in this report, including the section of this report captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes. If any of the events described in the following risk factors and the risks described elsewhere in this report occurs, our business, operating results and financial condition could be seriously harmed. This report on Form 10-Q also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report.

Risks Related to Our Business and Strategy

We face risks related to health epidemics and other outbreaks, which could significantly disrupt our operations and could have a material adverse impact on us.

Our business could be adversely impacted by the effects of health epidemics and other outbreaks. For example, in December 2019, a novel strain of coronavirus, SARS-CoV-2, the causative agent of coronavirus disease 2019, or COVID-19, was first reported. Since then, COVID-19 has spread across the globe and is affecting worldwide economic activity, including in the United States and European and Asia-Pacific countries. Quarantines, shelter-in-place and similar government orders have been imposed in many of the regions in which we have material operations or sales, including the greater Seattle, Washington area. As a result, our business activities originating from affected areas, including sales, manufacturing and supply chain related activities, have been, and could continue to be, adversely affected. Disruptive activities could include:

- the temporary closure of our manufacturing facilities and those used in our supply chain processes;
- restrictions on the export or shipment of our products;
- unavailability of components and materials used in our products;
- significant cutback of ocean container delivery;
- business closures in impacted areas;
- limitations in employee resources, including because of stay-at-home orders, sickness of employees or their families or the desire of employees to avoid contact with large groups of people; and
- restrictions on our employees' and other service providers' ability to travel, to meet with customers and install and train customers on our systems.

The extent to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the virus and the actions to contain it or treat its impact, among others. Although national, state and local governments have introduced relief measures
intended to alleviate the impact of COVID-19-related disruptions, we may not qualify for or benefit from such measures.

We have incurred losses since we were formed and expect to incur losses in the future. We cannot be certain that we will achieve or sustain profitability.

We have incurred losses since we were formed and expect to incur losses in the future. We incurred net losses of $65.8 million and $41.9 million for the six months ended June 30, 2020 and 2019, respectively. As of June 30, 2020, we had an accumulated deficit of $497.7 million. We expect that our losses will continue for at least the next several years as we will be required to invest significant additional funds toward ongoing development and commercialization of our technology. We also expect that our operating expenses will continue to increase as we grow our business, and there can be no assurance that our revenue and gross profit will increase sufficiently such that our net losses decline, or we attain profitability, in the future. Our ability to achieve or sustain profitability is based on numerous factors, many of which are beyond our control, including the market acceptance of our products, future product development and our market penetration and margins. We may never be able to generate sufficient revenue to achieve or sustain profitability.

Our financial results may vary significantly from quarter to quarter which may adversely affect our stock price.

Investors should consider our business and prospects in light of the risks and difficulties we expect to encounter in the uncertain and rapidly evolving markets in which we compete. Because these markets are evolving, predicting their future growth and size is difficult. We expect that our visibility into future sales of our products, including volumes, prices and product mix between instruments and consumables, and the amount and timing of payments pursuant to collaboration agreements will continue to be limited and could result in unexpected fluctuations in our quarterly and annual operating results.

Numerous other factors, many of which are outside our control, may cause or contribute to significant fluctuations in our quarterly and annual operating results, including the ongoing impact of the COVID-19 pandemic on our business operations and financial results. These fluctuations may make financial planning and forecasting difficult. In addition, these fluctuations may result in unanticipated changes in our available cash, which could negatively affect our business and prospects. Factors that may contribute to fluctuations in our operating results include many of the risks described in this section. Also, one or more of such factors may cause our revenue or operating expenses in one period to be disproportionately higher or lower relative to the others. Furthermore, our instruments involve a significant capital commitment by our customers and accordingly involve a lengthy sales cycle. We may expend significant effort in attempting to make a particular sale, which may be deferred by the customer or never occur. Accordingly, comparing our operating results on a period-to-period basis may not be meaningful, and investors should not rely on our past results as an indication of our future performance. If such fluctuations occur or if our operating results deviate from our expectations or the expectations of securities analysts, our stock price may be adversely affected.

If we do not achieve, sustain or successfully manage our anticipated growth, our business and growth prospects will be harmed.

We have experienced significant revenue growth in recent periods and we may not achieve similar growth rates in the future. Investors should not rely on our operating results for any prior periods as an indication of our future operating performance. If we are unable to maintain adequate revenue growth, our financial results could suffer and our stock price could decline. Furthermore, growth will place significant strains on our management and our operational and financial systems and processes. For example, the recent commercial launch of our GeoMx DSP system is a key element of our growth strategy and will require us to hire and retain additional sales and marketing personnel and resources. If we do not successfully generate demand for GeoMx DSP or other new product offerings, or manage our anticipated expenses accordingly, our operating results will be harmed.

Our future success is dependent upon our ability to expand our customer base and introduce new applications and products.

Our current customer base is primarily composed of academic and government research laboratories, biopharmaceutical companies and clinical laboratories (including physician-owned laboratories) that perform analyses using our nCounter Analysis Systems. Our success will depend, in part, upon our ability to increase our market penetration among all of these customers and to expand our market by developing and marketing new research applications and new instruments. We expect that increasing the installed base of our nCounter Analysis Systems will drive demand for our relatively high margin consumable products. If we are not able to successfully increase our installed base of nCounter Analysis Systems, sales of our consumable products and our margins may not meet expectations.

We also develop and introduce new products, such as our recently launched GeoMx DSP system. Our GeoMx DSP instrument and related consumables became commercially available in 2019 and we anticipate that scaling and training our sales force to attract new customers will require substantial time and expense. Any failure to expand our existing customer base through the launch of our GeoMx DSP system or other new applications and products would adversely affect our operating results.

New market opportunities may not develop as quickly as we expect, limiting our ability to successfully market and sell our products.

The markets for our products are new and evolving. Accordingly, we expect the application of our technologies to emerging opportunities will take several years to develop and mature and we cannot be certain that these market opportunities will develop as we expect. For example, in 2017 we launched our 360 panels for use in breast cancer, immuno-oncology and hematology research. In 2018, we expanded beyond oncology and launched research panels in neuroscience and CAR-T characterization and in 2019 we introduced research panels for human organ transplantation and Alzheimer's disease.

We also recently launched our GeoMx DSP system and related consumables. GeoMx DSP targets spatial genomics, a novel market opportunity and research application for which existing research experience and applications are limited. Prior to the launch of GeoMx DSP, we had not previously targeted this market and, as a result, we have limited marketing and selling experience. We also have GeoMx DSP related products under development that target new markets and customers that differ from our current customer base. Even if we successfully develop these products, our limited marketing and selling experience targeting these new markets and customers may hinder the successful commercialization of these products.

The future growth of the market for these new products depends on many factors beyond our control, including recognition and acceptance of our applications by the scientific community and the growth, prevalence and costs of competing research methods. In addition, the COVID-19 pandemic has disrupted our operations and the operations of the customers we seek to serve in our targeted markets, which has impacted and may continue to impact our growth and our ability to serve these markets. If the markets for our new products do not develop as we expect, our business may be adversely affected. If we are not able to successfully market and sell our products or to achieve the revenue or margins we expect, our operating results may be harmed.

Our research business depends on levels of research and development spending by academic and governmental research institutions and biopharmaceutical companies, a reduction in which could limit demand for our products and adversely affect our business and operating results.

In the near term, we expect that a large portion of our revenue will be derived from sales of our nCounter Analysis Systems to academic and government research laboratories and biopharmaceutical companies worldwide for research and development applications. The demand for our products will depend in part upon the research and development budgets of these customers, which are impacted by factors beyond our control, such as:

- changes in government programs (such as the National Institutes of Health) that provide funding to research institutions and companies;
- macroeconomic conditions, the political climate and the ongoing impact of the COVID-19 pandemic;
- changes in the regulatory environment;
- differences in budgetary cycles;
- competitor product offerings or pricing;
- market-driven pressures to consolidate operations and reduce costs; and
- market acceptance of relatively new technologies, such as our GeoMx DSP instrument.

In addition, academic, governmental and other research institutions that fund research and development activities may be subject to stringent budgetary constraints that could result in spending reductions, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers to purchase our products. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers, including delays caused by these customers' reducing activities in response to the COVID-19 pandemic. Any decrease in our customers' budgets or expenditures, or in the size, scope or frequency of capital or operating expenditures, could materially and adversely affect our business, operating results and financial condition.

Our sales cycle is lengthy and variable, which makes it difficult for us to forecast revenue and other operating results.

Our sales process involves numerous interactions with multiple individuals within an organization, and often includes in-depth analysis by potential customers of our products, performance of proof-of-principle studies, preparation of extensive documentation and a lengthy review process. As a result of these factors, the large capital investment required in purchasing our instruments and the budget cycles of our customers, the time from initial contact with a customer to our receipt of a purchase order can vary significantly and be up to 12 months or longer. In addition, the recent introduction of GeoMx DSP in 2019 may decrease our near-term visibility as to the timing of our total sales or the length of our overall sales cycle. Given the length and uncertainty of our sales cycle that we have in the past experienced, and likely will in the future experience, fluctuations in our instrument sales will occur on a period-to-period basis. These factors also make it difficult to forecast revenue on a quarterly basis. In addition, any failure to meet customer expectations could result in customers choosing to continue to use their existing

systems or to purchase systems other than ours.

Our reliance on distributors for sales of our products outside of the United States could limit or prevent us from selling our products and impact our revenue.

We have established distribution agreements for our nCounter Analysis Systems and GeoMx DSP systems and related consumable products in many countries where we do not sell directly. We intend to continue to grow our business internationally, and to do so we must attract additional distributors and retain existing distributors to maximize the commercial opportunity for our products. There is no guarantee that we will be successful in attracting or retaining desirable sales and distribution partners or that we will be able to enter into such arrangements on favorable terms. Distributors may not commit the necessary resources to market and sell our products to the level of our expectations or may choose to favor marketing the products of our competitors. If current or future distributors do not perform adequately, or we are unable to enter into effective arrangements with distributors in particular geographic areas, we may not realize long-term international revenue growth.

Our future capital needs are uncertain and we may need to raise additional funds in the future.

We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 12 months. However, we may need to raise substantial additional capital to:

- expand the commercialization of our products;
- fund our operations; and
- further our research and development.

Our future funding requirements will depend on many factors, including:

- market acceptance of our products;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- revenue and cash flow derived from existing or future collaborations;
- the cost of our research and development activities;
- the cost and timing of regulatory clearances or approvals;
- the effect of competing technological and market developments; and
- the extent to which we engage in strategic transactions, such as the acquisition of, investment in or disposal of businesses, assets, products and technologies, including inbound or outbound licensing arrangements.

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, or convertible debt, our stockholders may experience dilution. For example, in March 2019, we sold an aggregate of 3,175,000 shares of common stock in an underwritten public offering for net proceeds of $68.3 million and in March 2020 we sold $230 million aggregate principal amount of our 2.625% Convertible Senior Notes due 2025 in a private placement to qualified institutional buyers for net proceeds of approximately $222.6 million. Future debt financing, if available, may involve additional covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through strategic transactions with third parties, such as collaborations, asset sales and licensing arrangements, 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. We have in the past pursued these types of transactions, such as the License and Asset Purchase Agreement, or LAPA, with Veracyte, Inc., or Veracyte, we completed in December 2019, and may in the future pursue similar transactions or other strategic transactions, on our own or with other advisors, that may impact our business and prospects and the value of our common stock. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

Our research and development efforts will be hindered if we are not able to contract with third parties for access to archival tissue samples.

Under standard clinical practice, tumor biopsies removed from patients are preserved and stored in formalin-fixed paraffin embedded, or FFPE, format. We rely on our ability to secure access to these archived FFPE tumor biopsy samples, as well as information pertaining to the clinical outcomes of the patients from which they were derived for our clinical development activities. Others compete with us for access to these samples. Additionally, the process of negotiating access to archived samples is lengthy because it typically involves numerous parties and approval levels to resolve complex issues such as usage rights, institutional review board approval, privacy rights, publication rights, intellectual property ownership and research parameters. In January 2017, the Department of Health and Human Services finalized new rules, which became

effective as of January 19, 2018, expanding the language to be included in informed consent forms related to the collection of identifiable private information or identifiable biospecimens. If this new requirement, or other factors arising in the future, impact our ability to negotiate access to archived tumor tissue samples with hospitals, clinical partners, pharmaceutical companies, or companies developing therapeutics on a timely basis or on commercially reasonable terms, or at all, or if other laboratories or our competitors secure access to these samples before us, our ability to research, develop and commercialize future products will be limited or delayed.

We may not be able to develop new products, enhance the capabilities of our systems to keep pace with rapidly changing technology and customer requirements or successfully manage the transition to new product offerings, any of which could have a material adverse effect on our business and operating results.

Our success depends on our ability to develop new products and applications for our technology in existing and new markets, while improving the performance and cost-effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future products and systems. Existing markets for our products, including gene expression analysis, gene fusions and copy number variation, as well as new markets, such as protein expression and gene mutations, and potential markets for our research product candidates, are characterized by rapid technological change and innovation. Competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies. It is critical to our success that we anticipate changes in technology and customer requirements and successfully introduce new, enhanced and competitive technologies to meet our customers' and prospective customers' needs on a timely and cost-effective basis. If we do not successfully innovate and introduce new technology into our product lines, our business and operating results will be adversely impacted.

The development and manufacture of new products typically requires new scientific discoveries or advancements and complex technology and engineering, including the design of sophisticated software. Such developments may involve external suppliers and service providers, making the management of development projects complex and subject to risks and uncertainties regarding timing, timely delivery of required components, software or services and satisfactory technical performance of such software, components or assembled products. If we do not achieve the required technical specifications or successfully manage new product development processes, or if development work and manufacturing is not performed according to schedule, then such new technologies or products may be adversely impacted and our business and operating results may be harmed. Any delays in bringing new products to market may lead our customers to purchase our competitors' products or cancel outstanding purchase orders.

Additionally, we must carefully manage the introduction of new products. If customers believe that such products will offer enhanced features or be sold for a more attractive price, they may delay purchases until such products are available. If customers conclude that such new products offer better value as compared to our existing products, we may suffer from reduced sales of our existing products and our overall revenue may decline. We may also have excess or obsolete inventory of older products as we transition to new products and our experience in managing product transitions is limited. If we do not effectively manage the transitions to new product offerings, our revenue, results of operations and business will be adversely affected.

We are dependent on single source suppliers for some of the components and materials used in our products, and the loss of any of these suppliers could harm our business.

We rely on Precision System Science, Co., Ltd of Chiba, Japan, to build our nCounter Prep Station, Korvis LLC of Corvallis, Oregon, to build our nCounter Digital Analyzer and GeoMx DSP, Paramit Corporation of Morgan Hill, California, to build the nCounter SPRINT Profiler and IDEX Corporation of Lake Forest, Illinois to build the fluidics cartridge, a key component of our nCounter SPRINT Profiler. Each of these contract manufacturers are sole suppliers. Since our contracts with these instrument suppliers do not commit them to carry inventory or make available any particular quantities, they may give other customers' needs higher priority than ours, and we may not be able to obtain adequate supplies in a timely manner or on commercially reasonable terms. We also rely on sole suppliers for various components we use to manufacture our consumable products. We periodically forecast our needs for such components and enter into standard purchase orders with them. If we were to lose such suppliers, or if the products provided by such suppliers are unable to meet our performance specifications, there can be no assurance that we will be able to identify or enter into agreements with alternative suppliers on a timely basis on acceptable terms, if at all. In addition, if as a result of global economic or political instability or disease outbreaks such as the COVID-19 pandemic, our suppliers experience shortages or delays for materials sourced or manufactured in the affected countries, their ability to supply us with instruments or product components may be affected. If we should encounter delays or difficulties in securing the quality and quantity of materials we require for our products, our supply chain would be interrupted which would adversely affect sales. If any of these events occur, our business and operating results could be harmed.

We may experience manufacturing problems or delays that could limit our growth or adversely affect our operating results.

Our consumable products are manufactured at our facilities located in the greater Seattle, Washington area using complex processes, sophisticated equipment and strict adherence to specifications and quality systems procedures. Any unforeseen manufacturing problems, such as contamination of our facilities, equipment malfunction, quality issues with components and materials sourced from third-party suppliers, failure to strictly follow procedures or meet specifications, or reduced or blocked access to our facilities as a result of the ongoing COVID-19 pandemic, could result in delays or shortfalls in production or require us to voluntarily recall our consumable products. Identifying and resolving the cause of any such manufacturing or supplier issues could require substantial time and resources. If we are unable to keep up with demand for our products by successfully manufacturing and shipping our products in a timely manner, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products or cancel outstanding purchase orders.

In addition, the introduction of new products may require the development of new manufacturing processes and procedures as well as new suppliers. For example, our GeoMx DSP systems require that we establish supply relationships with antibody providers. While all of our CodeSets are produced using the same basic processes, significant variations may be required to meet new product specifications. Developing new processes and negotiating supply agreements can be very time consuming, and any unexpected difficulty in doing so could delay the introduction of a product.

If our greater Seattle area facilities become unavailable or inoperable, we will be unable to continue our research and development, manufacturing our consumables or processing sales orders, and our business will be harmed.

We manufacture our consumable products in our facilities located in the greater Seattle, Washington area, which are the center for research and development, order processing, receipt of our instruments manufactured by third-party contract manufacturers and shipping products to customers. Our facilities and the equipment we use to manufacture our consumable products would be costly, and would require substantial lead time, to repair or replace. The Seattle area is situated near active earthquake fault lines. These facilities may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes and power outages, which may render it difficult or impossible for us to produce our products for some period of time. The inability to manufacture consumables or to ship products to customers for even a short period of time may result in the loss of customers or harm our reputation, and we may be unable to regain those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance, and in particular earthquake insurance, which is limited, may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, if at all.

We expect to generate a substantial portion of our product and service revenue internationally and are subject to various risks relating to our international activities, which could adversely affect our operating results.

Our product and service revenue generated from sales to customers located outside of North America was approximately 32% and 38% for the six months ended June 30, 2020 and 2019, respectively. We believe that a significant percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional areas. Engaging in international business involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, privacy and data protection requirements, labor laws and anti-competition regulations;
- export or import restrictions;
- various reimbursement and insurance regimes;
- laws and business practices favoring local companies;
- longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;
- political and economic instability, such as the exit of the United Kingdom from the European Union;
- global health pandemics, such as the ongoing COVID-19 pandemic;
- potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;
- difficulties and costs of staffing and managing foreign operations; and
- difficulties protecting or procuring intellectual property rights.

As we expand internationally, our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Historically, most of our revenue has been denominated in U.S. dollars, although we have sold our products and services in local currency outside of the United States, principally the Euro. Our expenses are generally denominated in the currencies of the countries in which our operations are located, which is primarily in the United States. As our operations in countries outside of the United States grow, our results of operations and cash flows will increasingly be subject to fluctuations due to changes in foreign currency exchange rates, which could harm our business in the future. For example, if the value of the U.S. dollar increases relative to foreign currencies, our product and service revenue could be adversely affected as we convert revenue from local currencies to U.S. dollars. Similarly, a strong U.S. dollar relative to the local currencies of our international customers can potentially reduce demand for our products, which may compound the adverse effect of foreign exchange translation on our revenue. If we dedicate significant resources to our international operations and are unable to manage these risks effectively, our business, operating results and prospects will suffer.

Significant United Kingdom or European developments stemming from the United Kingdom's withdrawal from the European Union could have a material adverse effect on us.

In June 2016, the United Kingdom held a referendum and voted in favor of leaving the European Union, and in March 2017, the government of the United Kingdom formally initiated the withdrawal process. After several delays, the United Kingdom exited from the European Union, on January 31, 2020. There will be a transition period until December 31, 2020 for the United Kingdom to negotiate a trade deal with the European Union. Negotiations related to Brexit have created political and economic uncertainty, particularly in the United Kingdom and the European Union, and this uncertainty may last for several more years. Our business in the United Kingdom, the European Union, and worldwide could be affected during this period of uncertainty, and perhaps longer, by the impact of the United Kingdom's withdrawal. There are many ways in which our business could be affected, only some of which we can identify as of the date of this report.

The decision of the United Kingdom to withdraw from the European Union has caused and, along with events that could occur in the future as a consequence of the United Kingdom's withdrawal may continue to cause significant volatility in global financial markets, including in global currency and debt markets. This volatility could cause a slowdown in economic activity in the United Kingdom, Europe or globally, which could adversely affect our operating results and growth prospects. In addition, our business could be negatively affected by new trade agreements or data transfer agreements between the United Kingdom and other countries, including the United States, and by the possible imposition of trade or other regulatory and immigration barriers in the United Kingdom. In addition, the Europe-wide market authorization framework for our products (and for the drugs sold by our collaboration partners in the pharmaceutical industry) and access to European Union research funding by research scientists based in the United Kingdom may also change and may also result in a slowdown in spending on research tools like our systems. Furthermore, we currently operate in Europe through a subsidiary based in the United Kingdom, which provides us with certain operational, tax and other benefits, as well as through other subsidiaries in Europe. The United Kingdom's withdrawal from the European Union could adversely affect our ability to realize those benefits and we may incur costs and suffer disruptions in our European operations as a result. These possible negative impacts, and others resulting from the United Kingdom's actual or threatened withdrawal from the European Union, may adversely affect our operating results and growth prospects.

We could be subject to additional income tax liabilities.

We are subject to income taxes in the United States and numerous foreign jurisdictions. Significant judgment is required in evaluating our worldwide provision for income taxes. During the ordinary course of business, there are many transactions for which the ultimate tax determination is uncertain. For example, our effective tax rates could be adversely affected by earnings being lower than anticipated in countries where we have lower statutory rates and higher than anticipated in countries where we have higher statutory rates, by changes in foreign currency exchange rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations. We are subject to audit in various jurisdictions, and such jurisdictions may assess additional income tax against us. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our operating results or cash flows in the period or periods for which that determination is made.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could affect the tax treatment of our domestic and foreign earnings. Any new taxes could adversely affect our domestic and international business operations, and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, the legislation

commonly known as the Tax Cut & Jobs Act, which was signed into law on December 22, 2017, significantly revised the Internal Revenue Code of 1986, as amended, or the Code. The federal income tax law, among other things, contains significant changes to corporate taxation, including a reduction of the federal statutory rates from a top marginal rate of 35% to a flat rate of 21%, the transition of U.S. international taxation from a worldwide tax system to a territorial system, one time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, and modifying or repealing many business deductions and credits. We have accounted for such changes in accordance with our understanding of the Tax Cut & Jobs Act and guidance available as of the date of this filing as described in more detail in our financial statements. We will continue to monitor and assess the impact of the federal legislation on our business and the extent to which various states conform to the newly enacted federal tax law. Any further changes in tax laws or regulations that are applied adversely to us or our customers could have a material adverse effect on our business, cash flow, financial condition or results of operations.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2019, we had federal net operating loss carryforwards, or NOLs, to offset future taxable income of approximately $317.4 million. The federal NOL carryforwards generated during and after fiscal 2018 totaling $83.5 million are carried forward indefinitely, while all others, if not utilized, will expire in various years beginning in 2025. A lack of future taxable income would adversely affect our ability to utilize these NOLs. In addition, under Section 382 of the Code, a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its NOLs to offset future taxable income. We may have already experienced one or more ownership changes. Depending on the timing of any future utilization of our carryforwards, we may be limited as to the amount that can be utilized each year as a result of such previous ownership changes. However, we do not believe such limitations will cause our NOL and credit carryforwards to expire unutilized. In addition, future changes in our stock ownership as well as other changes that may be outside of our control, could result in additional ownership changes under Section 382 of the Code. Our NOLs may also be impaired under similar provisions of state law or limited pursuant to provisions of the Tax Cut and Jobs Act amendments to the Code. We have recorded a full valuation allowance related to our NOLs and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Provisions of debt instruments we may enter into may restrict our ability to pursue our business strategies.

From time to time, we have used debt financing to provide capital for our business. Debt instruments we may enter into in the future may require us to comply with various covenants that limit our ability to, among other things:

- dispose of assets;
- complete mergers or acquisitions;
- incur indebtedness;
- encumber assets;
- pay dividends or make other distributions to holders of our capital stock;
- make specified investments;
- engage in any new line of business; and
- engage in certain transactions with our affiliates.

These restrictions could inhibit our ability to pursue our business strategies and may also impose certain financial covenants that require us to achieve certain revenue targets and/or maintain certain minimum cash balances. If we default under any such debt instruments, the lenders could terminate commitments to lend and cause all amounts outstanding with respect to such debt to be due and payable immediately, which in turn could result in cross defaults under other debt instruments. Our assets and cash flow may not be sufficient to fully repay borrowings under all of our then outstanding debt instruments if some or all of these instruments are accelerated upon a default. If we are unable to repay, refinance or restructure indebtedness when payment is due, the lenders could also proceed against any collateral granted to them to secure such indebtedness or force us into bankruptcy or liquidation.

Acquisitions or joint ventures could disrupt our business, cause dilution to our stockholders and otherwise harm our business.

We may acquire other businesses, products or technologies as well as pursue strategic alliances, joint ventures, technology licenses or investments in complementary businesses. We have not made any acquisitions to date, and our ability to do so successfully is unproven. Any of these transactions could be material to our financial condition and operating results and expose us to many risks, including:

- disruption in our relationships with customers, distributors or suppliers as a result of such a transaction;
- unanticipated liabilities related to acquired companies;

- difficulties integrating acquired personnel, technologies and operations into our existing business;
- diversion of management time and focus from operating our business;
- increases in our expenses and reductions in our cash available for operations and other uses; and
- possible write-offs or impairment charges relating to acquired businesses.

Foreign acquisitions involve unique risks in addition to those mentioned above, including those related to integration of operations across different cultures and languages, currency risks and the particular economic, political and regulatory risks associated with specific countries.

Also, the anticipated benefit of any strategic transaction may not materialize. Future acquisitions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition. We cannot predict the number, timing or size of future joint ventures or acquisitions, or the effect that any such transactions might have on our operating results.

If we are unable to recruit, train and retain key personnel, we may not achieve our goals.

Our future success depends on our ability to recruit, train, retain and motivate key personnel, including our senior management, research and development, manufacturing and sales and marketing personnel. Competition for qualified personnel is intense, particularly in the Seattle, Washington area. Our growth depends, in particular, on attracting, retaining and motivating highly-trained sales personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively identify and sell to potential new customers. We do not maintain fixed term employment contracts or key man life insurance with any of our employees. Because of the complex and technical nature of our products and the dynamic market in which we compete, any failure to attract, train, retain and motivate qualified personnel could materially harm our operating results and growth prospects.

Undetected errors or defects in our products could harm our reputation, decrease market acceptance of our products or expose us to product liability claims.

Our products may contain undetected errors or defects when first introduced or as new versions are released. Disruptions or other performance problems with our products may damage our customers' businesses, harm our reputation and result in reduced revenues. If that occurs, we may also incur significant costs, the attention of our key personnel could be diverted, or other significant customer relations problems may arise. We may also be subject to warranty and liability claims for damages related to errors or defects in our products. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our products could adversely impact our business and operating results.

The sale and use of products or services based on our technologies, or activities related to our research, could lead to the filing of product liability claims if someone were to allege that one of our products contained a design or manufacturing defect which resulted in the failure to adequately perform the analysis for which it was designed. A product liability claim could result in substantial damages and be costly and time consuming to defend, either of which could materially harm our business or financial condition. We cannot assure investors that our product liability insurance would adequately protect our assets from the financial impact of defending a product liability claim. Any product liability claim brought against us, with or without merit, could increase our product liability insurance rates or prevent us from securing insurance coverage in the future.

We face risks related to handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials in manufacturing and in our products, and the generation, transportation and storage of waste. We could discover that we, an acquired business or our suppliers are not in material compliance with these regulations. For example, our products must be compliant with an EU regulation, Delegated Directive (EU) 2015/863, or RoHS3, which expands the list of prohibited substances from six to ten by adding four new types of phthalates. If our only products are not compliant by the deadlines as determined by RoHS3, we may be unable to ship our products into the EU market and our results of operations may suffer. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business.

If we experience a significant disruption in our information technology systems or breaches of data security, our business could be adversely affected.

We rely on information technology systems to keep financial records, manage our manufacturing operations, fulfill customer orders, capture laboratory data, maintain corporate records, communicate with staff and external parties and operate other critical functions. Our information technology systems, and those of our vendors, are potentially vulnerable to disruption due to breakdown, malicious intrusion and computer viruses or other disruptive events including but not limited to natural disaster. In particular, the COVID-19 pandemic has caused us to modify our business practices, including the requirement that our office-based employees in the U.S. and in most of our other key markets work from home. As a result, we are increasingly dependent upon our technology systems to operate our business and our ability to effectively manage our business depends on the security, reliability and adequacy of our technology systems and data, which includes use of cloud technologies, including Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). If we were to experience a prolonged system disruption in our information technology systems or those of certain of our vendors, it could negatively impact our ability to serve our customers, which could adversely impact our business. Although we maintain offsite back-ups of our data, if operations at our facilities were disrupted, it may cause a material disruption in our business if we are not capable of restoring function on an acceptable timeframe. In addition, our information technology systems, and those of our vendors, are potentially vulnerable to data security breaches — whether by employees or others — which may expose sensitive data to unauthorized persons. Such data security breaches, whether resulting from hacking, social engineering, phishing, or other causes could lead to the loss of confidential information, trade secrets or other intellectual property, or could lead to unauthorized access to or acquisition of, or the public exposure of, personal information (including sensitive personal information) of our employees, customers and others, any of which could have a material adverse effect on our business, reputation, financial condition and results of operations. In addition, any such access, disclosure or other loss of information could result in legal claims, investigations or proceedings by governmental entities or private parties, adverse publicity and harm to our reputation, loss of business, and liability under laws or regulations, including state data protection regulations and the E.U. General Data Protection Regulation, or GDPR, and other regulations, the breach of which could result in significant penalties. In addition, these breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. We expect to continue to expend significant resources to protect against security breaches, and could be required to expend significant amounts to remediate and otherwise respond to security breaches, including in connection with making notifications to customers or other persons or implementing additional security measures. With the increase in personnel working remotely during the COVID-19 pandemic, we and our vendors are at increased risk for security breaches. We are taking steps in an effort to monitor and enhance the security of our technology systems and data; however, the unprecedented scale of remote work may require additional personnel and resources, which nevertheless cannot be guaranteed to fully safeguard our technology systems or data.

Although we maintain insurance that may cover certain liabilities in connection with a security breach or other security incident, we cannot be certain our insurance coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on commercially reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, results of operations and reputation.

We intend to seek strategic collaborations and partnerships and other transactions, which may result in the use of a significant amount of our management resources or significant costs, and we may not be able to fully realize the potential benefit of such transactions.

We intend to seek strategic collaborations, partnerships and other transactions to support the continued growth of our company. However, there is no assurance that we will be successful in doing so. Accordingly, we may be engaged in evaluating potential transactions including, without limitation, strategic partnerships, divestitures of existing businesses or assets, a merger or consolidation with a third party that results in a change in control, a sale or transfer of all or a significant portion of our assets or a purchase by a third party of our securities that may result in a minority or control investment by such third party. From time to time, we may engage in discussions that may result in one or more transactions. Although there would be uncertainty that any of these discussions would result in definitive agreements or the completion of any transaction, we may devote a significant amount of our management resources to such a transaction, which could negatively impact our operations. In addition, we may incur significant costs in connection with seeking strategic transactions regardless of whether the transaction is completed. In the event that we consummate a strategic collaboration, partnership or other transaction in the future, we cannot assure you that we would fully realize the potential benefit of such a transaction or that the market would not have an adverse reaction to any such transaction. The failure to fully realize the potential benefit of such a transaction, adverse market reaction to any such transaction and any other issues we may encounter in connection with the consummation of any such transaction could adversely affect our future financial results or negatively impact the value of stockholders' investment in us.

For example, in December 2019, we entered into a LAPA, with Veracyte, pursuant to which we granted to Veracyte an exclusive worldwide license to our nCounter FLEX Analysis System, or the FLEX System, for *in vitro* diagnostic use and for the development and commercialization of *in vitro* diagnostic tests, including *in vitro* diagnostic devices, or IVDs, or laboratory developed tests, or LDTs, for use on the FLEX System and sold to Veracyte certain assets, including our rights with respect to the Prosigna Breast Cancer Prognostic Gene Signature Assay, the LymphMark Lymphoma Subtyping Test and the assay software modules that operate together with the FLEX System. For additional information regarding our transaction with Veracyte please see Part I, Item 1. “Business - License Agreement - Veracyte, Inc.” of our Annual Report on Form 10-K for the year ended December 31, 2019. We cannot be certain that we will realize the anticipated benefits from our transaction with Veracyte and the disposition of certain of our assets pursuant to the LAPA may have a detrimental impact on our business on a go-forward basis. Furthermore, transactions such as our agreement with Veracyte can be disruptive to our retained operations, divert management’s attention from day-to-day operations and potentially increase employee attrition.

Our strategy to seek to enter into strategic collaborations, licensing arrangements and other transactions with third parties to develop products may not be successful.

We have relied, and expect to continue to rely, on strategic collaborations and licensing agreements with third parties for discoveries based on products which we develop. For example, in connection with our collaboration with Merck & Co., Inc., or Merck, to develop a companion diagnostic test and the subsequent termination of the collaboration agreement, Merck granted to us a non-exclusive license to certain intellectual property that relates to Merck’s tumor inflammation signature. We intend to enter into more such arrangements with our research customers and other researchers, including biopharmaceutical companies and research institutions, for development of future products. However, there is no assurance that we will be successful in doing so. Establishing collaborations and licensing arrangements is difficult and time-consuming. Discussions may not lead to collaborations or licenses on favorable terms, if at all. To the extent we agree to work exclusively with a party in a given area, our opportunities to collaborate with others could be limited. Certain parties may seek to partner with companies in addition to us in connection with a project. This, in turn, may limit the commercial potential of any products that are the subject of such collaborations. Potential collaborators or licensors may elect not to work with us based upon their assessment of our financial, regulatory, commercial or intellectual property position. In particular, our customers are not obligated to collaborate with us or license technology to us, and they may choose to develop products themselves or collaborate with our competitors.

New product development involves a lengthy and complex process, and we may be unable to commercialize on a timely basis, or at all, any of the products we develop individually or with our collaborators.

Few research and development projects result in successful commercial products. At any point, we may abandon development of a product candidate, which would adversely impact potential revenue and our expenses. In addition, any delay in product development would provide others with additional time to commercialize competing products before we do, which in turn may adversely affect our growth prospects and operating results. In addition, the success of the development programs for any product candidates or assays developed in collaboration with others will be dependent on the continued pursuit and success of the related drug trials by our collaborators.

In August 2017, we entered into a collaboration agreement with Lam Research Corporation, or Lam, with respect to the development and commercialization of our Hyb & Seq platform and related assays. Pursuant to the terms of the collaboration agreement, Lam contributed $50.0 million for allowable development costs; however, completing development of our Hyb & Seq platform will require funding beyond Lam’s contribution. We are pursuing potential commercial applications and partnerships that can support our emerging commercial strategy for Hyb & Seq, but it is uncertain whether these efforts will be successful. Ultimately the development may not be successful, which could negatively impact our prospects for future revenue growth. Although we expect such collaborations to provide funding to cover our costs of development, the failure, discontinuation or modification of these development efforts could negatively impact our ability to attract new collaboration partners, and would reduce our prospects for introducing new products, revenue growth, and future operating results.

The life sciences research market is highly competitive. If we fail to compete effectively, our business and operating results will suffer.

We face significant competition in the life sciences research market. We currently compete with both established and early stage life sciences research companies that design, manufacture and market instruments and consumables for gene expression analysis, single-cell analysis, polymerase chain reaction, or PCR, digital PCR, other nucleic acid detection and additional applications. These companies use well-established laboratory techniques such as microarrays or quantitative PCR as well as newer technologies such as next generation sequencing such as RNA-sequencing. We believe our principal competitors in the life sciences research and diagnostic markets are Agilent Technologies, Akoya Biosciences, Becton-Dickinson, Bio-Rad, Bio-Techne, Fluidigm, HTG Molecular Diagnostics, Illumina, Luminex, Merck Millipore, O-Link, Perkin Elmer, Qiagen,

Roche Applied Science, Thermo Fisher Scientific and 10x Genomics. In addition, there are a number of new market entrants in the process of developing novel technologies for the life sciences market, including those that may compete with GeoMx DSP.

Many of our current competitors are large publicly-traded companies, or are divisions of large publicly-traded companies, and may enjoy a number of competitive advantages over us, including:

- greater name and brand recognition, financial and human resources;
- broader product lines;
- larger sales forces and more established distributor networks;
- substantial intellectual property portfolios;
- larger and more established customer bases and relationships; and
- better established, larger scale, and lower cost manufacturing capabilities.

We believe that the principal competitive factors in all of our target markets include:

- cost of capital equipment;
- cost of consumables and supplies;
- reputation among customers;
- innovation in product offerings;
- flexibility and ease-of-use;
- accuracy and reproducibility of results; and
- compatibility with existing laboratory processes, tools and methods.

We cannot assure investors that our products will compete favorably or that we will be successful in the face of increasing competition from new products and technologies introduced by our existing competitors or new companies entering our markets. In addition, we cannot assure investors that our competitors do not have or will not develop products or technologies that currently or in the future will enable them to produce competitive products with greater capabilities or at lower costs than ours. For example, certain of our customers have shifted certain types of experiments that previously had been performed on our nCounter system to RNA-sequencing technology. Although we are pursuing several strategies to mitigate this trend, there can be no assurance we will be successful in doing so. Any failure to compete effectively could materially and adversely affect our business, financial condition and operating results.

Risks Related to Government Regulation

Our "Research Use Only" products for the research, life sciences market could become subject to more stringent regulatory surveillance as medical devices by the FDA or other regulatory agencies in the future which could increase our costs and delay our commercialization efforts, thereby materially and adversely affecting our business and results of operations.

In the United States, most of our products are currently labeled and sold for Research Use Only, or RUO, and not for the diagnosis or treatment of disease, and are sold to pharmaceutical and biotechnology companies, academic and government institutions and research laboratories. Because such products are not intended for diagnostic use, and the products do not include clinical or diagnostic claims or provide directions for use as diagnostic products, they are not subject to regulation by the Food and Drug Administration, or FDA, as medical devices. In particular, while the FDA regulations require that RUO products be appropriately labeled, "For Research Use Only. Not for Use in Diagnostic Procedures," the regulations do not subject such products to the FDA's pre- and post-market controls for medical devices. Pursuant to the FDA guidance on RUO products, a company may not make clinical or diagnostic claims about an RUO product or provide clinical directions or clinical support services to customers for RUO products, or engage in distribution or sales practices that are not consistent with the RUO labeling. If the FDA were to modify its approach to regulating products labeled for Research Use Only, compliance with these additional regulations could reduce our revenue or increase our costs and adversely affect our business, prospects, results of operations or financial condition. If the FDA determines that our sales or distribution practices are not consistent with the RUO labeling, the FDA may take an adverse administrative or enforcement action against us, which could materially harm our business. In the event that the FDA requires marketing authorization of our RUO products in the future, there can be no assurance that the FDA will ultimately grant any clearance or approval requested by us in a timely manner, or at all.

In addition, we sell dual-use instruments with software that has both FDA-cleared functions, and research functions for which the FDA approval or clearance is not required. Dual-use instruments are subject to the FDA regulation since they are intended, at least in part, for use by customers performing clinical diagnostic testing. In November 2014, the FDA issued a guidance document that described the FDA's approach to regulating molecular diagnostic instruments that combine both approved/cleared device functions and research functions for which approval/clearance is not required. There is a risk that the requirements for dual-use instruments could change causing additional costs and delays for development of these products. For

example, there could be enforcement action if the FDA determines that approval or clearance was required for those functions for which the FDA approval or clearance has not been obtained, or the instruments are being promoted for off-label use. There is also a risk that the FDA could broaden its current regulatory enforcement of dual-use instruments through additional FDA oversight of such products or impose additional requirements upon such products. In July 2017, the FDA adopted a new regulation exempting certain clinical multiplex test systems, like the ones used with the Prosigna assay that we supply to Veracyte, from premarket notification requirements. However, these regulations will not impact the FDA clearance requirements for our nCounter Dx Analysis System which will still require 510(k) clearance for use with specific assays, such as Prosigna.

Our nCounter reagents may be used by clinical laboratories to create Laboratory-Developed Tests (LDTs), which could, in the future, be the subject of additional FDA regulation as medical devices, which could materially and adversely affect our business and results of operations.

Our nCounter reagents allow users to design and validate their own customized assays using standard sets of barcodes provided by us with the laboratories' choice of oligonucleotide probes. These reagents may be used by laboratories in conjunction with analyte-specific reagents and general purpose reagents to create diagnostic tests or test systems validated within the accredited testing laboratory.

A clinical laboratory can use our custom-manufactured reagents to create what is called a Laboratory Developed Test, or LDT. LDTs, according to the FDA, are *in vitro* diagnostic tests that are developed, validated and performed by a single laboratory and include genetic tests. Historically, the FDA has generally exercised "enforcement discretion" for most LDTs, meaning that the FDA has not required LDTs to comply with medical device requirements. However, the FDA has sought to regulate certain types of LDTs, such as pharmacogenetic tests and cancer screening tests, and had taken enforcement action against companies marketing such tests without premarket authorization. In October 2014, the FDA issued two draft guidance documents proposing a comprehensive risk-based regulatory framework for all LDTs. Although the FDA announced in 2016 these draft guidance documents would not be finalized, the FDA could in the future seek to regulate LDTs more broadly and could take enforcement action against new LDTs, the FDA could alter its position or question a particular LDT that a laboratory is providing. Congress could also enact legislation restricting LDTs. Any restrictions on LDTs by the FDA could decrease demand for our reagents. Additionally, compliance with additional regulatory burdens could be time consuming and costly for our customers. The adoption of new restrictions on RUOs, whether by the FDA or Congress, could adversely affect demand for our specialized reagents and instruments. Further, we could be required to obtain premarket clearance or approval before we can continue to sell our products to certain customers.

We are subject to ongoing and extensive regulatory requirements, and our failure to comply with these requirements could substantially harm our business.

Certain of our products are regulated as *in vitro* diagnostic medical devices, including the nCounter FLEX Analysis System. Accordingly, we and certain of our contract manufacturers are subject to ongoing International Organization for Standardization, or ISO, obligations as well as regulation by the FDA, state regulatory authorities, and other comparable national and local health authorities. These may include routine inspections of our manufacturing facilities and our records by Notified Bodies, the FDA, and other health authorities, to assess compliance with requirements such as ISO 13485 and the FDA's Quality System Regulations, or QSR, 21 C.F.R. Part 820, which include extensive requirements for quality assurance and control as well as manufacturing and change control procedures, among other things. We are also subject to other FDA regulations, such as requirements pertaining to the registration of our manufacturing facilities and the listing of our devices with the FDA; continued medical device reporting, for example, reporting of adverse events and malfunctions; reporting certain corrections and removals; and labeling and promotional requirements. Other agencies may also issue guidelines and regulations that could impact the development of our products. The final form of the European Medical Device Regulation (MDR), which will replace Europe's Medical Device Directive (MDD), becomes effective on May 26, 2021. On May 25, 2017, the European Union adopted the IVD Directive Regulation, which increases the regulatory requirements applicable to *in vitro* diagnostics in the EU and would require that we re-classify and obtain approval, registration, or clearance for our existing CE-marked IVD products, including our nCounter FLEX system, within a five-year grace period (by May 26, 2022).

We may also be subject to additional FDA or global regulatory authority post-marketing obligations or requirements by the FDA or other regulatory authorities to change our current product classifications which would impose additional regulatory obligations on us. If we are not able to maintain regulatory compliance, we may not be permitted to market our medical device products and/or may be subject to enforcement by EU Competent Authorities and the FDA and other global regulatory authority such as the issuance of warning or untitled letters, fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions; and criminal prosecution. In addition, we may be subject to similar regulatory regimes of other foreign jurisdictions as we continue to commercialize our products in new markets outside of the United States and Europe. Adverse Notified Body, EU Competent Authority, the FDA or other regulatory authority action in any of these areas could significantly increase our expenses and limit our revenue and profitability and cause reputational harm.

We are also required to comply with an increasing number of environmental compliance regulations, including those focused upon the restriction of certain hazardous substances in our products. For example, we are subject to the EU's Restrictions on Hazardous Substances (RoHS) directive, which restricts the use of certain substances in electrical and electronic products. Similar legislation has been or may be enacted in other jurisdictions, including the United States. We have compliance programs designed to meet the requirements of environmental compliance regulations, but our failure to comply with such current or future regulations could result in the imposition of substantial fines, suspension of production, alteration of our manufacturing processes or cessation of operations that could have a material adverse effect on our business, results of operations and financial condition.

We may be subject, directly or indirectly, to healthcare fraud and abuse laws and other laws applicable to our marketing practices. If we are unable to comply, or have not complied, with such laws, we could face substantial penalties.

Our operations are directly, or indirectly through our customers, subject to various fraud and abuse laws, including, without limitation, the federal and state anti-kickback statutes and state, and federal and foreign marketing compliance laws. These laws may impact, among other things, our proposed sales and marketing and education programs and require us to implement additional internal systems for tracking certain marketing expenditures and reporting them to government authorities. In addition, we may be subject to laws and regulations relating to privacy and data protection by both the federal government and the states in which we conduct our business as well as by foreign governments and entities. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-kickback Statute and state equivalents;
- the federal physician self-referral prohibition, commonly known as the Stark Law, and state equivalents;
- the federal Health Insurance Portability and Accountability Act of 1996, as amended, commonly known as HIPAA;
- the Medicare civil money penalty laws and exclusion requirements;
- the federal False Claims Act and state equivalents;
- the Physician Payments Sunshine Act;
- state, federal and foreign marketing expenditure disclosure laws;
- state privacy laws, such as the California Consumer Privacy Act;
- the Foreign Corrupt Practices Act, which applies to our international activities; and
- the European Union's General Data Protection Regulation.

Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the U.S. We have undertaken certain efforts to conform transfers of personal data from the European Economic Area, or EEA, to the U.S. and other jurisdictions based on our understanding of current regulatory obligations and the guidance of data protection authorities, including standard contractual clauses approved by the European Commission, or the SCCs, and the EU-U.S. and Swiss-U.S. Privacy Shield programs administered by the U.S. Department of Commerce. Despite this, we may be unsuccessful in maintaining conforming means of transferring personal data from the EEA, in particular as a result of continued legal and legislative activity within the EEA. Both the U.S.-E.U. Privacy Shield and the SCCs have been subject to legal challenge and on July 16, 2020, the Court of Justice of the European Union issued a decision invalidating the EU-U.S. Privacy Shield and imposing additional requirements in connection with the use of the SCCs. We are assessing this decision and its impact on our data transfer mechanisms. We may, in addition to other impacts, experience additional costs associated with increased compliance burdens, and we and our customers face the potential for regulators in the EEA to apply different standards to the transfer of personal data from the EEA to the U.S., and to block, or require ad hoc verification of measures taken with respect to, certain data flows from the EEA to the U.S. We also may be required to engage in new contract negotiations with third parties that aid in processing data on our behalf. We may find it necessary or desirable to make further changes to our handling of personal data of EEA residents. The regulatory environment applicable to the handling of EEA residents' personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face a risk of enforcement actions by data protection authorities in the EEA relating to personal data transfers to us and by us from the EEA. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results and financial condition.

More generally, the laws, rules and regulations relating to privacy or data protection to which we may be subject, or that otherwise apply to our business, are constantly evolving, and we expect that there will continue to be new proposed laws, regulations and industry standards concerning these matters in the United States, the EU and other jurisdictions. If our operations are found to be in violation of any of the laws or regulations described above or others that apply to us, or to which we become subject in the future, we may be subject to claims, complaints, investigations, enforcement actions, and penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations, any of which could

adversely affect our ability to operate our business and our results of operations.

Healthcare policy changes, including legislation reforming the United States healthcare system, may have a material adverse effect on our financial condition and results of operations.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the ACA, enacted in March 2010, made changes that significantly impact the pharmaceutical and medical device industries and clinical laboratories. For example, beginning in 2013, each medical device manufacturer must pay a sales tax in an amount equal to 2.3% of the price for which such manufacturer sells its medical devices. In December 2015, Congress passed a two-year suspension of the medical device tax from January 1, 2016 to December 31, 2017. The tax applies to our listed medical device products, which include the nCounter Dx Analysis System. In December 2019, this excise tax was permanently repealed for medical device sales, effective after December 31, 2019. The Budget Control Act of 2011 contained automatic spending cuts to the federal budget known as sequestration. As a result of sequestration, Medicare payments are reduced by 2% per year. These or any future proposed or mandated reductions in payments may indirectly reduce demand for our products.

Other significant measures contained in the ACA include coordination and promotion of research on comparative clinical effectiveness of different technologies and procedures, initiatives to revise Medicare payment methodologies, such as bundling of payments across the continuum of care by providers and physicians, and initiatives to promote quality indicators in payment methodologies. The ACA also included significant new fraud and abuse measures, including required disclosures of financial arrangements with physician customers, lower thresholds for violations and increased potential penalties for such violations.

On December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case to the District Court to determine whether the remaining provisions of the ACA are invalid. We cannot predict whether future healthcare initiatives, including efforts to repeal and replace the ACA in whole or in part, will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the effect any future legislation, regulation, court decisions, subsequent appeals, and other efforts will have on us. Changes in the United States healthcare industry may result in decreased profits to us, which may adversely affect our business, financial condition and results of operations.

Risks Related to Intellectual Property

If we are unable to protect our intellectual property effectively, our business would be harmed.

We rely on patent protection as well as trademark, copyright, trade secret and other intellectual property rights protection and contractual restrictions to protect our proprietary technologies, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. As of June 30, 2020, we owned or licensed 36 issued U.S. patents and approximately 22 pending U.S. patent applications, including provisional and non-provisional filings. We also owned or licensed approximately 247 pending and granted counterpart applications worldwide, including 112 country-specific validations of 17 European patents. We continue to file new patent applications to protect the full range of our technologies. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us and we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property.

Our success depends in part on obtaining patent protection for our products and processes, preserving trade secrets, patents, copyrights and trademarks, operating without infringing the proprietary rights of third parties, and acquiring licenses for technology or products. We cannot assure investors that any of our currently pending or future patent applications will result in issued patents, and we cannot predict how long it will take for such patents to be issued. As the patent and prior art landscape for translational research products grows more crowded and becomes more complex we may find it more difficult to obtain patent protection for our products including those related to digital spatial profiling and sequencing, for example. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products and may therefore fail to provide us with any competitive advantage. Additionally, we cannot assure investors that our currently pending or future patent applications have or will be filed in all of our potential markets. Further, we cannot assure investors that other parties will not challenge any patents issued to us or that courts or regulatory agencies will hold our patents to be valid or enforceable. We cannot guarantee investors that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge to our patents could result in the third party or the unenforceability or invalidity of such patents and could deprive us of the ability to prevent others from using the technologies claimed in such issued patents.

The patent positions of life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies' patents has emerged to date in the United States. Furthermore, in the biotechnology field, courts frequently render opinions that may affect the patentability of certain inventions or discoveries, including opinions that may affect the patentability of methods for analyzing or comparing biological macromolecules including nucleic acids, such as DNA and RNA, and proteins.

In particular, the patent positions of companies engaged in development and commercialization of genomic diagnostic tests, like Prosigna, are particularly uncertain. Various courts, including the U.S. Supreme Court, have rendered decisions that impact the scope of patentability of certain inventions or discoveries relating to genomic diagnostics. Specifically, these decisions stand for the proposition that patent claims that recite laws of nature (for example, the relationships between gene expression levels and the likelihood of risk of recurrence of cancer) are not themselves patentable unless those patent claims have sufficient additional features that provide practical assurance that the processes are genuine inventive applications of those laws rather than patent drafting efforts designed to monopolize the law of nature itself. What constitutes a "sufficient" additional feature is uncertain. Furthermore, in view of these decisions, in December 2014 the U.S. Patent and Trademark Office, or USPTO, published revised guidelines for patent examiners to apply when examining process claims for patent eligibility. This guidance was updated by the USPTO in July 2015 and additional illustrative examples provided in May 2016. The USPTO provided additional guidance on examination procedures pertaining to subject matter eligibility in April 2018 and June 2018. The guidance indicates that claims directed to a law of nature, a natural phenomenon, or an abstract idea that do not meet the eligibility requirements should be rejected as non-statutory, patent ineligible subject matter; however, method of treatment claims that practically apply natural relationships should be considered patent eligible. We cannot assure you that our patent portfolio will not be negatively impacted by the current uncertain state of the law, new court rulings or changes in guidance or procedures issued by the USPTO. From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability and validity of patents within the genomic diagnostic space, and any such changes could have a negative impact on our business.

The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- We might not have been the first to make the inventions covered by each of our pending patent applications.
- We might not have been the first to file patent applications for these inventions.
- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies.
- It is possible that our pending patent applications will not result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties.
- We may not develop additional proprietary products and technologies that are patentable.
- The patents of others may have an adverse effect on our business.
- We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, we may fail to apply for patents on important products and technologies in a timely fashion or at all.

In addition to pursuing patents on our technology, we take steps to protect our intellectual property and proprietary technology by entering into confidentiality agreements and intellectual property assignment agreements with our employees, consultants, corporate partners and, when needed, our advisors. Similarly, where permitted by applicable law, we enter into non-compete agreements with certain of our employees. Such agreements may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure or other breaches of the agreements, and we may not be able to prevent such unauthorized disclosure. Monitoring unauthorized disclosure is difficult, and we do not know whether the steps we have taken to prevent such disclosure are, or will be, adequate. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, it would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets.

In addition, competitors could purchase our products and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. In addition, competitors may develop their own versions of our technology in countries where we did not apply for patents, where our patents have not issued or where our intellectual property rights are not recognized and compete with us in those countries and markets. If our intellectual property is not adequately protected so as to protect our market against competitors' products and methods, our competitive position could be adversely affected, as could our business.

We have not yet registered certain of our trademarks in all of our potential markets. If we apply to register these trademarks, our applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, opposition or cancellation proceedings may be filed against our trademark applications and registrations, and our trademarks may not survive such proceedings. If we do not secure registrations for our trademarks, we may encounter more difficulty in enforcing them against third parties than we otherwise would.

To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we would be exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors' products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive.

We depend on certain technologies that are licensed to us. We do not control these technologies and any loss of our rights to them could prevent us from selling our products.

We rely on licenses in order to be able to use various proprietary technologies including our core digital molecular barcoding technology licensed from the Institute for Systems Biology, technology relating to Prosigna licensed from Veracyte, intellectual property relating to a gene signature for lymphoma subtyping from the National Institutes of Health and intellectual property relating to the tumor inflammation signature from Merck. We do not own the patents that underlie these licenses. Our rights to use these technologies and employ the inventions claimed in the licensed patents are subject to the continuation of and compliance with the terms of those licenses.

We may need to license other technologies to commercialize future products. We may also need to negotiate licenses to patents and patent applications after launching any of our commercial products. Our business may suffer if the patents or patent applications are unavailable for license or if we are unable to enter into necessary licenses on acceptable terms.

In some cases, we do not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company, or are licensed from a third party. Thus, these patents and patent applications are not written by us or our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions. Therefore, our business may suffer if these licenses terminate, if the licensors fail to abide by the terms of the license or fail to prevent infringement by third parties or if the licensed patents or other rights are found to be invalid. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license or termination of the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

In addition, certain of the patents we have licensed relate to technology that was developed with U.S. government grants. Federal regulations impose certain domestic manufacturing requirements with respect to some of our products embodying these patents.

Involvement in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others' proprietary rights, or to defend against third-party claims of intellectual property infringement, could be time-intensive and costly and may adversely impact our business or stock price.

We have received notices of claims of infringement and misappropriation or misuse of other parties' proprietary rights in the past and may from time to time receive additional notices. Some of these claims have led and may lead to litigation. We cannot assure investors that we will prevail in such actions, or that other actions alleging misappropriation or misuse by us of third-party trade secrets, infringement by us of third-party patents and trademarks or other rights, or the validity of our patents, trademarks or other rights, will not be asserted or prosecuted against us.

Litigation may also be necessary for us to protect or enforce our patent and proprietary rights, defend against third-party claims or to determine the scope, coverage and validity of the proprietary rights of others. Litigation could result in substantial legal fees and could adversely affect the scope of our patent protection and reduce our ability to compete in the marketplace. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us. If we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results or financial condition.

Numerous significant intellectual property issues have been litigated, and will likely continue to be litigated, between existing and new participants in our existing and targeted markets. Our success depends in part on our non-infringement of the patents or proprietary rights of third parties. We develop complex products that integrate a wide range of technologies which may impact our ability to do so clear of third-party rights and therefore may need to license other technologies or challenge the scope, coverage and validity of the proprietary rights of others to commercialize future products. As we develop new technologies such as those related to digital spatial profiling and sequencing, for example, and move into new markets and applications for our products, we expect incumbent participants in such markets may assert their patents and other proprietary rights against us as part of a business strategy to slow our entry into such markets, impede our successful competition and/or extract substantial license and royalty payments from us. In addition, we may be unaware of pending third-party patent applications that relate to our technology and our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. Our competitors and others may now, and in the future, have significantly larger and more mature patent portfolios than we currently have. In addition, future litigation may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence or protection. Therefore, our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. We are aware of a third party, Genomic Health, Inc., that has issued patents and pending patent applications in the United States, Europe and other jurisdictions that claim methods of using certain genes that are included in Prosigna, which we manufacture for Veracyte. We believe that our manufacture of Prosigna does not infringe any valid issued claim. We could incur substantial costs and divert the attention of our management and technical personnel in defending against any of these claims. Any adverse ruling or perception of an adverse ruling in defending ourselves against these claims could have an adverse impact on our stock price, which may be disproportionate to the actual impact of the ruling itself. Parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may not be able to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our ability to grow and gain market acceptance for our products.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

In addition, our agreements with some of our suppliers, distributors, customers, collaborators and other entities with whom we do business require us to defend or indemnify these parties to the extent they become involved in infringement claims against us, including the claims described above. We could also voluntarily agree to defend or indemnify third parties in instances where we are not obligated to do so if we determine it would be important to our business relationships. If we are required or agree to defend or indemnify any of these third parties in connection with any infringement claims, we could incur significant costs and expenses that could adversely affect our business, operating results, or financial condition.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our employees' former employers.

Many of our employees were previously employed at universities or other life sciences companies, including our competitors or potential competitors. Although no claims against us are currently pending, we or our employees may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. A loss of key research personnel work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Our products contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products.

Our products contain software tools licensed by third-party authors under "open source" licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products with less development effort and time and ultimately could result in a loss of product sales.

Although we monitor our use of open source software to avoid subjecting our products to conditions, we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure investors that our processes for controlling our use of open source software in our products will be effective. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if re-engineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, operating results, and financial condition.

We use third-party software that may be difficult to replace or cause errors or failures of our products that could lead to lost customers or harm to our reputation.

We use software licensed from third parties in our products. In the future, this software may not be available to us on commercially reasonable terms, or at all. Any loss of the right to use any of this software could result in delays in the production of our products until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated, which could harm our business. In addition, any errors or defects in third-party software, or other third-party software failures could result in errors, defects or cause our products to fail, which could harm our business and be costly to correct. Many of these providers attempt to impose limitations on their liability for such errors, defects or failures, and if enforceable, we may have additional liability to our customers or third-party providers that could harm our reputation and increase our operating costs.

We will need to maintain our relationships with third-party software providers and to obtain software from such providers that does not contain any errors or defects. Any failure to do so could adversely impact our ability to deliver reliable products to our customers and could harm our results of operations.

Risks Related to Our Common Stock

The price of our common stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock has fluctuated and may continue to fluctuate substantially. The trading price of our common stock depends on a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. These fluctuations could cause stockholders to lose all or part of their investment in our common stock. Factors that could cause fluctuations in the trading price of our common stock include the following:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements by us or our competitors of new products, significant contracts or commercial relationships;

- adverse regulatory announcements;
- issuance of new or changed securities analysts' reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- volatility and uncertainty in U.S. and international markets resulting from the spread of COVID-19 and related containment and mitigation measures;
- market conditions in the research market;
- manufacturing disruptions;
- any future sales of our common stock or other securities;
- any change to the composition of the board of directors or key personnel;
- announcements by us or our competitors of significant acquisitions or divestitures, strategic partnerships, joint ventures or capital commitments;
- general economic conditions and slow or negative growth of our markets; and
- the other factors described in this "Risk Factors" section.

The stock market in general, and market prices for the securities of life sciences companies like ours in particular, have from time to time experienced volatility that often has been unrelated to the operating performance of the underlying companies. These broad market and industry fluctuations may adversely affect the market price of our common stock, regardless of our operating performance. In several recent situations where the market price of a stock has been volatile, holders of that stock have instituted securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit against us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management and harm our operating results and negatively impact the trading price of our common stock.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Future sales of our common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares of our common stock or the perception that these sales could occur, including by our officers, directors and their respective affiliates. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

We register the offer and sale of all shares of common stock that we may issue under our equity compensation plans. In addition, in the future, we may issue additional shares of common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangements or otherwise. For example, in March 2019, we sold an aggregate of 3,175,000 shares of common stock in an underwritten public offering for net proceeds of $68.3 million and in March 2020 we sold $230 million aggregate principal amount of 2.625% Convertible Senior Notes due 2025 in a private placement to qualified institutional buyers for net proceeds of approximately $222.6 million. Any such future issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

We have broad discretion over the use of the proceeds to us from our 2019 underwritten public offering and 2020 convertible notes offering and may apply the proceeds to uses that do not improve our operating results or the value of your securities.

We have broad discretion over the use of proceeds to us from our 2019 underwritten public offering and 2020 convertible notes offering and investors will be relying solely on the judgment of our board of directors and management regarding the application of these proceeds. Our use of the proceeds may not improve our operating results or increase the value of the securities offered pursuant to the foregoing fundraising transactions.

Servicing our convertible notes may require a significant amount of cash, and we may not have sufficient cash flow or the ability to raise the funds necessary to satisfy our obligations under the notes, and our current and future indebtedness may limit our operating flexibility or otherwise affect our business.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance any current or future indebtedness, including the 2.625% Convertible Senior Notes due 2025, or the notes, or to make cash payments in connection with any conversion of notes or upon any fundamental change if note holders require us to repurchase their notes for cash, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our indebtedness and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring indebtedness or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations. In addition, our existing and future indebtedness could have important consequences to our stockholders and significant effects on our business. For example, it could:

- make it more difficult for us to satisfy our debt obligations, including the notes;
- increase our vulnerability to general adverse economic and industry conditions;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital and other general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- restrict us from exploiting business opportunities;
- place us at a competitive disadvantage compared to our competitors that have less indebtedness; and
- limit our availability to borrow additional funds for working capital, capital expenditures, acquisitions, debt service requirements, execution of our business strategy or other general purposes.

Transactions relating to our notes may dilute the ownership interest of existing stockholders, or may otherwise depress the price of our common stock.

If the notes are converted by holders, we have the ability under the indenture for the notes to deliver cash, common stock, or any combination of cash or common stock, at our election upon conversion of the notes. If we elect to deliver common stock upon conversion of the notes, it would dilute the ownership interests of existing stockholders. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, certain holders of the notes may engage in short selling to hedge their position in the notes. Anticipated future conversions of such notes into shares of our common stock could depress the price of our common stock.

Anti-takeover provisions in our charter documents and under Delaware or Washington law could make an acquisition of us difficult, limit attempts by our stockholders to replace or remove our current management and limit our stock price.

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our stock. Among other things, the certificate of incorporation and bylaws:

- permit the board of directors to issue up to 15,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate;
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that all vacancies, including newly-created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide the board of directors into three classes;
- provide that a director may only be removed from the board of directors by the stockholders for cause;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and may not be taken by written consent;

- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and meet specific requirements as to the form and content of a stockholder's notice;
- prevent cumulative voting rights (therefore allowing the holders of a plurality of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer or by the board of directors; and
- provide that stockholders are permitted to amend the bylaws only upon receiving at least two-thirds of the total votes entitled to be cast by holders of all outstanding shares then entitled to vote generally in the election of directors, voting together as a single class.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any "interested" stockholder for a period of three years following the date on which the stockholder became an "interested" stockholder. Likewise, because our principal executive offices are located in Washington, the anti-takeover provisions of the Washington Business Corporation Act may apply to us under certain circumstances now or in the future. These provisions prohibit a "target corporation" from engaging in any of a broad range of business combinations with any stockholder constituting an "acquiring person" for a period of five years following the date on which the stockholder became an "acquiring person."

Complying with the laws and regulations affecting public companies increases our costs and the demands on management and could harm our operating results.

As a public company, we incur and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company. We ceased to be an "emerging growth company" on December 31, 2018 and are no longer eligible for reduced disclosure requirements and exemptions applicable to "emerging growth companies." We expect that our loss of "emerging growth company" status will require additional attention from management and will result in increased costs to us, which could include higher legal fees, accounting fees and fees associated with investor relations activities, among others. In addition, the Sarbanes-Oxley Act and rules subsequently implemented by the SEC and The Nasdaq Global Market impose numerous requirements on public companies, including requiring changes in corporate governance practices. Also, the Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results. Our management and other personnel must devote a substantial amount of time to compliance with these laws and regulations. These burdens may increase as new legislation is passed and implemented, including any new requirements that the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 may impose on public companies. These requirements have increased and will likely continue to increase our legal, accounting, and financial compliance costs and have made and will continue to make some activities more time consuming and costly. For example, as a public company it is more difficult and more expensive for us to obtain director and officer liability insurance, and in the future we may be required to accept reduced policy limits and coverage or to incur substantial costs to maintain the same or similar coverage. These rules and regulations could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or our board committees or as executive officers.

The Sarbanes-Oxley Act requires the SEC to implement new requirements on registrants, and these new requirements that were implemented require, among other things, that we assess the effectiveness of our internal control over financial reporting annually and SEC requirements also require us to assess the effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404 of the Sarbanes-Oxley Act, or Section 404, requires us to perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on, and our independent registered public accounting firm to attest to, the effectiveness of our internal control over financial reporting. As an "emerging growth company," we availed ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption since we ceased to be an "emerging growth company" on December 31, 2018. As a result, our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting and the cost of our compliance with Section 404 will correspondingly increase. Our compliance with applicable provisions of Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues as we implement additional corporate governance practices and comply with reporting requirements.

As disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 2, 2020, during the fourth quarter of 2019, management identified a material weakness related to an ineffective control environment as we did not maintain a sufficient complement of resources with an appropriate level of controls knowledge, expertise and training commensurate with our financial reporting requirements. This contributed to additional control material weaknesses, as follows, as we did not (i) design and maintain effective information technology general controls, or ITGCs, for significant applications used in the preparation of the financial statements. Specifically, we did not design and maintain: (a) user access controls to adequately restrict user and privileged access to the financial application, programs, and data to appropriate Company personnel, (b) program change management controls for certain financial systems to ensure that information technology, or IT, program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized and implemented appropriately; (ii) design and maintain effective controls to timely detect and independently review instances where individuals with access to post a journal entry may also have edited or created the journal entry; (iii) design and maintain effective controls relating to our accounting for product and services revenues, specifically to ensure occurrence, accuracy, and completeness of customer order entry, price, and quantity during the billing and revenue processes (this deficiency was impacted by the deficiencies related to the design and maintenance of our ITGCs); and (iv) maintain effective controls related to the existence of inventory. Specifically, we did not maintain effective controls related to periodic inventory counts, receiving of inventory, and recording adjustments to inventory quantities.

As a result, management concluded that our internal control over financial reporting was not effective as of December 31, 2019. We have taken steps to implement remediation efforts; however, there can be no assurance that our efforts to remediate the material weaknesses will be successful or will be completed by the end of 2020. Pursuing these remediation efforts will result in additional technology and other expenses.

If we are unable to remediate these material weaknesses, or are otherwise unable to maintain effective internal control over financial reporting or disclosure controls and procedures, our ability to record, process and report financial information accurately, and to prepare financial statements within required time periods, could be adversely affected, which could subject us to litigation or investigations requiring management resources and payment of legal and other expenses and negatively impact the price of our common stock. In addition, we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Furthermore, investor perceptions of our company may suffer as a result of the material weaknesses in our internal controls, and this could cause a decline in the market price of our stock. Irrespective of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated operating results and harm our reputation. If we are unable to remediate the material weaknesses effectively or efficiently or avoid future material weaknesses, it could harm our operations, financial reporting, or financial results and could result in an adverse opinion on our internal control over financial reporting from our independent registered public accounting firm.

Item 6. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Exhibit Number	Description
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a).
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a).
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350.
32.2*	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
101.INS	Inline XBRL Instance Document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

* The Certifications attached as Exhibits 32.1 and 32.2 that accompany this Quarterly Report on Form 10-Q are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of NanoString Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-Q, irrespective of any general incorporation language contained in such filing.

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.

NANOSTRING TECHNOLOGIES, INC.

Date: August 10, 2020

By: /s/ R. Bradley Gray

R. Bradley Gray
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 10, 2020

By: /s/ K. Thomas Bailey

K. Thomas Bailey
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 31.1

CERTIFICATIONS

I, R. Bradley Gray, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NanoString Technologies, Inc.;

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 10, 2020

/s/ R. Bradley Gray

R. Bradley Gray

President and Chief Executive Officer

(Principal Executive Officer)

Exhibit 31.2

CERTIFICATIONS

I, K. Thomas Bailey, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of NanoString Technologies, Inc.;

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 10, 2020

/s/ K. Thomas Bailey

K. Thomas Bailey

Chief Financial Officer

(Principal Financial and Accounting Officer)

Exhibit 32.1

NANOSTRING TECHNOLOGIES, INC.
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of NanoString Technologies, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, R. Bradley Gray, President and Chief Executive Officer *(Principal Executive Officer)* of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ R. Bradley Gray

R. Bradley Gray
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 10, 2020

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of NanoString Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.

Exhibit 32.2

NANOSTRING TECHNOLOGIES, INC.
CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of NanoString Technologies, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, K. Thomas Bailey, Chief Financial Officer *(Principal Financial and Accounting Officer)* of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ K. Thomas Bailey

K. Thomas Bailey
Chief Financial Officer
(Principal Financial and Accounting Officer)

Date: August 10, 2020

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of NanoString Technologies, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.