UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of
The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported)
April 26, 2017

Pacific Biosciences of California, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-34899**	**16-1590339**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

1305 O'Brien Drive
Menlo Park, California 94025
(Address of principal executive offices, including zip code)

(650) 521-8000
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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. □

ITEM 2.02. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

This current report on Form 8-K contains forward-looking statements that involve risks and uncertainties. Forward-looking statements are based on management's beliefs and assumptions and on information currently available to them. The Company's actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us and described in the Company's most recently filed Annual Report on Form 10-K, or the Company's other filings with the SEC, as the case may be. You should not place undue reliance on forward-looking statements, which apply only as of the date of this Current Report on Form 8-K. The Company assumes no obligation to update these forward-looking statements.

On April 26, 2017, Pacific Biosciences of California, Inc. (the "Company") reported its financial results for the quarter ended March 31, 2017. The Company's unaudited Condensed Consolidated Balance Sheets, Condensed Consolidated Statements of Operations and Comprehensive Income (Loss) and Condensed Consolidated Statements of Cash Flows are filed together as Exhibit 99.1 hereto and are incorporated herein by reference.

Product and service revenue for the first quarter of 2017 increased by 60% to $24.9 million, compared to $15.5 million for the first quarter of 2016. Revenue for the first quarter of 2017 was comprised of product, service and other revenue of $24.9 million, up 30% compared to $19.1 million for the first quarter of 2016. Revenue for the first quarter of 2016 included $3.6 million of contractual revenue, whereas the first quarter of 2017 included no contractual revenue.

Gross profit for the first quarter of 2017 was $8.9 million, resulting in a gross margin of 35.9%. During the first quarter of 2017, the Company recorded a $1.3 million charge to cost of revenue relating to RS II instruments primarily due to a change in the estimated useful life of such instruments. Excluding this charge, adjusted gross margin for the first quarter of 2017 would have been 41.0%. Gross profit for the first quarter of 2016 was $9.5 million, resulting in a gross margin of 49.7%. This included $3.6 million of contractual revenue at 100% gross margin. Excluding this contractual revenue, adjusted gross margin for the first quarter of 2016 would have been 38.0%. Adjusted gross margin is not meant to be considered in isolation or as a substitute for gross margin. Adjusted gross margin is subject to limitations, and should be read only in conjunction with the Company's consolidated financial statements prepared in accordance with GAAP.

Operating expenses for the first quarter of 2017 totaled $32.2 million, compared to $28.1 million for the first quarter of 2016. Operating expenses for the first quarter of 2017 and 2016 included non-cash stock-based compensation of $4.5 million and $4.1 million, respectively.

Net loss for the first quarter of 2017 was $23.9 million, compared to $19.4 million for the first quarter of 2016.

Cash, cash equivalents and investments, excluding restricted cash, at March 31, 2017 totaled $56.1 million, compared to $72.0 million at December 31, 2016.

The Company has provided disclosure regarding its Results of Operations for the Quarter Ended March 31, 2017 and updated its Legal Proceedings and Risk Factors. The revised disclosure is filed as Exhibit 99.2 hereto and incorporated herein by reference.

The information set forth in this Item 2.02, as well as Exhibit 99.1 and 99.2 referenced therein, shall be deemed "filed" for purposes of the Securities Exchange Act of 1934, as amended, and shall be incorporated by reference into the Company's filings under the Securities Act of 1933, as amended.

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS.

(d) Exhibits.

99.1	Condensed Consolidated Balance Sheets (unaudited), Condensed Consolidated Statements of Operations and Comprehensive Loss (unaudited) and Condensed Consolidated Statements of Cash Flows (unaudited).
99.2	Discussion of Results of Operations for the Quarter Ended March 31, 2017, Legal Proceedings and Risk Factors

SIGNATURE

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 hereunto duly authorized.

Pacific Biosciences of California, Inc.

By: /s/ Susan K. Barnes

Susan K. Barnes
Executive Vice President, Chief Financial Officer & Principal Accounting Officer

Date: April 26, 2017

EXHIBIT INDEX

Exhibit No.	Description
99.1	Condensed Consolidated Balance Sheets (unaudited), Condensed Consolidated Statements of Operations and Comprehensive Loss (unaudited) and Condensed Consolidated Statements of Cash Flows (unaudited)
99.2	Discussion of Results of Operations for the Quarter Ended March 31, 2017, Legal Proceedings and Risk Factors

Exhibit 99.1

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Balance Sheets
(unaudited)

(in thousands, except per share amounts)	March 31, 2017	December 31, 2016
Assets		
Current assets		
Cash and cash equivalents	$ 28,982	$ 16,765
Investments	27,068	55,213
Accounts receivable	10,441	11,421
Inventory	15,348	15,634
Prepaid expenses and other current assets	6,501	9,978
Total current assets	88,340	109,011
Property and equipment, net	42,449	14,560
Long-term restricted cash	4,500	4,500
Other long-term assets	219	9,813
Total assets	$ 135,508	$ 137,884
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 8,221	$ 8,359
Accrued expenses	17,246	16,604
Deferred service revenue, current	6,683	7,130
Other liabilities, current	167	1,681
Notes payable, current	3,123	—
Total current liabilities	35,440	33,774
Deferred service revenue, non-current	1,484	1,297
Deferred rent, non-current	14,148	19
Other liabilities, non-current	1,741	1,664
Notes payable, non-current	13,302	16,106
Financing derivative	208	356
Total liabilities	66,323	53,216
Commitments and contingencies		
Stockholders' equity		
Preferred Stock, $0.001 par value:		
Authorized 50,000 shares; No shares issued or outstanding	—	—
Common Stock, $0.001 par value:		
Authorized 1,000,000 shares; Issued and outstanding 93,540 and 92,677 shares at March 31, 2017 and December 31, 2016, respectively	94	93
Additional paid-in-capital	880,505	872,114
Accumulated other comprehensive income (loss)	(3)	5
Accumulated deficit	(811,411)	(787,544)
Total stockholders' equity	69,185	84,668
Total liabilities and stockholders' equity	$ 135,508	$ 137,884

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)

(in thousands, except per share amounts)	Three-Month Periods Ended March 31, 2017	2016
Revenue:		
Product revenue	$ 21,294	$ 12,379
Service and other revenue	3,621	3,152
Contractual revenue	—	3,596
Total revenue	24,915	19,127
Cost of revenue:		
Cost of product revenue	11,362	6,880
Cost of service and other revenue	4,616	2,743
Total cost of revenue	15,978	9,623
Gross profit	8,937	9,504
Operating expense:		
Research and development	16,971	16,361
Sales, general and administrative	15,265	11,708
Total operating expense	32,236	28,069
Operating loss	(23,299)	(18,565)
Interest expense	(838)	(779)
Other income (expense), net	270	(8)
Net loss	(23,867)	(19,352)
Other comprehensive loss:		
Unrealized gain on investments	(8)	48
Comprehensive loss	$ (23,875)	$ (19,304)
Net loss per share:		
Basic and diluted net loss per share	$ (0.26)	$ (0.23)
Shares used in computing basic and diluted net loss per share	92,970	83,604

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Statements of Cash Flows
(unaudited)

(in thousands)	Three-Month Periods Ended March 31, 2017	2016
Cash flows from operating activities		
Net loss	$ (23,867)	$ (19,352)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	2,850	848
Amortization of debt discount and financing costs	319	268
Stock-based compensation	4,985	4,581
Other items	(145)	74
Changes in assets and liabilities		
Accounts receivable	980	(2,865)
Inventory	366	(2,119)
Prepaid expenses and other assets	3,377	4,709
Accounts payable	(5,929)	(39)
Accrued expenses	562	(3,350)
Deferred service revenue	(260)	(705)
Deferred contractual revenue	—	(3,596)
Other liabilities	92	1,279
Net cash used in operating activities	(16,670)	(20,267)
Cash flows from investing activities		
Purchase of property and equipment	(2,668)	(457)
Disposal of property and equipment	—	111
Purchase of investments	(10,419)	(43,383)
Sales of investments	3,662	4,949
Maturities of investments	34,905	15,539
Net cash provided by (used in) investing activities	25,480	(23,241)
Cash flows from financing activities		
Proceeds from issuance of common stock from equity plans	3,407	3,423
Proceeds from issuance of common stock from at-the-market equity offering, net of issuance costs	—	26,536
Net cash provided by financing activities	3,407	29,959
Net decrease in cash and cash equivalents	12,217	(13,549)
Cash and cash equivalents at beginning of period	16,765	33,629
Cash and cash equivalents at end of period	$ 28,982	$ 20,080
Supplemental disclosure of non-cash investing and financing activities		
Changes in unpaid property and equipment	$ 5,791	$ 24
Changes in deposits for property and equipment paid in prior period	$ 9,694	$ —
Property and equipment paid by landlord	$ 12,600	—

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Discussions under the captions "Discussion of Results of Operations for the Quarter Ended March 31, 2017," "Legal Proceedings" and "Risk Factors," contain or may contain forward-looking statements that are based on the beliefs and assumptions of the management of Pacific Biosciences of California, Inc. (the "Company," "we," "us," or "our,") and on information currently available to our management. The statements contained in this Current Report on Form 8-K 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 (the "Exchange Act"), and include, but are not limited to, our statements regarding the sequencing advantages of SMRT® technology, future payments from our landlord in return for our agreement to amend our current leases, the transition to and attributes of the Sequel System, market opportunities, strategic plans, expectations regarding the conversion of backlog to revenue, manufacturing plans, research and development plans, product development, competition, expectations regarding unrecognized income tax benefits, expectations regarding the impact of an increase in market rates on the value of our investment portfolio, the sufficiency of cash, cash equivalents and investments to fund projected operating requirements, and the effects of recent accounting pronouncements on our financial statements. Such statements may be signified by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "seeks," "should," "target," "will," "would" or similar expressions and the negatives of those terms. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed under the heading "Risk Factors" in this report and in other documents we file with the Securities and Exchange Commission ("SEC"). Given these risks and uncertainties, you should not place undue reliance on forward-looking statements. Also, forward-looking statements represent management's beliefs and assumptions as of the date of this report. Except as required by law, we assume no obligation to update forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

DISCUSSION OF RESULTS OF OPERATIONS FOR THE QUARTER ENDED MARCH 31, 2017

Overview

We design, develop and manufacture sequencing systems to help scientists resolve genetically complex problems. Based on our novel Single Molecule, Real-Time (SMRT®) sequencing technology, our products enable: *de novo* genome assembly to finish genomes in order to more fully identify, annotate and decipher genomic structures; full-length transcript analysis to improve annotations in reference genomes, characterize alternatively spliced isoforms in important gene families, and find novel genes; targeted sequencing to more comprehensively characterize genetic variations; and real-time kinetic information for epigenome characterization. Our technology provides high accuracy, ultra-long reads, uniform coverage, and is the only DNA sequencing technology that provides the ability to simultaneously detect epigenetic changes. PacBio® sequencing systems, including consumables and software, provide a simple, fast, end-to-end workflow for SMRT sequencing.

In September 2015, we announced that we had launched a new nucleic acid sequencing platform, the PacBio Sequel™ System, which provides higher throughput, more scalability, a reduced footprint and lower sequencing project costs compared to the PacBio® RS II System, while maintaining the existing benefits of our SMRT Sequencing Technology. As a result, our first quarter product and service revenue grew by over 60% in 2017 compared to 2016, and we now have an installed base of over 300 PacBio systems. However, due to current uncertainty regarding United States government funding, our sales to customers who rely on such funding have been and may continue to be negatively impacted.

Results of Operations

Comparison of the Three-month Periods Ended March 31, 2017 and 2016

(in thousands, except percentages)	Three-Month Periods Ended March 31, 2017	2016	$ Change	% Change
	(unaudited)			
Revenue:				
Product revenue	$ 21,294	$ 12,379	$ 8,915	72%
Service and other revenue	3,621	3,152	469	15%
Contractual revenue	—	3,596	(3,596)	(100%)
Total revenue	24,915	19,127	5,788	30%
Cost of Revenue:				
Cost of product revenue	11,362	6,880	4,482	65%
Cost of service and other revenue	4,616	2,743	1,873	68%
Total cost of revenue	15,978	9,623	6,355	66%
Gross profit	8,937	9,504	(567)	(6%)
Operating Expense:				
Research and development	16,971	16,361	610	4%
Sales, general and administrative	15,265	11,708	3,557	30%
Total operating expense	32,236	28,069	4,167	15%
Operating loss	(23,299)	(18,565)	(4,734)	(25%)
Interest expense	(838)	(779)	(59)	(8%)
Other income (expense), net	270	(8)	278	3475%
Net loss	$ (23,867)	$ (19,352)	$ (4,515)	(23%)

Revenue

Total revenue for the three-month period ended March 31, 2017 was $24.9 million, compared to $19.1 million for the same period during 2016.

Product revenue for the three-month period ended March 31, 2017 consisted of $12.6 million from sales of Sequel and RSII instruments and $8.7 million from sales of consumables, for total product revenue of $21.3 million, compared to $7.8 million from sales of Sequel and RS II instruments and $4.6 million from sales of consumables, for total product revenue of $12.4 million for the same period during 2016. The increase in instrument sales for the three-month period ended March 31, 2017 was primarily attributable to increased Sequel instrument shipments and installations. The increase in consumable sales was primarily attributable to a larger installed base of instruments.

Service and other revenue of $3.6 million and $3.2 million for the three-month periods ended March 31, 2017 and 2016, respectively, and was primarily derived from product maintenance agreements sold on our installed instruments. The increase in service and other revenue was primarily attributable to supporting a larger installed base of instruments.

There was no contractual revenue for the three-month period ended March 31, 2017. Contractual revenue for the three-month period ended March 31, 2016 related to the quarterly amortization of $3.6 million from the non-refundable upfront payment of $35.0 million we received during September 2013 pursuant to our development, commercialization and license agreement with F. Hoffman-La Roche Ltd. (the "Roche Agreement"). In December 2016, we received notice from Roche that Roche had elected to terminate the Roche Agreement for convenience and the termination became effective February 10, 2017, which was 60 days after the date of the notice in accordance with the terms of the Roche Agreement.

Gross Profit

Gross profit for the three-month period ended March 31, 2017 was $8.9 million, resulting in a gross margin of 35.9%. During the first quarter of 2017, we recorded a charge to cost of revenue of $1.3 million relating to RS II instruments primarily due to a change in the estimated useful life of these instruments. Excluding this charge, adjusted gross margin for the first quarter of 2017 would have been 41.0%. Gross profit for the first quarter of 2016 was 49.7%, which included $3.6 million of contractual revenue at 100% gross margin. Excluding this contractual revenue, adjusted gross margin for the first quarter of 2016 would have been 38.0%. Adjusted gross margin is not meant to be considered in isolation or as a substitute for gross margin. Adjusted gross margin is subject to limitations, and should be read only in conjunction with our consolidated financial statements prepared in accordance with the General Accepted Accounting Principle ("GAAP").

Cost of product revenue was $11.4 million for the three-month period ended March 31, 2017, compared to cost of product revenue of $6.9 million for the same period during 2016. Cost of service and other revenue for the three-month period ended March 31, 2017 was $4.6 million for the three-month period ended March 31, 2017, compared to $2.7 million for the same period during 2016. The increase in cost of product revenue of $4.5 million was primarily driven by the increased instrument installs and consumable sales year over year. The increase in cost of service and other revenue of $1.9 million was primarily due to the charge associated with the leased RS II instruments described above.

We expect our gross margin to improve during 2017 compared to the first quarter of 2017.

Research and Development Expense

During the three-month period ended March 31, 2017, research and development expense increased by $0.6 million, or 4%, compared to the same period during 2016. The increase in research and development expense was primarily attributable to an increase of $1.5 million in facility expense and an increase of $0.7 million in compensation expense compared to the same period in 2016. These increases were partially offset by a decrease of $1.4 million in product development costs compared to the same period in 2016. Research and development expense included stock-based compensation expense of $2.0 million and $1.9 million during the three-month periods ended March 31, 2017 and 2016, respectively.

We expect our total research and development expenses to increase in 2017 compared to 2016.

Sales, General and Administrative Expense

During the three-month period ended March 31, 2017, sales, general and administrative expense increased by $3.6 million, or 30.4%, compared to the same period during 2016. The increase in sales, general and administrative expense was primarily attributable to an increase of $2.3 million in consulting and professional fees, including legal fees incurred in connection with the patent infringement litigation described under "Legal Proceedings" below and costs associated with transitioning to our new headquarters. Other factors included an increase in compensation expense as a result of increased headcount, higher stock-based compensation expense and an increase in depreciation. Sales, general and administrative expense included stock-based compensation expense of $2.4 million and $2.2 million during the three-month periods ended March 31, 2017 and 2016.

We expect our total selling, general and administrative expenses to increase in 2017 compared to 2016.

Interest Expense

Interest expense for the three-month period ended March 31, 2017 remained essentially flat compared to the same period during 2016. Interest expense related primarily to the debt facility entered into in February 2013.

Liquidity and Capital Resources

Liquidity

Since our inception, we have financed our operations primarily through product sales, issuance of common stock and convertible preferred stock, in addition to our debt facility and payments from Roche pursuant to the terms of the Roche Agreement. Cash, cash equivalents and investments, excluding restricted cash, at March 31, 2017 totaled $56.1 million, compared to $72.0 million at December 31, 2016.

We believe that our existing cash, cash equivalents and investments will be sufficient to fund our projected operating requirements for at least 12 months; however, we plan to raise additional capital in the future. Our view regarding sufficiency of cash and liquidity is primarily based on our financial forecast for 2017 and into the first quarters of 2018, which is impacted by various assumptions regarding demand for our products. Generally, we expect demand for our products to increase for the remainder of 2017 and into 2018 as compared to 2016, and this expectation is included in our forecast of future cash and liquidity availability. These expectations are based on our current operating and financing plans, which are subject to change. Factors that may affect our capital needs include, but are not limited to, slower than expected adoption of our products resulting in lower sales of our products and services; future acquisitions; our ability to obtain new collaboration and customer arrangements; the progress of our research and development programs; initiation or expansion of research programs and collaborations; litigation costs, including the costs involved in preparing, filing, prosecuting, defending and enforcing intellectual property rights; the purchase of patent licenses; the costs associated with the ongoing transition to our new facilities in Menlo Park, California; and other factors.

To the extent we raise additional funds through the sale of equity or convertible debt securities, the issuance of such securities will result in dilution to our stockholders. There can be no assurance that such funds will be available on favorable terms, or at all. If adequate funds are not available, we may be required to curtail operations significantly or to obtain funds by entering into collaboration or debt agreements on unattractive terms. Our inability to raise capital could have a material adverse effect on our business, financial condition and results of operations

Operating Activities

Our primary uses of cash in operating activities are for the development of ongoing product enhancements and future products, manufacturing, and support functions related to our sales, general and administrative activities. The net cash used for the three-month periods ended March 31, 2017 and 2016 primarily reflected the net loss for those periods, partially offset by non-cash operating expenses including depreciation and stock-based compensation, as well as changes in working capital.

We used $16.7 million of cash from operating activities for the three-month period ended March 31, 2017, compared to cash usage of $20.3 million for the same period in 2016. Cash used in operating activities for the three-month period ended March 31, 2017 primarily reflected a net loss of $23.9 million, adjusted for non-cash items such as stock-based compensation of $5.0 million and depreciation of $2.9 million. Additionally, net loss included $1.5 million of straight-line rent expense during the rent abatement period under the O'Brien Lease. Additionally, the change in net operating assets and liabilities was attributed to a decrease in accounts payable of $5.9 million related to the timing of payments to vendors, partially offset by a decrease in prepaid expenses and other assets of $3.4 million, of which $2.6 million related to the payments we received from our prior landlord as a result of exiting a portion of our prior facilities.

Cash used in operating activities for the three-month period ended March 31, 2016 primarily reflected a net loss of $19.4 million, adjusted for non-cash items such as stock-based compensation of $4.6 million and depreciation of $0.8 million. Additionally, the change in net operating assets and liabilities was attributed to a decrease in deferred contractual revenue of $3.6 million, a decrease in accrued expenses of $3.4 million and an increase in accounts receivable of $2.9 million, partially offset by a decrease in prepaid expenses and other assets of $4.7 million.

Investing Activities

Our investing activities consist primarily of capital expenditures and investment purchases, sales and maturities. We had a net increase in cash of $25.5 million from investing activities for the three-month period ended March 31, 2017, compared to a net decrease in cash of $23.2 million for the same period in 2016.

Cash provided by investing activities for the three-month period ended March 31, 2017 reflected net maturities and sales of investments of $28.1 million, partially offset by net purchases of property and equipment of $2.7 million.

Cash used in investing activity for the three-month period ended March 31, 2016 reflected net purchases of investments of $22.9 million and net purchases of property and equipment of $0.3 million.

Financing Activities

We had a net increase of $3.4 million and $30.0 million in cash from financing activities for the three-month period ended March 31, 2017 and 2016, respectively.

Cash provided by financing activities during the three-month period ended March 31, 2017 reflected the issuance of common stock through our equity compensation plans.

Cash provided by financing activities during the three-month period ended March 31, 2016 reflected net proceeds of $26.5 million from our common stock "at-the-market" offering program and $3.4 million from the issuance of common stock through our equity compensation plans.

Capital Resources

Common Stock "At-the-Market" Offering

During the three-month period ended March 31, 2016, we issued 3.1 million shares of our common stock at an average price of $8.80 per share through our “at-the-market” offering, resulting in net proceeds of $26.5 million.

During the three-month period ended March 31, 2017 we did not issue any shares pursuant to our “at-the-market” offering program; however, in February 2017, we filed an additional prospectus supplement pursuant to which we may offer and sell, from time to time, additional shares of our common stock having an aggregate offering price of up to $60.0 million.

We may need to raise additional capital in the future through the sale of equity or convertible debt securities, including “at-the-market” offerings.

We pay a commission equal to 3% of the gross proceeds from the sale of shares of our common stock under the sales agreement for our “at-the-market” offering. We are not obligated to sell shares of our common stock under the sales agreement.

Debt Facility Agreement

Under the terms of our February 2013 debt agreement with Deerfield (the “Facility Agreement”), we received $20.5 million and issued promissory notes in the aggregate principal amount of $20.5 million (the “Notes”). The Notes bear simple interest at a rate of 8.75% per annum, payable quarterly in arrears commencing on April 1, 2013 and on the first business day of each January, April, July and October thereafter. The Facility Agreement has a maximum term of seven years. We received net proceeds of $20.0 million, representing $20.5 million of gross proceeds, less a $500,000 facility fee, before deducting other expenses of the transaction. As of March 31, 2017, $3.1 million of the total $20.5 million principal payment is due in the first quarter of 2018 thus we reclassified $3.1 million from “Notes payable, non- current” to “Notes payable, current”.

The Facility Agreement also contains various representations and warranties, and affirmative and negative covenants, customary for financings of this type, including restrictions on our ability to incur additional indebtedness or liens on our assets, except as permitted under the Facility Agreement. In addition, the Facility Agreement requires us to maintain consolidated cash and cash equivalents on the last day of each calendar quarter of not less than $2.0 million. As security for our repayment of our obligations under the Facility Agreement, we granted the lenders a security interest in substantially all of our property and interests in property.

Subject to certain exceptions set forth in the Facility Agreement, holders representing a majority of the aggregate principal amount of the outstanding Notes issued pursuant to the Facility Agreement may elect to receive 25% of the net proceeds from any financing that includes an equity component. To the extent we raise additional capital in the future through the sale of common stock, including without limitation, sales of common stock pursuant to an “at-the-market” offering program, we may be obligated, at the election of the holders of the Notes, to pay 25% of the net proceeds from any such financing activities as partial payment of the Notes.

Contractual Obligations

Leases

In December 2009, we entered into a lease agreement for a manufacturing and office facility in Menlo Park. For the facility to meet our needs and operating requirements, substantial tenant improvements, including improvements to the structural elements and principal operating systems of the facility, were necessary. The lessor provided a tenant improvement allowance of $1.8 million to apply towards the necessary improvements and we remained obligated for additional amounts over the afforded allowance. Due to our involvement in and the nature of the renovations made to the facility and our obligations to fund the costs of renovations exceeding the incentives afforded to us, we account for the facility as if we are the owner. Accordingly, we recorded $3.0 million of building and leasehold improvement assets, reflecting the $1.2 million fair value of the facility prior to commencing renovations and the $1.8 million of landlord incentives within property and equipment, net and a corresponding liability recorded to facility financing obligation.

As a result of the lease amendment agreement described below, future rent expense associated with our existing Menlo Park facility leases was reduced to zero. The remaining long-term facility financing obligations associated with these leases, presented as “Other liabilities, non-current” on the condensed consolidated balance sheets at March 31, 2017 and December 31, 2016, were both $1.7 million.

Lease Amendment Agreement

On July 23, 2015, we entered into a Lease Amendment Agreement (the "Lease Amendment Agreement") with Peninsula Innovation Partners, LLC (the "Existing Landlord"), which amends the terms and conditions of certain of our existing Menlo Park facility real property leases. The Lease Amendment Agreement provides for, among other things, amendments of the term for certain of the leases with the Existing Landlord, the termination of all renewal, expansion and extension rights contained in any of the existing leases with the Existing Landlord (including our options to extend the terms for certain of the existing leases for two consecutive five-year periods), as well as rent abatement for a specified period of time. As consideration for our agreement to amend the existing leases pursuant to the Lease Amendment Agreement, and subject to the terms and conditions contained therein, we became eligible to receive up to four payments of $5.0 million each from the Existing Landlord over time (the "Landlord Payments"), and rent abatement for the remainder of the lease. In the event that we breach any of the leases and fail to cure such breach within the time permitted, the Existing Landlord would have no obligation to make the final $5.0 million payment. On September 1, 2015, the permit process related to an architectural approval and a change of use permit with respect to our new premises at 1305 O'Brien Drive (formerly 1315 O'Brien Drive), Menlo Park, California (the "O'Brien Premises") was completed, which satisfied the contingencies under the Lease Amendment Agreement. As a result, we recorded $23.0 million in "Gain on lease amendments" in the consolidated statements of operations and comprehensive loss for the three-month period ended September 30, 2015, reflecting that our rent payments were reduced to zero for the remaining term of our existing Menlo Park facility real property leases, and the aggregate of $20.0 million in Landlord Payments became receivable and any associated financing obligation was revalued. Of the $20.0 million remaining Landlord Payments, the first $5.0 million Landlord Payment was received in September 2015, the second $5.0 million Landlord Payment was received in February 2016 and the third $5.0 million Landlord Payment was received in August 2016.

In June 2016, we entered into a Second Lease Amendment Agreement with the Existing Landlord that modified the payment schedule for the final $5.0 million. At December 31, 2016, the final $5.0 million landlord payment was recorded in "Prepaid Expenses and Other Current Assets" in the condensed consolidated balance sheets.

In January 2017, we entered into a Third Lease Amendment Agreement with the Existing Landlord that increased the amount of the final $5.0 million landlord payment by $65,000. In February 2017 and March 2017, we received payments of $1,045,000 and $1,583,000, respectively, resulting in a remaining balance of $2,437,000 in "Prepaid Expenses and Other Current Assets" in the condensed consolidated balance sheets at March 31, 2017.

O'Brien Lease Agreement

On July 22, 2015, we entered into a lease agreement (the "O'Brien Lease") with respect to the O'Brien Premises. The term of the O'Brien Lease is one hundred thirty-two (132) months, commencing on the date that is the later of April 15, 2016 or the date on which the O'Brien Premises landlord has substantially completed certain shell improvements and tenant improvements. In December 2016, we entered into an amendment to the O'Brien Lease which defined the commencement date of the lease to be October 25, 2016, notwithstanding that such substantial completion did not occur until the first quarter of 2017. Base monthly rent will be abated for the first six (6) months of the lease term and thereafter will be $540,000 per month during the first year of the lease term, with specified annual increases thereafter until reaching $711,000 per month during the last twelve (12) months of the lease term. We were required to pay $2,160,000 in prepaid rent which will be applied to the monthly rent installments due for the first to fourth months after the rent abatement period; and, as such, $2.2 million was recorded in "Prepaid expense and other current assets" in the condensed consolidated balance sheet as of both March 31, 2017 and December 31, 2016. We were required to establish a deposit of $4.5 million in the form of a letter of credit in October 2015; and, as such, $4.5 million was recorded in "Long-term restricted cash" in the condensed consolidated balance sheet as of both March 31, 2017 and December 31, 2016.

In addition, the landlord is obligated to construct certain warm shell improvements at the landlord's cost and expense and provide us with a tenant improvement allowance in the amount of $12.6 million. Construction was completed in phases and we began moving into the O'Brien Premises in January 2017. By the end of the first quarter of 2017, improvements associated with the entire O'Brien Premises were substantially completed. As a result, during the first quarter of 2017 we capitalized $28.9 million of tenant improvements, of which $12.6 million was paid by the landlord as a tenant improvement allowance. As the $12.6 million tenant improvement allowance is accounted for as a lease incentive, $12.6 million was recorded to "Deferred rent, non-current", which will be amortized over the lease term of approximately 11 years. In addition, as the premises was completed in phases during the first quarter 2017, tenant improvements were placed into service in phases once construction was substantially complete and the related asset was ready for its intended use.

As of March 31, 2017, the future annual minimum lease payments for the O'Brien Lease were as follows:

Years ending December 31,	Amount (in thousands)
Remaining of 2017	$ 4,251
2018	6,822
2019	6,930
2020	7,056
2021	7,272
Thereafter	46,710
Total minimum lease payments	$ 79,041

Legal Proceedings

On November 2, 2016, we filed a complaint against Oxford Nanopore Technologies Ltd., Oxford Nanopore Technologies, Inc. ("ONT Inc.") and Metrichor, Ltd. ("Metrichor" and, together with ONT Inc., "ONT") with the U.S. International Trade Commission ("USITC") for patent infringement. On December 5, 2016, the USITC provided notice that an investigation had been instituted based on the complaint. We are seeking exclusionary relief with respect to several ONT products, including ONT's MinION and PromethION devices. The complaint is based on our U.S. Patent No. 9,404,146, entitled "Compositions and methods for nucleic acid sequencing" which covers novel methods for sequencing single nucleic acid molecules using linked double-stranded nucleic acid templates, providing improved sequencing accuracy. On March 1, 2017, we filed an amendment complaint to add a second patent in the same patent family, U.S. Patent No. 9,542,527, which was granted on January 10, 2017, to the investigation. We are seeking, among other things, an exclusion order permanently barring entry of infringing ONT products into the United States, and a cease and desist order preventing ONT from advertising and selling infringing products in the United States.

On February 2, 2017, we filed a claim in the High Court of England and Wales against Oxford Nanopore Technologies Ltd. ("ONT Ltd.") and Metrichor for infringement of Patent EP(UK) 3 025 542, which is in the same patent family as the patents asserted in the USITC action referred to above. We are seeking remedies including injunctive relief, damages, and costs.

On March 15, 2017, we filed a complaint in the U.S. District Court for the District of Delaware against ONT Inc. for patent infringement. The complaint is based on our U.S. Patent No. 9,546,400, entitled "Nanopore sequencing using n-mers" which covers novel methods for nanopore sequencing of nucleic acid molecules using the signals from multiple monomeric units. This patent was granted on January 17, 2017. We are seeking remedies including injunctive relieve, damages and costs.

On April 21, 2017, ONT Ltd. and Harvard University filed a claim against us in the High Court of England and Wales for infringement of Patent EP(UK) 1 192 453, a patent owned by Harvard University and entitled "Molecular and atomic scale evaluation of biopolymers," and for which ONT Ltd. alleges it holds an exclusive license. ONT Ltd. and Harvard University are seeking remedies including injunctive relief, damages, and costs. On April 25, 2017, ONT Ltd. announced that it also had filed a claim against us in the District Court of Mannheim, Germany, for infringement of the same patent.

Litigation is inherently unpredictable, and it is too early in the proceedings to predict the outcome of these lawsuits or any impact they may have on us.

From time to time, we may also be involved in a variety of other claims, lawsuits, investigations and proceedings relating to securities laws, product liability, patent infringement, contract disputes, employment and other matters that arise in the normal course of our business. In addition, third parties may, from time to time, assert claims against us in the form of letters and other communications. We record a provision for contingent losses when it is both probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We currently do not believe that the ultimate outcome of any of the matters described above is probable or reasonably estimable, or that these matters will have a material adverse effect on our business; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on us because of litigation and settlement costs, diversion of management resources and other factors.

RISK FACTORS

You should consider carefully the risks and uncertainties described below, together with all of the other information in our public filings with the Securities and Exchange Commission, which could materially affect our business, financial condition, results of operations and prospects. The risks described below are not the only risks facing us. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially affect our business, financial condition, results of operations and prospects.

Risks Related to Our Business

We have limited experience as a commercial company.

Our first commercial product launched in 2011 and we have had limited sales to date. As such, we have limited historical financial data upon which to base our projected revenue, planned operating expenses or upon which to evaluate our company and our commercial prospects. Furthermore, in September 2015, we launched a new nucleic acid sequencing platform, the PacBio Sequel™ System. Based on our limited experience in developing and marketing our existing products and launching new products, we may not be able to effectively:

- drive adoption of our current and future products, including the Sequel System;
- attract and retain customers for our products;
- provide appropriate levels of customer training and support for our products;

- implement an effective marketing strategy to promote awareness of our products;
- develop, manufacture and commercialize new products or achieve an acceptable return on our manufacturing or research and development efforts and expenses;
- comply with regulatory requirements applicable to our products;
- anticipate and adapt to changes in our market;
- accommodate customer expectations and demands with respect to our products, increase product adoption by our existing customers or develop new customer relationships;
- grow our market share by marketing and selling our products to new and additional market segments;
- maintain and develop strategic relationships with vendors and manufacturers to acquire necessary materials for the production of our existing or future products;
- adapt or scale our manufacturing activities to meet potential demand at a reasonable cost;
- avoid infringement and misappropriation of third-party intellectual property;
- obtain any necessary licenses to third-party intellectual property on commercially reasonable terms;
- obtain valid and enforceable patents that give us a competitive advantage or enforce existing patents;
- protect our proprietary technology; and
- attract, retain and motivate qualified personnel.

The risks noted above, especially with respect to the marketing, sales, and commercialization of our products into the markets that Roche would have addressed under the Roche Agreement, may be heightened by the recent termination of the Roche Agreement. In addition, a high percentage of our expenses is and will continue to be fixed. Accordingly, if we do not generate revenue as and when anticipated, our losses may be greater than expected and our operating results will suffer.

We have incurred losses to date, and we expect to continue to incur significant losses as we develop our business and may never achieve profitability.

We have incurred net losses since inception and we cannot be certain if or when we will produce sufficient revenue from our operations to support our costs. While we achieved profitability for the quarter ended September 30, 2015, this result was largely due to a one-time gain on lease amendments. We have incurred net losses for all other fiscal periods, and, even if profitability is achieved in the future, we may not be able to sustain profitability on a consistent basis. We expect to continue to incur substantial losses and negative cash flow from operations for the foreseeable future.

If our products fail to achieve and sustain sufficient market acceptance, we will not generate expected revenue and our business may not succeed.

We cannot be sure that our current or future products will gain acceptance in the marketplace at levels sufficient to support our costs. Our success depends, in part, on our ability to expand the market for genetic analysis to include new applications that are not practicable with other current technologies. To accomplish this, we must successfully commercialize, and continue development of, our proprietary Single Molecule, Real-Time (SMRT®) Sequencing technology for use in a variety of life science and other applications, including uses by academic, government and clinical laboratories, as well as pharmaceutical, diagnostic, biotechnology and agriculture companies, among others. There can be no assurance that we will be successful in securing additional customers for our products. For example, we have limited experience commercializing and selling products outside of the academic and research settings, and we cannot assure you that we can successfully acquire additional customers in additional markets. Furthermore, we cannot guarantee that our products will be satisfactory to potential customers in the markets we seek to reach. These markets are new and dynamic, and there can be no assurance that they will develop as quickly as we anticipate, that they will reach their full potential or that they will be receptive to our most recently-launched product, the Sequel System. As a result, we may be required to refocus our marketing efforts, and we may have to make changes to the specifications of our products to enhance our ability to enter particular markets more quickly. Even if we are able to implement our technology successfully, we and/or our sales and distribution partners may fail to achieve or sustain market acceptance of our current or future products across the full range of our intended life science and other applications. Given the loss of Roche as a partner, we may need to either expand our internal capabilities or collaborate with other partners, or both, in order to successfully expand sales of our products in the markets we seek to reach, including the markets that Roche would have addressed under the Roche Agreement, which we may be unable to do at the scale required to support our business. If the market for our products grows more slowly than anticipated, if we are unable to successfully scale or otherwise ensure sufficient manufacturing capacity for new products to meet demand, if we are not able to successfully market and sell our products, if competitors develop better or more cost-effective products, or if we are unable to further grow our customer base or do not realize the growth with existing customers that we are expecting, our current and future sales and revenue would be materially harmed and our business may not succeed.

If we are unable to successfully develop and timely manufacture our products, including Sequel Systems and related consumables, our business may be adversely affected.

In light of the highly complex technologies involved in our products, there can be no assurance that we will be able to manufacture and commercialize our new products on a timely basis or continue providing adequate support for our existing products. The commercial success of our products, including the Sequel System, depends on a number of factors, including performance and reliability of the system, our anticipating and effectively addressing customer preferences and demands, the success of our sales and marketing efforts, effective forecasting and management of product demand, purchase commitments and inventory levels, effective management of manufacturing and supply costs, and the quality of the Sequel System, including related consumables such as SMRT Cells and reagents. Should we face delays in or discover unexpected defects during the further development or manufacturing process of Sequel System instruments or consumables, including any delays or defects in software development or product functionality, the timing and success of the rollout and scaling of the Sequel System may be significantly impacted, which may materially and negatively impact our revenue and gross margin. The ability of our customers to successfully utilize the Sequel System will also depend on our ability to deliver high quality SMRT Cells and reagents. We have designed new SMRT Cells and other consumables for the Sequel System, and have recently transferred production of the new SMRT Cells from a prototype chip vendor to a high-volume manufacturer. Our production of the new SMRT Cells has previously been and may in the future be below desired levels, and we have experienced and may experience in the future manufacturing delays, product or quality defects, SMRT Cell variability, and other issues, including unanticipated delays and other issues in connection with our transition to the high-volume manufacturer, any of which could negatively impact our ability to sell Sequel Systems or result in other material adverse effects on our business, financial condition and results of operations.

The development of our products is complex and costly. Problems in the design or quality of our products may have a material and adverse effect on our brand, business, financial condition, and operating results, and could result is us losing our certifications from the International Organization for Standardization ("ISO"). If we were to lose ISO certification, then our customers might choose not to purchase products from us and this could adversely impact our ability to develop products approved for clinical uses. Unanticipated problems with our products could divert substantial resources, which may impair our ability to support our new and existing products, and could substantially increase our costs. If we encounter development challenges or discover errors in our products late in our development cycle, we may be forced to delay product shipments or the scaling of manufacturing or supply. In particular, if the continued rollout of the Sequel System is delayed or is not successful, we may not be able to achieve an acceptable return, if any, on our substantial research and development efforts, and our business may be materially and adversely affected. The expenses or losses associated with delayed or unsuccessful product development or lack of market acceptance of our new products could materially and adversely affect our business, financial condition and results of operations.

Our research and development efforts may not result in the benefits we anticipate, and our failure to successfully market, sell, and commercialize our current and future products could have a material adverse effect on our business, financial condition and results of operations.

We have dedicated significant resources to developing our current products, including sequencing systems and consumables based on our proprietary SMRT sequencing technology and our Sequel System. We are also engaged in substantial and complex research and development efforts, which, if successful, may result in the introduction of new products in the future. Our research and development efforts are complex and require us to incur substantial expenses. We may not be able to develop and commercialize new products, obtain regulatory approval if necessary, or achieve an acceptable return, if any, on our research and development efforts and expenses. There can also be no assurance that we will be able to develop and manufacture future products as a result of our research and development efforts, or that we will be able to market, sell and commercialize the products that result from our research and development efforts. Furthermore, in December 2016, Roche elected to terminate the Roche Agreement, and the termination became effective February 10, 2017, which was 60 days after the date of the notice in accordance with the terms of the Roche Agreement. We may therefore need to expand our internal capabilities or seek new partnerships or collaborations, or both, in order to successfully market, sell and commercialize the products that we have developed in the markets we seek to reach, including the markets that Roche would have addressed under the Roche Agreement.

We must successfully manage new product introductions and transitions, we may incur significant costs during these transitions, and they may not result in the benefits we anticipate.

If our products and services fail to deliver the performance or results expected by our current and future customers, or are not delivered on a timely basis, our reputation and credibility may suffer, our current and future sales and revenue may be materially harmed and our business may not succeed. For instance, if we are not able to realize the benefits we anticipate from the development and commercialization of the Sequel System or our future products, including those that may be developed for clinical uses, it could have a material adverse effect on our business, financial condition and results of operations. In addition, the introduction of future products may lead to our limiting or ceasing development of further enhancements to our existing products as we focus our resources on new products, and could result in reduced marketplace acceptance and loss of sales of our existing products, materially adversely affecting our revenue and operating results. The introduction of new products, such as the Sequel System, may also have a negative impact on our revenue in the near-term as our current and future customers may delay or cancel orders of existing products in anticipation of new products and we may also be pressured to decrease prices for our existing products. Further, we have in the past experienced, and could in the future experience difficulty in managing or forecasting customer reactions, purchasing decisions or transition requirements with respect to newly-launched products, such as the Sequel System. We have incurred and may continue to incur significant costs in completing the transitions, including costs of write-downs of our products, as current or future customers transition to new products. If we do not successfully manage these product transitions, our business, reputation and financial condition may be materially and adversely affected.

We rely on other companies for the manufacture of certain components and sub-assemblies and intend to outsource additional sub-assemblies in the future. We may not be able to successfully scale the manufacturing process necessary to build and test multiple products on a full commercial basis, which could materially harm our business.

Our products are complex and involve a large number of unique components, many of which require precision in manufacturing. The nature of our products requires customized components that are currently available only from a limited number of sources, and in some cases, single sources. We have chosen to source certain critical components from a single source, including suppliers for our SMRT Cells, reagents and instruments. Furthermore, we have recently transferred production of the SMRT Cells for our Sequel System from a prototype chip vendor to a high-volume manufacturer and we have experienced, and may in the future experience, unanticipated delays and other issues in connection with such transition. If we are required to purchase these components from alternative sources, it could take several months or longer to qualify the alternative sources. If we are unable to secure a sufficient supply of these product components on a timely basis, or if these components do not meet our expectations or specifications for quality and functionality, our operations and manufacturing will be materially and adversely affected, we could be unable to meet customer demand and our business and results of operations may be materially and adversely affected.

The operations of our third-party manufacturing partners and suppliers could be disrupted by conditions unrelated to our business or operations or that are beyond our control, including but not limited to international trade restrictions or changes resulting from factors beyond our control. If our manufacturing partners or suppliers are unable or fail to fulfill their obligations to us for any reason, we may not be able to manufacture our products and satisfy customer demand or our obligations under sales agreements in a timely manner, and our business could be harmed as a result. Our current manufacturing process is characterized by long lead times between the placement of orders for and delivery of our products. If we have received insufficient components to manufacture our products on a timely basis to meet customer demand, our sales and our gross margin may be adversely affected and our business could be materially harmed. If we are unable to reduce our manufacturing costs and establish and maintain reliable, high-volume manufacturing suppliers as we scale our operations, our business could be materially harmed.

We may be unable to consistently manufacture our instruments and consumable kits, including SMRT Cells, to the necessary specifications or in quantities necessary to meet demand at an acceptable cost.

In order to successfully generate revenue from our products, we need to supply our customers with products that meet their expectations for quality and functionality in accordance with established specifications. Our customers have previously experienced variability in the performance of our instruments and SMRT Cells. Moreover, we are manufacturing a new version of our SMRT Cells for the Sequel System, and are in the process of simultaneously moving our in-house manufacturing facilities and scaling up manufacturing capacity for our products. In connection with this process, we may experience delays, quality issues or other difficulties leading to customer dissatisfaction with our products. Our production of new SMRT Cells has initially been and may in the future be below desired levels and we have experienced and may experience in the future manufacturing delays, product or quality defects, SMRT Cell variability, or other issues, including in connection with our recent transfer of production of our SMRT Cells to a high-volume manufacturer. There is no assurance that we will be able to manufacture our products so that they consistently achieve the product specifications and quality that our customers expect, including any products developed for clinical uses. Problems in the design or quality of our products may have a material adverse effect on our brand, business, financial condition, and operating results, and could result is us losing our ISO certifications. If we were to lose our ISO certification, then our customers might choose not to purchase products from us. There is also no assurance that we will be able to increase manufacturing yields and decrease costs, or that we will be successful in forecasting customer demand or manufacturing and supply costs. Furthermore, we may not be able to increase manufacturing to meet anticipated demand or may experience downtime in our existing or new manufacturing facilities. An inability to manufacture products and components that consistently meet specifications, in necessary quantities and at commercially acceptable costs, will have a negative impact, and may have a material adverse effect, on our business, financial condition and results of operations.

Rapidly changing technology in life sciences and diagnostics could make our products obsolete unless we continue to develop and commercialize new and improved products and pursue new market opportunities.

Our industry is characterized by rapid and significant technological changes, frequent new product introductions and enhancements and evolving industry standards. Our future success will depend on our ability to continually improve our products, to develop and introduce new products that address the evolving needs of our customers on a timely and cost-effective basis and to pursue new market opportunities. These new market opportunities may be outside the scope of our proven expertise or in areas where the market demand is unproven, and new products and services developed by us may not gain market acceptance. Our inability to develop and introduce new products and to gain market acceptance of the Sequel System and other new products could harm our future operating results. Unanticipated difficulties or delays in replacing existing products with new products or in commercializing the Sequel System or other new or improved products in sufficient quantities to meet customer demand could diminish future demand for our products and harm our future operating results.

Increased market adoption of our products by customers may depend on the availability of sample preparation and informatics tools, some of which may be developed by third parties.

Our commercial success may depend in part upon the development of sample preparation and software and informatics tools by third parties for use with our products. We cannot guarantee that third parties will develop tools that our current and future customers will find useful with our products. A lack of complementary sample preparation and informatics tools may impede the adoption of our products and may materially and adversely impact our business.

We operate in a highly competitive industry and if we are not able to compete effectively, our business and operating results will likely be harmed.

Some of our current competitors, including Illumina, Inc. and Thermo Fisher Scientific Inc., as well as other potential competitors, have greater name recognition, more substantial intellectual property portfolios, longer operating histories, significantly greater financial, technical, research and/or other resources, more experience in new product development, larger and more established manufacturing capabilities and marketing, sales and support functions, and/or more established distribution channels to deliver products to customers than we do. These competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. In light of these advantages, even if our technology is more effective than the products or service offerings of our competitors, current and potential customers might purchase competitive products and services instead of our products.

There are also several companies that are in the process of developing or have already developed new, potentially competing technologies, products and/or services, including Oxford Nanopore Technologies Ltd., against whom we have filed a complaint with the U.S. International Trade Commission for patent infringement. Roche is developing potentially competing sequencing products through its acquisition of Genia Technologies. Increased competition may result in pricing pressures, which could harm our sales, profitability or market share. Our failure to further enhance our existing products and to introduce new products to compete effectively could materially and adversely affect our business, financial condition or results of operations.

We may be unable to successfully increase sales of our products.

Our ability to achieve profitability depends on our ability to attract customers for our current and future products, and we may be unable to effectively market or sell our products, or find appropriate partners to do so. To perform sales, marketing, distribution and customer support functions successfully, we face a number of risks, including:

- our ability to attract, retain and manage the sales, marketing and service personnel necessary to expand market acceptance for our technologies;
- availability of potential sales partners to sell our technologies, and our ability to attract and retain such sales partners;
- the time and cost of maintaining and growing a specialized sales, marketing and service force for a particular application, which may be difficult to justify in light of the revenue generated; and
- our sales, marketing and service force may be unable to execute successful commercial activities.

We have enlisted and may continue to enlist third parties to assist with sales, distribution and customer support. There is no guarantee that we will be successful in attracting desirable sales and distribution partners, that we will be able to enter into arrangements with such partners on terms favorable to us or that we will be able to retain such partners on a going forward basis. If our sales and marketing efforts, or those of any of our third-party sales and distribution partners, are not successful, our technologies and products may not gain market acceptance, which could materially impact our business operations.

We plan to raise additional financing to fund our existing operations. Equity and debt securities we issue may have rights senior to common stockholders and additional equity financing will dilute the holdings of current stockholders.

We plan to raise additional funds through public or private debt or equity financing. Additional funds may not be available on terms acceptable to us or at all, particularly in light of restrictions under our debt agreement. We have incurred and may further incur additional debt. Debt holders have rights senior to common stockholders to make claims on our assets and the terms of our existing debt agreement restrict certain activities, including our ability to pay dividends on our common stock. To the extent that we raise additional funds through the sale of our common stock, downward fluctuations in our stock price could adversely affect such fundraising efforts. Furthermore, fundraising through sales of additional shares of common stock or other equity securities will have a dilutive effect on our existing investors.

Our indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations.

Our net losses since inception and our expectation of incurring substantial losses and negative cash flow for the foreseeable future, combined with our existing indebtedness, could:

- make it more difficult for us to satisfy our obligations, including under our existing debt agreement;
- increase our vulnerability to general adverse economic and industry conditions;
- limit our ability to fund future working capital, capital expenditures, research and development and other business opportunities;
- require us to dedicate a substantial portion of our cash flow from operations to service payments on our indebtedness;
- increase the volatility of the price of our common stock;
- limit our flexibility to react to changes in our business and the industry in which we operate;
- place us at a competitive disadvantage to our competitors that have less or no indebtedness; and

- limit, along with the financial and other restrictive covenants in our indebtedness, among other things, our ability to borrow additional funds.

Our existing debt contains covenants which may adversely impact our business and our failure to comply with such covenants could cause our outstanding indebtedness to become immediately payable.

Our existing debt contains various affirmative and negative covenants, including restrictions on our and our subsidiaries' ability to incur additional indebtedness or liens on our assets. These covenants impose significant operating and financial restrictions on us, including restrictions on our ability to take certain actions that may be in our best interests.

A breach of any of the covenants contained in our debt could result in an event of default. If an event of default exists, debt holders could elect to declare all amounts outstanding under the debt to be immediately due and payable. If we are unable to repay our indebtedness when due and payable, debt holders could proceed against the collateral granted to them to secure such indebtedness. We have pledged substantially all of our property and interests in property, including our intellectual property, as collateral under our existing debt. If the debt holders accelerate the repayment of our indebtedness, we may not have sufficient funds to make such repayment, which could have a material adverse effect on our liquidity and ability to conduct our business.

In addition, at the election of the holders representing a majority of the aggregate principal amount of the outstanding notes issued pursuant to our existing debt agreement, the holders may elect to receive 25% of the net proceeds from any financing that includes an equity component, including, without limitation, the sale or issuance of our common stock, options, warrants or other securities convertible or exchangeable for shares of our common stock, as partial payment of the notes. This right is subject to certain exceptions set forth in our existing debt agreement. To the extent we raise additional capital in the future through the sale of common stock under any future "at-the-market" offering or through other financing activities, we may be obligated, at the election of the holders of the notes, to pay 25% of the net proceeds from any such financing activities as partial payment of the notes.

Our products are highly complex, have recurring support requirements and could have unknown defects or errors, which may give rise to claims against us or divert application of our resources from other purposes.

Products using our SMRT sequencing technology are highly complex and may develop or contain undetected defects or errors. Our customers have in the past experienced reliability issues with our products, and we have only recently launched the Sequel System, such that support costs are difficult to predict. Despite testing, defects or errors may arise in our products, which could result in a failure to maintain or increase market acceptance of our products, diversion of development resources, injury to our reputation and increased warranty, service and maintenance costs. New products or enhancements to our existing products in particular may contain undetected errors or performance problems that are discovered only after delivery to customers. If our products have reliability or other quality issues or require unexpected levels of support in the future, the market acceptance and utilization of our products may not grow to levels sufficient to support our costs and our reputation and business could be harmed. We generally ship our sequencing instruments with one year of service included in the purchase price with an option to purchase one or more additional years of service. We also provide a warranty for our consumables, which is generally limited to replacing, or at our option, giving credit for any consumable with defects in material or workmanship. Defects or errors in our products may also discourage customers from purchasing our products. The costs incurred in correcting any defects or errors may be substantial and could materially and adversely affect our operating margins. If our service and support costs increase, our business and operations may be materially and adversely affected.

In addition, such defects or errors could lead to the filing of product liability claims against us or against third parties who we may have an obligation to indemnify against such claims, which could be costly and time-consuming to defend and result in substantial damages. Although we have product liability insurance, any product liability insurance that we have or procure in the future may not protect our business from the financial impact of a product liability claim. Moreover, we may not be able to obtain adequate insurance coverage on acceptable terms. Any insurance that we have or obtain will be subject to deductibles and coverage limits. A product liability claim could have a serious adverse effect on our business, financial condition and results of operations.

We depend on the continuing efforts of our senior management team and other key personnel. If we lose members of our senior management team or other key personnel or are unable to successfully retain, recruit and train qualified scientists, engineers and other personnel, our ability to maintain and develop our products could be harmed and we may be unable to achieve our goals.

Our future success depends upon the continuing services of members of our senior management team and scientific and engineering personnel. In particular, our scientists and engineers are critical to our future technological and product innovations and we will need to hire additional qualified personnel. Our industry, particularly in the San Francisco Bay Area, is characterized by high demand and intense competition for talent, and the turnover rate can be high. We compete for qualified management and scientific personnel with other life science companies, academic institutions and research institutions, particularly those focusing on genomics. Our employees could leave our company with little or no prior notice and would be free to work for a competitor. In addition, changes to U.S. immigration policies, particularly to H-1B and other visa programs, could restrain the flow of technical and professional talent into the U.S. and may inhibit our ability to hire qualified personnel. If one or more of our senior executives or other key personnel were unable or unwilling to continue in their present positions, we may not be able to replace them easily or at all, and other senior management may be required to divert attention from other aspects of the business. In addition, we do not have "key person" life insurance policies covering any member of our management team or other key personnel. The loss of any of these individuals or any inability to attract or retain qualified personnel, including scientists, engineers and others, could prevent us from pursuing collaborations and materially and adversely affect our support of existing products, product development and introductions, business growth prospects, results of operations and financial condition.

A significant portion of our potential sales depends on customers' spending budgets that may be subject to significant and unexpected variation which could have a negative effect on the demand for our products.

Our instruments represent significant capital expenditures for our customers. Potential customers for our current or future products include academic and government institutions, genome centers, medical research institutions, clinical laboratories, pharmaceutical, agricultural, biotechnology, diagnostic and chemical companies. Their spending budgets can have a significant effect on the demand for our products. Spending budgets are based on a wide variety of factors, including the allocation of available resources to make purchases, funding from government sources which is highly uncertain and subject to change, the spending priorities among various types of research equipment and policies regarding capital expenditures during economically uncertain periods. Any decrease in capital spending or change in spending priorities of our current and potential customers could significantly reduce the demand for our products. Any delay or reduction in purchases by potential customers or our inability to forecast fluctuations in demand could harm our future operating results.

Our business could be negatively impacted by changes in the United States political environment.

The most recent presidential and congressional elections in the United States have resulted in significant uncertainty with respect to, and could result in changes in, legislation, regulation and government policy at the federal level, as well as the state and local levels. Any such changes could significantly impact our business as well as the markets in which we compete. Specific legislative and regulatory proposals discussed during election campaigns and more recently that might materially impact us include, but are not limited to, changes to spending priorities and potential reductions in research funding. Uncertainty about U.S. government funding has posed, and may continue to pose, a risk as customers may choose to postpone or reduce spending in response to actual or anticipated restraints on funding. To the extent changes in the political environment have a negative impact on us or on our markets, our business, results of operation and financial condition could be materially and adversely impacted in the future.

We may not be able to convert our orders in backlog into revenue.

Our backlog represents product orders from our customers that we have confirmed and for which we have not yet recognized revenue. We may not receive revenue from these orders, and the order backlog we report may not be indicative of our future revenue.

Many events can cause an order to be delayed or not completed at all, some of which may be out of our control. If we delay fulfilling customer orders or if customers reconsider their orders, those customers may seek to cancel or modify their orders with us. Customers may otherwise seek to cancel or delay their orders even if we are prepared to fulfill them. If our orders in backlog do not result in sales, our operating results may suffer.

Delivery of our products could be delayed or disrupted by factors beyond our control, and we could lose customers as a result.

We rely on third-party carriers for the timely delivery of our products. As a result, we are subject to carrier disruptions and increased costs that are beyond our control. Any failure to deliver products to our customers in a safe and timely manner may damage our reputation and brand and could cause us to lose customers. If our relationship with any of these third-party carriers is terminated or impaired or if any of these carriers are unable to deliver our products, the delivery and acceptance of our products by our customers may be delayed, which could harm our business and financial results. The failure to deliver our products in a safe and timely manner may harm our relationship with our customers, increase our costs and otherwise disrupt our operations.

We are, and may become, subject to governmental regulations that may impose burdens on our operations, and the markets for our products may be narrowed.

We are subject, both directly and indirectly, to the adverse impact of government regulation of our operations and markets. For example, export of our instruments may be subject to strict regulatory control in a number of jurisdictions. We have expanded and are continuing to expand the international jurisdictions into which we supply products, which increase the risks surrounding governmental regulations relating to our business. The failure to satisfy export control criteria or to obtain necessary clearances could delay or prevent shipment of products, which could materially and adversely affect our revenue and profitability. Moreover, the life sciences industry, which is expected to be one of the primary markets for our technology, has historically been heavily regulated. There are, for example, laws in several jurisdictions restricting research in genetic engineering, which may narrow our markets. Given the evolving nature of this industry, legislative bodies or regulatory authorities may adopt additional regulations that may adversely affect our market opportunities. Additionally, if ethical and other concerns surrounding the use of genetic information, diagnostics or therapies become widespread, there may be less demand for our products.

Our business is also directly affected by a wide variety of government regulations applicable to business enterprises generally and to companies operating in the life science industry in particular. Failure to comply with government regulations or obtain or maintain necessary permits and licenses could result in a variety of fines or other censures or an interruption in our business operations which may have a negative impact on our ability to generate revenue and the cost of operating our business. In addition, changes to laws and government regulations could cause a material adverse effect on our business as we will need to adapt our business to comply with such changes. For example, a governmental prohibition on the use of human *in vitro* diagnostics would adversely impact our commercialization of products on which we have expended significant research and development resources, which would in turn have a material adverse impact on our business and prospects.

Our products could become subject to regulation by the U.S. Food and Drug Administration or other domestic and international regulatory agencies, which could increase our costs and impede or delay our commercialization efforts, thereby materially and adversely affecting our business and results of operations.

Our products are not currently subject to U.S. Food and Drug Administration ("FDA") clearance or approval since they are not intended for use in the diagnosis or treatment of disease. However, in the future, certain of our products or related applications, such as those that may be developed for clinical uses, could be subject to FDA regulation, or the FDA's regulatory jurisdiction could be expanded to include our products. Even where a product is exempted from FDA clearance or approval, the FDA may impose restrictions as to the types of customers to which we or our partners can market and sell our products. Such regulation and restrictions may materially and adversely affect our business, financial condition and results of operations. In the event that we fail to obtain and maintain necessary regulatory clearances or approvals for products that we develop for clinical uses, or if clearances or approvals for future products and indications are delayed or not issued, our commercial operations may be materially harmed. Furthermore, even if we are granted regulatory clearances or approvals, they may include significant limitations on the indicated uses for the product, which may limit the market for the product. We do not have experience in obtaining FDA approvals and no assurance can be given that we will be able to obtain or to maintain such approvals. Furthermore, any approvals that we may obtain can be revoked if safety or efficacy problems develop.

Many countries have laws and regulations that could affect our products, such as 510(k) clearances, premarket approvals or CE Mark requirements, and failure to adhere to applicable statutory or regulatory requirements by us or our business partners would have a material adverse effect on our operations and financial condition. The number and scope of these requirements are increasing. Unlike many of our competitors, this is an area where we do not have expertise. We, or our other third-party sales and distribution partners, may not be able to obtain regulatory approvals in such countries or may incur significant costs in obtaining or maintaining our foreign regulatory approvals. In addition, the export by us of certain of our products, which have not yet been cleared for domestic commercial distribution, may be subject to FDA or other export restrictions. Any action brought against us for violations of these laws or regulations, even if successfully defended, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

Doing business internationally creates operational and financial risks for our business.

We currently conduct operations in various countries and jurisdictions, and continue to expand to new international jurisdictions. For example, in 2016, we started selling into several new countries directly and through distribution partners, including Mexico and Israel, where we or our distribution partners may be subject to additional regulations and increased diversion of management time and efforts. Conducting and launching operations on an international scale requires close coordination of activities across multiple jurisdictions and time zones and consumes significant management resources. If we fail to coordinate and manage these activities effectively, our business, financial condition or results of operations could be materially and adversely affected and failure to comply with laws and regulations applicable to business operations in foreign jurisdictions may also subject us to significant liabilities and other penalties. International operations entail a variety of other risks, including, without limitation:

- challenges in staffing and managing foreign operations;
- tariffs and other trade barriers;
- changes in social, political and economic conditions or in laws, regulations and policies governing foreign trade, manufacturing, development and investment both domestically as well as in the other countries and jurisdictions into which we sell our products, including as a result of the referendum held in the United Kingdom approving the separation of the United Kingdom as a member of the European Union;

·difficulties in obtaining export licenses or in overcoming other trade barriers and restrictions resulting in delivery delays;

· potential increases on tariffs or restrictions on trade generally; and

· significant taxes or other burdens of complying with a variety of foreign laws.

In conducting our international operations, we are subject to U.S. laws relating to our international activities, such as the Foreign Corrupt Practices Act of 1977, as well as foreign laws relating to our activities in other countries, such as the United Kingdom Bribery Act of 2010. Failure to comply with these laws may subject us to claims or financial and/or other penalties in the United States and/or foreign countries that could materially and adversely impact our operations or financial condition. These risks have become increasingly prevalent as we have expanded our sales into countries that are generally recognized as having a higher risk of corruption.

We face risks related to the current global economic environment, which could delay or prevent our customers from purchasing our products, which could in turn harm our business, financial condition and results of operations. The state of the global economy continues to be uncertain. The current global economic conditions and uncertain credit markets and concerns regarding the availability of credit pose a risk that could impact customer demand for our products, as well as our ability to manage normal commercial relationships with our customers, suppliers and creditors, including financial institutions. If the current global economic environment deteriorates, our business could be negatively affected.

Moreover, changes in the value of the relevant currencies may affect the cost of certain items required in our operations. Changes in currency exchange rates may also affect the relative prices at which we are able sell products in the same market. Our revenue from international customers may be negatively impacted as increases in the U.S. dollar relative to our international customers' local currencies could make our products more expensive, impacting our ability to compete or as a result of financial or other instability in such locations which could result in decreased sales of our products. Our costs of materials from international suppliers may also increase as the value of the U.S. dollar decreases relative to their local currency. Foreign policies and actions regarding currency valuation could result in actions by the United States and other countries to offset the effects of such fluctuations. Such actions may materially and adversely impact our financial condition and results of operations.

Violations of complex foreign and U.S. laws and regulations could result in fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also materially affect our brand, our international growth efforts, our ability to attract and retain employees, our business, and our operating results. Even if we implement policies or procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our distribution partners, our employees, contractors, or agents will not violate our policies and subject us to potential claims or penalties.

If we fail to comply with healthcare and other governmental regulations, we could face substantial penalties and our business, results of operations and financial condition could be adversely affected.

The products that we may develop for clinical uses may be highly regulated, and there can be no assurance that the regulatory environment in which we would operate will not change significantly and adversely in the future. Any arrangements with physicians, hospitals and clinics may expose us to broadly applicable fraud and abuse and other laws and regulations that may restrict the financial arrangements and relationships through which we market, sell and distribute our products and services. Our employees, consultants, and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements. Federal and state healthcare laws and regulations that may affect our ability to conduct business, include, without limitation:

·federal and state laws and regulations regarding billing and claims payment applicable to products that we may develop for clinical uses, and regulatory agencies enforcing those laws and regulations;

·the federal Anti-Kickback Statute, which prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs;

·the federal False Claims Act, which prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, false claims, or knowingly using false statements, to obtain payment from the federal government;

·federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

·the FCPA, the U.K. Bribery Act of 2010, and other local anti-corruption laws that apply to our international activities;

·the federal Physician Payment Sunshine Act, or Open Payments, created under the Affordable Care Act, and its implementing regulations, which requires manufacturers of drugs, medical devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to the U.S. Department of Health and Human Services, or HHS, information related to payments or other transfers of value made to licensed physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;

·HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, which impose certain requirements relating to the privacy, security and transmission of individually identifiable health information; HIPAA also created criminal liability for knowingly and willfully falsifying or concealing a material fact or making a materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

- the federal physician self-referral prohibition, commonly known as the Stark Law; and
- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers, and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or Affordable Care Act, was enacted in 2010. The Affordable Care Act, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our activities could be subject to challenge under one or more of such laws. Any action brought against us for violations of these laws or regulations, even successfully defended, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. We may be subject to private "qui tam" actions brought by individual whistleblowers on behalf of the federal or state governments, with potential liability under the federal False Claims Act including mandatory treble damages and significant per-claim penalties.

The growth of our business and sales organization and our expansion outside of the United States may increase the potential of violating these laws. The risk of our being found in violation of these or other laws and regulations is further increased by the fact that many have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the federal, state and foreign laws described above or any other current or future fraud and abuse or other healthcare laws and regulations that apply to us, we may be subject to penalties, including significant criminal, civil, and administrative penalties, damages, fines, imprisonment, for individuals, exclusion from participation in government programs, such as Medicare and Medicaid, and we could be required to curtail or cease certain of our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired, which would adversely affect our business and our stock price.

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be evaluated frequently. We may in the future discover areas of our internal financial and accounting controls and procedures that need improvement. Operating as a public company requires sufficient resources within the accounting and finance functions in order to produce timely financial information, ensure the level of segregation of duties, and maintain adequate internal control over financial reporting customary for a U.S. public company.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. Our management does not expect that our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within our company will have been detected.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we perform periodic evaluations of our internal control over financial reporting. While we have in the past performed this evaluation and concluded that our internal control over financial reporting was operating effectively, there can be no assurance that in the future material weaknesses or significant deficiencies will not exist or otherwise be discovered. In addition, if we are unable to produce accurate financial statements on a timely basis, investors could lose confidence in the reliability of our financial statements, which could cause the market price of our common stock to decline and make it more difficult for us to finance our operations and growth.

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

Under Section 382 of the Internal Revenue Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses ("NOLs") to offset future taxable income. We believe that we have had one or more ownership changes, as a result of which our existing NOLs are currently subject to limitation. Future changes in our stock ownership could result in additional ownership changes under Section 382. We may not be able to utilize a material portion of our NOLs even if we attain profitability.

Our sales cycle is unpredictable and lengthy, which makes it difficult to forecast revenue and may increase the magnitude of quarterly or annual fluctuations in our operating results.

The sales cycle for our sequencing instruments is lengthy because they represent a major capital expenditure and generally require the approval of our customers' senior management. This may contribute to substantial fluctuations in our quarterly or annual operating results, particularly during the periods in which our sales volume is low. Factors that may cause fluctuations in our quarterly or operating results include, without limitation, market acceptance for our products; our ability to attract new customers; publications of studies by us, competitors or third parties; the timing and success of new product introductions by us or our competitors or other changes in the competitive dynamics of our industry, such as consolidation; the amount and timing of our costs and expenses; changes in our pricing policies or those of our competitors; general economic, industry and market conditions; the regulatory environment; expenses associated with warranty costs or unforeseen product quality issues; the hiring, training and retention of key employees, including our ability to grow our sales organization; litigation or other claims against us for intellectual property infringement or otherwise; our ability to obtain additional financing as necessary; and changes or trends in new technologies and industry standards. Because of these fluctuations, it is likely that in some future quarters our operating results will fall below the expectations of securities analysts or investors. If that happens, the market price of our stock would likely decrease. Past fluctuations in our quarterly and annual operating results have resulted in decreases in our stock price. Such fluctuations also mean that investors may not be able to rely on our operating results in any particular period as an indication of future performance. Sales to existing customers and the establishment of a business relationship with other potential customers is a lengthy process, generally taking several months and sometimes longer. Following the establishment of the relationship, the negotiation of purchase terms can be time-consuming, and a potential customer may require an extended evaluation and testing period. In anticipation of product orders, we may incur substantial costs before the sales cycle is complete and before we receive any customer payments. As a result, in the event that a sale is not completed or is canceled or delayed, we may have incurred substantial expenses, making it more difficult for us to become profitable or otherwise negatively impacting our financial results. Furthermore, because of our lengthy sales cycle, the realization of revenue from our selling efforts may be substantially delayed, our ability to forecast our future revenue may be more limited and our revenue may fluctuate significantly from quarter to quarter.

Our operations involve the use of hazardous materials, and we must comply with environmental, health and safety laws, which can be expensive and may adversely affect our business, operating results and financial condition.

Our research and development and manufacturing activities involve the use of hazardous materials, including chemicals and biological materials, and some of our products include hazardous materials. Accordingly, we are subject to federal, state, local and foreign laws, regulations and permits relating to environmental, health and safety matters, including, among others, those governing the use, storage, handling, exposure to and disposal of hazardous materials and wastes, the health and safety of our employees, and the shipment, labeling, collection, recycling, treatment and disposal of products containing hazardous materials. Liability under environmental laws and regulations can be joint and several and without regard to fault or negligence. For example, under certain circumstances and under certain environmental laws, we could be held liable for costs relating to contamination at our or our predecessors' past or present facilities and at third-party waste disposal sites. We could also be held liable for damages arising out of human exposure to hazardous materials. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes. The failure to comply with past, present or future laws could result in the imposition of substantial fines and penalties, remediation costs, property damage and personal injury claims, investigations, the suspension of production or product sales, loss of permits or a cessation of operations. Any of these events could harm our business, operating results and financial condition. We also expect that our operations will be affected by new environmental, health and safety laws and regulations on an ongoing basis, or more stringent enforcement of existing laws and regulations. New laws or changes to existing laws may result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how we manufacture them, which could have a material adverse effect on our business, operating results and financial condition.

Our facilities in California are located near earthquake faults, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities in the San Francisco Bay Area are located near earthquake fault zones and are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired. In addition, the nature of our activities could cause significant delays in our research programs and commercial activities and make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions. Accordingly, an earthquake or other disaster could materially and adversely harm our ability to conduct business.

Our ability to successfully manage our ongoing transition to our new headquarters could result in a material adverse effect on our business or operations if we underestimate the costs of the transition, experience delays or quality issues with our manufacturing, or if internal measures to mitigate these risks are not effective.

We are in the midst of transitioning to our new headquarters in Menlo Park, California. The transition may involve unanticipated delays, which could materially impact our desired commercial timelines and there is no assurance that we will be able to move into our new headquarters without any material interruption to our business. The successful transition of our headquarters, including the transition of our manufacturing facilities, is largely dependent upon the cooperation and continued performance of both our current and future landlords, as well as third-party contractors who are preparing certain shell improvements and tenant improvements. During the transition period, we must successfully establish and implement procedures to ensure that our current and future manufacturing facilities meet our quality standards while maintaining a reasonable cost structure. In addition, after our new manufacturing facilities have been qualified, it may take a considerable period of time to commence volume production. We have already devoted significant expenses and resources in connection with the transition, and there is no assurance that we can manage the transition successfully.

In addition, the transition to our new headquarters may delay or disrupt our ability to perform critical functions, distract our management and employees or result in unanticipated expenses, all of which could negatively affect our business, at least in the near term. There may also be additional costs associated with running separate manufacturing facilities until our in-house manufacturing has been relocated to the new headquarters, and such costs may exceed our projections. If the transition does not go as expected, in addition to other issues noted above, we could experience delayed shipments of products, unexpected cost overruns or quality issues, or loss of our ISO certifications, each of which could have a material adverse effect on our business, operating results and business reputation. Moreover, in the event that we breach any of our current Menlo Park facility real property leases and fail to cure such breach within the time permitted, the landlord would have no obligation to make the final payment due to us under the leases, as amended, as consideration for our agreement to amend the leases.

Ethical, legal, privacy and social concerns or governmental restrictions surrounding the use of genetic information could reduce demand for our technology.

Our products may be used to provide genetic information about humans, agricultural crops and other living organisms. The information obtained from our products could be used in a variety of applications which may have underlying ethical, legal, privacy and social concerns, including the genetic engineering or modification of agricultural products or testing for genetic predisposition for certain medical conditions. Governmental authorities could, for safety, social or other purposes, call for limits on or regulation of the use of genetic testing. Such concerns or governmental restrictions could limit the use of our products, which could have a material adverse effect on our business, financial condition and results of operations.

Disruption of critical information technology systems or material breaches in the security of our systems could harm our business, customer relations and financial condition.

Information technology (“IT”) helps us to operate efficiently, interface with customers, maintain financial accuracy and efficiently and accurately produce our financial statements. IT systems are used extensively in virtually all aspects of our business, including sales forecast, order fulfillment and billing, customer service, logistics, and management of data from running samples on our products. Our success depends, in part, on the continued and uninterrupted performance of our IT systems. IT systems may be vulnerable to damage from a variety of sources, including telecommunications or network failures, power loss, natural disasters, human acts, computer viruses, computer denial-of-service attacks, unauthorized access to customer or employee data or company trade secrets, and other attempts to harm our systems. Certain of our systems are not redundant, and our disaster recovery planning is not sufficient for every eventuality. Despite any precautions we may take, such problems could result in, among other consequences, disruption of our operations, which could harm our reputation and financial results.

If we do not allocate and effectively manage the resources necessary to build and sustain the proper IT infrastructure, we could be subject to transaction errors, processing inefficiencies, loss of customers, business disruptions or loss of or damage to intellectual property through security breach. If our data management systems do not effectively collect, store, process and report relevant data for the operation of our business, whether due to equipment malfunction or constraints, software deficiencies or human error, our ability to effectively plan, forecast and execute our business plan and comply with applicable laws and regulations will be impaired, perhaps materially. Any such impairment could materially and adversely affect our reputation, financial condition, results of operations, cash flows and the timeliness with which we report our internal and external operating results.

Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our customers, suppliers and business partners, and personally identifiable information of our customers and employees, in our data centers and on our networks. The secure processing, maintenance and transmission of this information is critical to our operations. Despite our security measures, our IT infrastructure may be vulnerable to attacks by hackers, computer viruses, malicious codes, unauthorized access attempts, and cyber- or phishing-attacks, or breached due to employee error, malfeasance, faulty password management or other disruptions. Third parties may attempt to fraudulently induce employees or other persons into disclosing user names, passwords or other sensitive information, which may in turn be used to access our IT systems, commit identity theft or carry out other unauthorized or illegal activities. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disruption of our operations and damage to our reputation, which could divert our management's attention from the operation of our business and materially and adversely affect our business, revenues and competitive position. Moreover, we may need to increase our efforts to train our personnel to detect and defend against cyber- or phishing-attacks, which are becoming more sophisticated and frequent, and we may need to implement additional protective measures to reduce the risk of potential security breaches, which could cause us to incur significant additional expenses.

Regulations related to conflict minerals has caused us to incur, and will continue to cause us to incur, additional expenses and could limit the supply and increase the costs of certain materials used in the manufacture of our products.

We are subject to requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 that require us to conduct diligence, and report whether or not our products contain conflict minerals. The implementation of these requirements could adversely affect the sourcing, availability and pricing of the materials used in the manufacture of components used in our products. Furthermore, the complex nature of our products requires components and materials that may be available only from a limited number of sources and, in some cases, from only a single source. We have incurred, and will continue to incur, additional costs to comply with the disclosure requirements, including costs related to conducting diligence procedures to determine the sources of conflict minerals that may be used or necessary to the production of our products and, if applicable, potential changes to components, processes or sources of supply as a consequence of such verification activities. We may face reputational harm if we determine that certain of our products contain minerals that are not determined to be conflict free or if we are unable to alter our processes or sources of supply to avoid using such materials. Reputational harm could materially and adversely affect our business, financial condition or results of operations.

Risks Related to Our Intellectual Property

Failure to secure patent or other intellectual property protection for our products and improvements to our products may reduce our ability to maintain any technological or competitive advantage over our current and potential competitors.

Our ability to protect and enforce our intellectual property rights is uncertain and depends on complex legal and factual questions. Our ability to establish or maintain a technological or competitive advantage over our competitors may be diminished because of these uncertainties. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications or issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;
- it is possible that neither our pending patent applications nor the pending patent applications of our licensors will result in issued patents;
- the scope of the patent protection we or our licensors obtain may not be sufficiently broad to prevent others from practicing our technologies, developing competing products, designing around our patented technologies or independently developing similar or alternative technologies;
- our and our licensors' patent applications or patents have been, are and may in the future be, subject to interference, opposition or similar administrative proceedings, which could result in those patent applications failing to issue as patents, those patents being held invalid or the scope of those patents being substantially reduced;
- we or our partners may not adequately protect our trade secrets;
- we may not develop additional proprietary technologies that are patentable; or
- the patents of others may limit our freedom to operate and prevent us from commercializing our technology in accordance with our plans.

The occurrence of any of these events could impair our ability to operate without infringing upon the proprietary rights of others or prevent us from establishing or maintaining a competitive advantage over our competitors.

Variability in intellectual property laws may adversely affect our intellectual property position.

Intellectual property laws, and patent laws and regulations in particular, have been subject to significant variability either through administrative or legislative changes to such laws or regulations or changes or differences in judicial interpretation, and it is expected that such variability will continue to occur. Additionally, intellectual property laws and regulations differ by country. Variations in the patent laws and regulations or in interpretations of patent laws and regulations in the United States and other countries may diminish the value of our intellectual property and may change the impact of third-party intellectual property on us. Accordingly, we cannot predict the scope of the patents that may be granted to us with certainty, the extent to which we will be able to enforce our patents against third parties or the extent to which third parties may be able to enforce their patents against us.

Some of the intellectual property that is important to our business is owned by other companies or institutions and licensed to us, and changes to the rights we have licensed may adversely impact our business.

We license from third parties some of the intellectual property that is important to our business. If we fail to meet our obligations under these licenses, these third parties could terminate the licenses. If the third parties who license intellectual property to us fail to maintain the intellectual property that we have licensed, or lose rights to that intellectual property, the rights we have licensed may be reduced or eliminated, which could subject us to claims of intellectual property infringement. Termination of these licenses or reduction or elimination of our licensed rights may result in our having to negotiate new or reinstated licenses with less favorable terms, or could subject us to claims of intellectual property infringement in litigation or other administrative proceedings that could result in damage awards against us and injunctions that could prohibit us from selling our products. In addition, some of our licenses from third parties limit the field in which we can use the licensed technology. Therefore, in order for us to use such licensed technology in potential future applications that are outside the licensed field of use, we may be required to negotiate new licenses with our licensors or expand our rights under our existing licenses. We cannot assure you that we will be able to obtain such licenses or expanded rights on reasonable terms or at all. In addition, we have limited rights to participate in the prosecution and enforcement of the patents and patent applications that we have licensed. As a result, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business. Further, because of the rapid pace of technological change in our industry, we may need to rely on key technologies developed or licensed by third parties, and we may not be able to obtain licenses and technologies from these third parties at all or on reasonable terms. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

The measures that we use to protect the security of our intellectual property and other proprietary rights may not be adequate, which could result in the loss of legal protection for, and thereby diminish the value of, such intellectual property and other rights.

In addition to patents, we also rely upon trademarks, trade secrets, copyrights and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. Despite these measures, any of our intellectual property rights could be challenged, invalidated, circumvented or misappropriated. In addition, we attempt to protect our intellectual property and proprietary information by requiring our employees and consultants to enter into confidentiality and assignment of inventions agreements, and by entering into confidentiality agreements with our third-party development, manufacturing, sales and distribution partners, who may also acquire, develop and/or commercialize alternative or competing products or provide services to our competitors. For example, Roche has had certain access to our trade secrets and other proprietary information pursuant the Roche Agreement, subject to the confidentiality provisions thereof (certain of which provisions survive the termination of the Roche Agreement); however, Roche is developing potentially competing sequencing products through its acquisition of Genia Technologies. There can be no assurance that our measures will provide adequate protection for our intellectual property and proprietary information. These agreements may be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets and other proprietary information may be disclosed to others, or others may gain access to or disclose our trade secrets and other proprietary information. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. Additionally, others may independently develop proprietary information and techniques that are substantially equivalent to ours. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

Our intellectual property may be subject to challenges in the United States or foreign jurisdictions that could adversely affect our intellectual property position.

Our pending, issued and granted U.S. and foreign patents and patent applications have been, are and may in the future be, subject to challenges by third parties asserting prior invention by others or invalidity on various grounds, through proceedings, such as interferences, reexamination or opposition proceedings. Addressing these challenges to our intellectual property has been, and any future challenges can be, costly and distract management’s attention and resources. For example, we previously incurred significant legal expenses to litigate and settle a complaint seeking review of a patent interference decision of the U.S. Patent and Trademark Office. Additionally, as a result of these challenges, our patents or pending patent applications may be determined to be unpatentable to us, invalidated or unenforceable in whole or in part. Accordingly, adverse rulings in these proceedings may negatively impact the scope of our intellectual property protection for our products and technology, and may materially and adversely affect our business.

Some of our technology is subject to “march-in” rights by the U.S. government.

Some of our patented technology was developed with U.S. federal government funding. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents, including a nonexclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise "march-in" rights to use or allow third parties to use our patented technology. The government can exercise its march-in rights if it determines that such action is necessary to (i) achieve practical application of the U.S. government-funded technology, (ii) alleviate health or safety needs, (iii) meet requirements of federal regulations, or (iv) give preference to U.S. industry. In addition, U.S. government-funded inventions must be reported to the government and such government funding must be disclosed in any resulting patent applications. Furthermore, our rights in such inventions are subject to government license rights and foreign manufacturing restrictions.

We are involved in legal proceedings to enforce our intellectual property rights.

Our intellectual property rights involve complex factual, scientific and legal questions. We operate in an industry characterized by significant intellectual property litigation. Even though we may believe that we have a valid patent on a particular technology, other companies may have from time to time taken, and may in the future take, actions that we believe violate our patent rights. For example, we have filed a complaint with the USITC against ONT for patent infringement, as well as complaints against ONT Inc. in the U.S. District Court for the District of Delaware and against ONT Ltd. and Metrichor in the High Court of England and Wales for infringements of patents in the same patent family as the patents asserted in the USITC action. Legal actions to enforce our patent rights can be expensive and may involve the diversion of significant management time and resources and adverse parties may bring claims against us and/or our intellectual property. Our enforcement actions may not be successful, could give rise to legal claims against us and could result in some of our intellectual property rights being determined to be invalid or not enforceable.

We have been, and could in the future be, subject to legal proceedings with third parties who may claim that our products infringe or misappropriate their intellectual property rights.

Our products are based on complex, rapidly developing technologies. We may not be aware of issued or previously filed patent applications that belong to third parties that mature into issued patents that cover some aspect of our products or their use. In addition, because patent litigation is complex and the outcome inherently uncertain, our belief that our products do not infringe third-party patents of which we are aware or that such third-party patents are invalid and unenforceable may be determined to be incorrect. As a result, third parties have claimed, and may in the future claim, that we infringe their patent rights and have filed, and may in the future file, lawsuits or engage in other proceedings against us to enforce their patent rights. For example, ONT Ltd. announced on April 21, 2017 that it was pursuing claims for patent infringement against us in the High Court of England and Wales, and on April 25, 2017 ONT Ltd. announced that it was also pursuing claims for patent infringement against us in the District Court of Mannheim, Germany. In addition, as we enter new markets, our competitors and other third parties may claim that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to develop further, commercialize, or sell products or services, and could result in the award of substantial damages against us. Patent litigation between competitors in our industry is common. Additionally, we have certain obligations to many of our customers and suppliers to indemnify and defend them against claims by third parties that our products or their use infringe any intellectual property of these third parties. In defending ourselves against any of these claims, we have in the past incurred, and could in the future incur, substantial costs, and the attention of our management and technical personnel could be diverted. For example, we previously incurred significant legal expenses to litigate and settle a complaint alleging patent infringement. Even if we have an agreement that indemnifies us against such costs, the indemnifying party may be unable to uphold its contractual obligations. To avoid or settle legal claims, it may be necessary or desirable in the future to obtain licenses relating to one or more products or relating to current or future technologies, which could negatively affect our gross margins. We may not be able to obtain these licenses on commercially reasonable terms, or at all. We may be unable to modify our products so that they do not infringe the intellectual property rights of third parties. In some situations, the results of litigation or settlement of claims may require us to cease allegedly infringing activities which could prevent us from selling some or all of our products. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

In addition, in the course of our business, we may from time to time have access or be alleged to have access to confidential or proprietary information of others, which, though not patented, may be protected as trade secrets. Others could bring claims against us asserting that we improperly used their confidential or proprietary information, or that we misappropriated their technologies and incorporated those technologies into our products. A determination that we illegally used the confidential or proprietary information or misappropriated technologies of others in our products could result in us paying substantial damage awards or being prevented from selling some or all of our products, which could materially and adversely affect our business.

We have not yet registered some of our trademarks in all of our potential markets, and failure to secure those registrations could adversely affect our business.

Some of our trademark applications may not be allowed for registration, and our registered trademarks may not be maintained or enforced. In addition, in the U.S. Patent and Trademark Office and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings.

Our use of "open source" software could adversely affect our ability to sell our products and subject us to possible litigation.

A portion of our products or technologies developed and/or distributed by us incorporate "open source" software, and we may incorporate open source software into other products or technologies in the future. Some open source software licenses require that we disclose the source code for any modifications to such open source software that we make and distribute to one or more third parties, and that we license the source code for such modifications to third parties, including our competitors, at no cost. We monitor the use of open source software in our products to avoid uses in a manner that would require us to disclose or grant licenses under our source code that we wish to maintain as proprietary; however, there can be no assurance that such efforts have been or will be successful. In some circumstances, distribution of our software that includes or is linked with open source software could require that we disclose and license some or all of our proprietary source code in that software, which could include permitting the use of such software and source code at no cost to the user. Open source license terms are often ambiguous and there is little legal precedent governing the interpretation of these licenses. Successful claims made by the licensors of open source software that we have violated the terms of these licenses could result in unanticipated obligations, including being subject to significant damages, being enjoined from distributing products that incorporate open source software and being required to make available our proprietary source code pursuant to an open source license, which could substantially help our competitors develop products that are similar to or better than ours or otherwise materially and adversely affect our business.

Risks Related to Owning Our Common Stock

The price of our common stock has been, is, and may continue to be, highly volatile, and you may be unable to sell your shares at or above the price you paid to acquire them.

The market price of our common stock is highly volatile, and we expect it to continue to be volatile for the foreseeable future in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- announcements of technological innovations by us or our competitors;
- announcements by our customers, partners or suppliers relating directly or indirectly to our products, services or technologies;
- overall conditions in our industry and market;
- addition or loss of significant customers;
- changes in laws or regulations applicable to our products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, capital commitments or achievement of significant milestones;
- additions or departures of key personnel;
- competition from existing products or new products that may emerge;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- disputes or other developments related to proprietary rights, including patents, litigation matters or our ability to obtain intellectual property protection for our technologies;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us or our stockholders;
- stock price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- reports, guidance and ratings issued by securities or industry analysts; and
- general economic and market conditions.

If any of the forgoing occurs, it would cause our stock price or trading volume to decline. Stock markets in general and the market for companies in our industry in particular have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. You may not realize any return on your investment in us and may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We have been a party to this type of litigation in the past and may be the target of this type of litigation again in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Future sales of our common stock could cause our stock price to fall.

We maintain a shelf registration statement on Form S-3 with the SEC pursuant to which we may, from time to time, sell up to an aggregate of $150 million of our common stock, preferred stock, depositary shares, warrants, units or debt securities. We have established, and may in the future establish, "at-the-market" offering programs pursuant to which we may offer and sell shares of our common stock. In February 2017, we filed an additional prospectus supplement pursuant to which we may offer and sell, from time to time, additional shares of our common stock having an aggregate offering price of up to $60.0 million under an "at-the-market" offering program. Sales of securities under the registration statement have resulted and will continue to result in dilution of our existing stockholders, and such sales could cause our stock price to fall.

In addition, if our existing stockholders sell, or indicate an intent to sell, a large number of shares of our common stock in the public market, it could cause our stock price to fall. We may also issue shares of common stock or securities convertible into our common stock from time to time in connection with financings, acquisitions, investments or otherwise. Any such issuance would result in dilution to our existing stockholders and could cause our stock price to fall.

Concentration of ownership by our principal stockholders may result in control by such stockholders of the composition of our board of directors.

Our existing significant stockholders, executive officers, directors and their affiliates beneficially own a significant number of our outstanding shares of common stock. As a result, these stockholders will be able to exercise a significant level of control over all matters requiring stockholder approval, including the election of directors. This control could have the effect of delaying or preventing a change of control of our company or changes in management and will make the approval of certain transactions difficult or impossible without the support of these stockholders.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management and limit the market price of our common stock.

Provisions in our certificate of incorporation and bylaws, as amended and restated, may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 50,000,000 shares of undesignated preferred stock and up to approximately 1,000,000,000 shares of authorized but unissued shares of common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the Board, the Chief Executive Officer or the President;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;
- provide that our directors may be removed only for cause; and
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us.

Our large number of authorized but unissued shares of common stock may potentially dilute existing stockholders' stockholdings.

We have a significant number of authorized but unissued shares of common stock. Our board of directors may issue shares of common stock from this authorized but unissued pool from time to time without stockholder approval, resulting in the dilution of our existing stockholders.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any dividends on our common stock and do not intend to pay any dividends in the foreseeable future. In addition, the terms of our existing debt agreement restrict our ability to pay dividends on our common stock. We anticipate that we will retain all of our future earnings for use in the operation of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.