PACIFIC BIOSCIENCES OF CALIFORNIA, INC. Form 10-Q August 09, 2013 Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2013

Or

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

For the transition period from to

Commission File Number 001-34899

Pacific Biosciences of California, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of

incorporation or organization)

1380 Willow Road

Menlo Park, CA 94025 (Address of principal executive offices)

to such filing requirements for the past 90 days. Yes x No "

(650) 521-8000

(Registrant s telephone number, including area code)

16-1590339 (I.R.S. Employer

Identification No.)

94025 (Zip Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No "

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

 Large accelerated filer
 "
 Accelerated filer
 x

 Non-accelerated filer
 " (Do not check if a smaller reporting company)
 Smaller reporting company
 "

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

Number of shares outstanding of the issuer s common stock as of July 31, 2013: 65,250,352

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Balance Sheets

(Unaudited)

(in thousands except par value amounts)	June 30, 2013	December 31, 2012
Assets		
Current assets		
Cash and cash equivalents	\$ 40,833	\$ 46,540
Investments	66,135	54,040
Accounts receivable	4,104	2,822
Inventory, net	10,283	9,592
Prepaid expenses and other current assets	759	2,006
Total current assets	122,114	115,000
Property and equipment, net	11,655	14,329
Other long-term assets	508	354
Total assets	\$ 134,277	\$ 129,683
	+,	+,,
Liabilities and Stockholders Equity		
Current liabilities		
Accounts payable	\$ 2,605	\$ 2,988
Accrued expenses and other current liabilities	¢ 2,005 8,950	¢ 2,900 8,204
Deferred revenue, current	3,347	3,378
Facility financing obligation, current	191	173
r denky manenie obligation, editent	171	175
Total current liabilities	15 002	14,743
	15,093 734	800
Deferred revenue, non-current Deferred rent and other long-term liabilities	1,638	2,145
Notes payable	13,007	2,145
Financing derivative	894	
Facility financing obligation, non-current	2,513	2,613
Facility infancing obligation, non-current	2,515	2,015
	22.070	20.201
Total liabilities	33,879	20,301
Stockholders equity		
Convertible Preferred Stock, \$0.001 par value: Authorized 50,000 shares; No shares issued or outstanding		
Common Stock and additional paid-in-capital, \$0.001 par value: Authorized 1,000,000 shares; Issued and		
outstanding 65,242 shares at June 30, 2013 and 56,170 shares at December 31, 2012	677,995	645,372
Accumulated other comprehensive income	(2)	30
Accumulated deficit	(577,595)	(536,020)
Total stockholders equity	100,398	109,382
Total liabilities and stockholders equity	\$ 134,277	\$ 129,683

See accompanying notes to the condensed consolidated financial statements.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

(in thousands, except per share amounts) Revenue:	Three-Month Periods Ended June 30, June 30, 2013 2012		Six-Month Pe June 30, 2013	eriods Ended June 30, 2012
	\$ 4,601	¢ 5.907	\$ 8.434	¢ 14540
Product revenue Service and other revenue	\$ 4,601 1,447	\$ 5,827 1,284	\$ 8,434 2,922	\$ 14,542 2,337
Grant revenue	1,447	1,284	2,922	450
Grant revenue		100	270	450
Total revenue	6,048	7,291	11,626	17,329
Cost of Revenue:	3,322	5,382	6,522	13,989
Cost of product revenue Cost of service and other revenue	5,522 1,667	1,634	3,115	3,217
Cost of service and other revenue	1,007	1,054	5,115	3,217
Total cost of revenue	4,989	7,016	9,637	17,206
Gross profit	1,059	275	1,989	123
Operating Expense:				
Research and development	11,682	11,272	23,665	23,345
Sales, general and administrative	9,374	11,558	18,928	26,843
Total operating expense	21,056	22,830	42,593	50,188
Operating loss	(19,997)	(22,555)	(40,604)	(50,065)
Interest expense	(673)	(69)	(1,098)	(139)
Other income, net	199	137	127	137
Net loss	(20,471)	(22,487)	(41,575)	(50,067)
Other comprehensive income (loss):				
Unrealized gain (loss) on investments	(13)	(60)	(32)	18
Comprehensive loss	\$ (20,484)	\$ (22,547)	\$ (41,607)	\$ (50,049)
Net loss per share:				
Basic and diluted net loss per share	\$ (0.33)	\$ (0.40)	\$ (0.70)	\$ (0.90)
Shares used in computing basic and diluted net loss per share	61,922	55,658	59,660	55,433

See accompanying notes to the condensed consolidated financial statements.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Condensed Consolidated Statements of Cash Flows

(Unaudited)

	Six-Month Pe June.	
(in thousands)	2013	2012
Cash flows from operating activities		
Net loss	\$ (41,575)	\$ (50,067)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	2,897	3,353
Amortization of debt discount and financing costs	248	
Stock-based compensation	5,190	4,770
Other items	(73)	53
Changes in assets and liabilities		
Accounts receivable	(1,282)	1,186
Inventory	(293)	4,082
Prepaid expenses and other assets	1,229	800
Accounts payable	(384)	(681)
Accrued expenses and other current liabilities	746	(3,719)
Deferred revenue	(97)	(204)
Lease incentives and other long-term liabilities	(588)	(523)
Net cash used in operating activities	(33,982)	(40,950)
Cash flows from investing activities		
Purchases of property and equipment	(577)	(781)
Purchases of investments	(111,524)	(54,359)
Sales of investments		4,856
Maturities of investments	99,373	63,972
Net cash provided by (used in) investing activities	(12,728)	13,688
Cash flows from financing activities		
Proceeds from issuance of common stock, net of issuance costs	21,237	2,020
Proceeds from issuance of debt facility, net of issuance costs	19,766	
Net cash provided by financing activities	41,003	2,020
Net decrease in cash and cash equivalents	(5,707)	(25,242)
Cash and cash equivalents at beginning of period	46,540	58,865
Cash and cash equivalents at end of period	\$ 40,833	\$ 33,623

See accompanying notes to the condensed consolidated financial statements.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

1. Overview

Pacific Biosciences of California, Inc., (Pacific Biosciences , the Company , we , us) has commercialized the PacBio *RS* High Resolution Genetic Analyzer and the PacBio *RS* II Sequencing System to help scientists solve genetically complex problems. Based on our novel Single Molecule, Real-Time (SMRT) technology, our products enable scientists to increase their understanding of biological systems through targeted sequencing and insight into genetic variations.

The names Pacific Biosciences, PacBio, SMRT, SMRTbell and our logo are our trademarks.

2. Summary of Significant Accounting Policies

Basis of Presentation

In the opinion of management, the accompanying unaudited Condensed Consolidated Financial Statements (financial statements) of Pacific Biosciences of California, Inc. and its wholly-owned subsidiaries have been prepared on a consistent basis with the December 31, 2012 audited Consolidated Financial Statements and include all adjustments, consisting of only normal recurring adjustments, necessary to fairly state the information set forth herein. Certain prior year amounts in the financial statements and notes thereto have been reclassified to conform to the current year s presentation. The financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission (SEC) and, therefore, omit certain information and footnote disclosures necessary to present the statements in accordance with U.S. generally accepted accounting principles (GAAP). These financial statements should be read in conjunction with the audited Consolidated Financial Statements and Notes thereto included in the Company s Annual Report on Form 10-K for the fiscal year ended December 31, 2012, which was filed on March 15, 2013. The results of operations for the first six months of fiscal 2013 are not necessarily indicative of the results to be expected for the entire fiscal year or any future periods.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting periods. Our estimates include, but are not limited to, useful lives assigned to long-lived assets, assumptions used in computing stock-based compensation expense and valuing warrants, assumptions used to value the financing derivative and long-term notes, provisions for income taxes, inventory, and contingencies. Actual results could differ from our estimates, and such differences could be material to our financial position and results of operations.

Fair Value of Financial Instruments

Assets and Liabilities measured at fair value on a recurring basis

The following table sets forth the fair value of our financial assets and liabilities that were measured on a recurring basis as of June 30, 2013 and December 31, 2012, respectively:

(in thousands)		June 3	0, 2013			December	r 31, 2012	
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets								
Cash and cash equivalents:								
Cash and money market funds	\$ 20,037	\$	\$	\$ 20,037	\$ 11,847	\$	\$	\$ 11,847
Commercial paper		20,796		20,796		34,693		34,693

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Total cash and cash equivalents	20,037	20,796		40,833	11,847	34,693		46,540
Investments:								
Commercial paper		58,094		58,094		28,866		28,866
Corporate debt securities		1,641		1,641		13,203		13,203
Asset backed securities		6,400		6,400		955		955
Certificates of deposits						2,008		2,008
U.S. government and agency securities						9,008		9,008
Total investments		66,135		66,135		54,040		54,040
		,				- ,		- ,
Total assets measured at fair value	\$ 20,037	\$ 86,931	\$	\$ 106,968	\$ 11,847	\$ 88,733	\$	\$ 100,580
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Liabilities								
Financing derivative	\$	\$	\$ 894	\$	\$	\$	\$	\$

6

\$ 894

\$

\$

\$

\$

\$

\$

\$

Total liabilities measured at fair value

All of our cash deposits and money market funds are classified within Level 1 of the fair value hierarchy because they are valued using bank balances or quoted market prices. Our investments are classified as Level 2 instruments based on market pricing and other observable inputs. None of our investments are classified within Level 3 of the fair value hierarchy.

During the six-month periods ended June 30, 2013 and 2012, realized gains and losses on the sale of investments were immaterial and there were no material impairments of our investments.

The fair value of the Financing Derivative (as defined in Note 6. *Debt Facility*) liability resulting from the debt facility we entered into during the first quarter of 2013 was determined using Level 3 inputs, or significant unobservable inputs. Refer to Note 6. *Debt Facility* for a detailed description and valuation approach. The following table provides the changes in the fair value of the Financial Derivative during the six-month period ended June 30, 2013 (in thousands):

Financial Derivative	Ar	nount
Balance as of December 31, 2012	\$	
Value at issuance		967
Loss on change in fair value of Financing Derivative		(73)
Balance as of June 30, 2013	\$	894

For the six-month period ended June 30, 2013 there were no assets or liabilities transferred between Level 1, Level 2, Level 3 reported at fair value on a recurring basis and valuation techniques did not change compared to the prior quarter.

Financial Assets and Liabilities not measured at fair value on a recurring basis

The carrying amount of our accounts receivable, prepaid expenses, other current assets, accounts payable, accrued expenses and other current liabilities, are determined to approximate fair value due to their short maturities. The carrying value of our facility financing obligation approximates fair value due to the time to maturity and prevailing market rates.

We determined the fair value of the Notes (as defined in Note 6. *Debt Facility*) from the debt facility we entered into during the first quarter of 2013 using Level 3 inputs, or significant unobservable inputs. The value of the Notes was determined by comparing the difference between the fair value of the Notes with and without the Financing Derivative by calculating the respective present values from future cash flows using a 20.8% weighted average market yield. Refer to Note 6. *Debt Facility* for additional details regarding the Notes. The estimated fair value and carrying value of the Notes are as follows (in thousands):

	June	30, 2013	December 31, 2012	
	Fair Value	Carrying Value	Fair Value	Carrying Value
Long-term notes payable	\$ 13,686	\$ 13,007	\$	\$
N / I D Cl				

Net Loss Per Share

The following table presents the computation of our basic and diluted net loss per share (in thousands, except per share amounts):

		Three-Months Ended June 30,		ths Ended e 30,
	2013	2012	2013	2012
<u>Net loss per share</u>				
Numerator:				
Net loss	\$ (20,471)	\$ (22,487)	\$ (41,575)	\$ (50,067)

Denominator:

Weighted average shares used in computation of basic and diluted net loss				
per share	61,92	22 55,658	59,660	55,433
Basic and diluted net loss per share	\$ (0.3	33) \$ (0.40)	\$ (0.70)	\$ (0.90)

The following were excluded from the computation of our diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect:

	As of Ju	ine 30,
(in thousands)	2013	2012
Options outstanding	13,696	11,976
Warrants to purchase common stock	5,504	10
Frankinglands and Incontraction		

3. Cash, Cash Equivalents and Investments

The following table summarizes our investments as of June 30, 2013 and December 31, 2012 (in thousands):

	Amortized Cost	Gross unrealized gains	Gross unrealized losses	Fair Value
Cash and cash equivalents:		-		
Cash and money market funds	\$ 20,037	\$	\$	\$ 20,037
Commercial paper	20,795	1		20,796
Total cash and cash equivalents	40,832	1		40,833
Investments:				
Commercial paper	58,086	9	(1)	58,094
Corporate debt securities	1,642		(1)	1,641
Asset backed securities	6,410		(10)	6,400
U.S. government and agency securities				
Total investments	66,138	9	(12)	66,135
Total cash, cash equivalents and investments	\$ 106,970	\$ 10	\$ (12)	\$ 106,968

	As of December 31, 2012 Gross Gross			
	Amortized Cost	unrealized gains	unrealized losses	Fair Value
Cash and cash equivalents:		U		
Cash and money market funds	\$ 11,847	\$	\$	\$ 11,847
Commercial paper	34,690	3		34,693
Total cash and cash equivalents	46,537	3		46,540
Commercial paper	28,859	7		28,866
Corporate debt securities	13,190	13		13,203
Asset backed securities	954	1		955
Certificates of deposit	2,005	3		2,008
U.S. government and agency securities	9,005	3		9,008
Total investments	54,013	27		54,040

Total cash, cash equivalents and investments	\$ 100,550	\$ 30	\$ \$ 100,580
Total cash, cash equivalents and investments	\$ 100,550	\$ 30	\$ \$ 100,580

The estimated fair value of marketable debt securities (corporate debt securities, asset backed securities, U.S. government and agency securities, and commercial paper) as of June 30, 2013, by contractual maturity, are as follows:

(in thousands)	Fair Value
Due in one year or less	\$ 80,531
Due after one year through 5 years	6,400
Total investments in debt securities	\$ 86,931

Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations without call or prepayment penalties.

4. Balance Sheet Components

As of June 30, 2013 and December 31, 2012 our inventory, net, consisted of the following components:

(in thousands)	June 30, 2013	ember 31, 2012
Purchased materials, net	\$ 2,953	\$ 3,823
Work in process, net	5,179	3,494
Finished goods, net	2,151	2,275
Inventory, net	\$ 10,283	\$ 9,592

5. Contingencies

We become subject to claims and assessments from time to time in the ordinary course of business. We accrue liabilities for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

Three putative class action lawsuits were filed against us and certain of our officers and directors in the Superior Court of the State of California, County of San Mateo. These actions were brought on behalf of all persons or entities that purchased or otherwise acquired our common stock pursuant or traceable to our initial public offering (IPO) of common stock in October 2010. The claims were initiated between October 2011 and April 2012 and have since been consolidated as *In re Pacific Biosciences of California Inc. S holder Litig.*, Case No. CIV509210 (the State Court Action). The plaintiffs in the State Court Action allege violations of several provisions of the federal securities laws in connection with our August 16, 2010 registration statement (effective, as amended, on October 26, 2010) and seek, among other things, compensatory damages, rescission, and attorneys fees and costs on behalf of the putative class. On October 26, 2012, the plaintiffs in the State Court Action filed a First Amended Consolidated Class Action Complaint, which the defendants answered on November 13, 2012. On June 3, 2013, the Superior Court preliminarily approved the terms of a tentative settlement reached by the parties to the State Court Action and conditionally certified the settlement class proposed by the parties, such class consisting of all persons or entities that purchased our common stock between October 27, 2010 and September 20, 2011 (inclusive). The Superior Court scheduled a hearing regarding final approval of the tentative settlement for October 25, 2013. As of June 30, 2013, we have accrued for our best estimate to resolve this matter.

On December 21, 2011, we and certain of our officers and directors were named in a putative class action lawsuit filed in United States District Court for the Northern District of California (*Primo v. Pacific Biosciences of California, Inc., et al.*, Case No. 4:11-CV-06599). On April 11, 2012, an amended complaint was filed in the *Primo* action, which added another plaintiff, Evan Powell. As amended, the complaint alleges violations of several provisions of the federal securities laws in connection with our August 16, 2010 registration statement (effective, as amended, on October 26, 2010), and by us and/or our employees during the class period. The complaint seeks, among other things, compensatory damages, rescission, and attorneys fees and costs on behalf of the putative class. On April 15, 2013, the District Court granted the defendants motion to dismiss the amended complaint while permitting plaintiffs to file an amended complaint within sixty days. On June 14, 2013, plaintiffs in the *Primo* action filed a second amended complaint. On June 13, 2013, the defendants moved to stay all proceedings in the *Primo* action, pending a consideration by the Superior Court of the State of California, County of San Mateo, of whether to grant final approval

to the tentative settlement preliminarily approved in the State Action. The District Court has scheduled a hearing on the defendants motion to stay the *Primo* action for August 22, 2013. Pursuant to the parties stipulation and as ordered by the District Court, the defendants are not obligated to respond to the second amended complaint until thirty days after the District Court has ruled on the pending motion to stay and then only in the event the District Court denies the motion.

On December 29, 2011, we were named as a nominal defendant, along with certain of our directors as individual defendants, in a purported shareholder derivative lawsuit filed in United States District Court for the Northern District of California (*Burlingame v. Martin et al.*, Case No. 4:11-CV-06703). The plaintiff in the *Burlingame* action has agreed to dismiss the litigation in its entirety. Accordingly, by stipulation of the parties, the *Burlingame* action was dismissed without prejudice on April 12, 2013.

We believe that the allegations in each of these pending actions are without merit and intend to vigorously contest the actions. However, there can be no assurance that we will be successful in our defense.

In addition, from time to time, we are a party to litigation and subject to claims incident to the ordinary course of business.

We cannot determine the ultimate outcome of these lawsuits. Except as noted above regarding the tentative settlement of the State Court Action, we cannot provide an estimate of the possible loss or possible range of loss associated with the resolution of these contingencies with certainty or confidence; therefore, except as noted above, we have not provided an estimate and we have not recorded a liability.

Indemnification

Pursuant to Delaware law and agreements entered into with each of our directors and certain officers, we may have obligations, under certain circumstances, to hold harmless and indemnify each of our directors and certain officers against losses suffered or incurred by the indemnified party in connection with their service to the Company, and judgments, fines, settlements and expenses related to claims arising against such directors and officers to the fullest extent permitted under Delaware law, our bylaws and certificate of incorporation. We also enter and have entered into indemnification agreements with our directors and certain officers that may require us to indemnify them against liabilities that arise by reason of their status or service as directors or officers, except as prohibited by applicable law. In addition, we may have obligations to hold harmless and indemnify third parties involved with our fund raising efforts and their respective affiliates, directors, officers, employees, agents or other representatives against any and all losses, claims, damages and liabilities related to claims arising efforts. To the extent that any such indemnification obligations apply to the lawsuits described above, any associated expenses incurred are included within the related accrued litigation expense amounts. No additional liability associated with such indemnification obligations has been recorded at June 30, 2013.

6. Debt Facility

On February 5, 2013, we entered into a Facility Agreement (the Facility Agreement) with entities affiliated with Deerfield Management Company, L.P. (collectively, Deerfield), pursuant to which Deerfield agreed to provide \$20.5 million in funding to us (the Facility). Under the terms of the Facility Agreement, we issued to Deerfield 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. 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.

The Facility Agreement has a maximum term of seven years from inception; however it provides for the early repayment of principal in the event we have net sales (as defined in the Facility Agreement) of less than \$41.0 million for the twelve-month period from the beginning of the second calendar quarter of 2014 through the first calendar quarter of 2015 (the Milestone). If the Milestone is not achieved, at Deerfield's option, one-third of the original principal balance of the Facility will become due, on each of the third, fourth and fifth anniversaries of the date of the Facility Agreement.

From and after the date of the Facility Agreement, at the election of the holders of Notes representing a majority of the aggregate principal amount of the outstanding Notes, we shall apply 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, to the payment of the Notes. This right is subject to certain exceptions set forth in the Facility Agreement, including that the right will not apply until we have issued 15.0 million shares (as adjusted for any stock split or reverse stock split) of our common stock or rights to acquire our capital stock following the date of the Facility Agreement.

Deerfield has the option to require us to repay the Notes if we complete a Major Transaction (as defined in the Facility Agreement), including a change of control or a sale of all or substantially all of our assets. Additionally, the principal balance of the Facility may become immediately due and payable upon an Event of Default (as defined in the Facility Agreement), in which case Deerfield would have the right to require us to repay 100% of the principal amount of the loan, plus any accrued and unpaid interest thereon. The Facility Agreement does not provide for a prepayment of the Notes at our option.

The Facility Agreement also contains various representations and warranties, and affirmative and negative covenants, customary for financings of this type, including restrictions on the ability of the Company and its subsidiaries to incur additional indebtedness or liens on its assets, except as permitted under the Facility Agreement. In addition, we are required 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 to Deerfield a security interest in substantially all of our property and interests in property.

Financing Derivative

A number of features embedded in the Notes to the Facility Agreement required accounting for as a derivative, including the indemnification of certain withholding taxes and the acceleration of debt upon (a) a qualified financing, (b) an Event of Default, (c) a Major Transaction, and

(d) the exercise of the Warrant via offset to debt principal. These features represent a single derivative (the Financing Derivative) that was bifurcated from the debt instrument and accounted for as a liability at fair value, with changes in fair value between reporting periods recorded in other income (expense), net. The fair value of the Financing Derivative as of February 5, 2013 and June 30, 2013, was \$1.0 million and \$0.9 million, respectively.

The value of the Financing Derivative as of February 5, 2013 and June 30, 2013 was determined by comparing the difference between the fair value of the Notes with and without the Financing Derivative by calculating the respective present values from future cash flows using a 20.8% weighted average market yield.

Warrants

In connection with the execution of the Facility Agreement, on February 5, 2013, we issued to Deerfield warrants to purchase an aggregate of 5,500,000 shares of common stock immediately exercisable at an exercise price per share initially equal to \$2.63 (the Warrants). The number of shares of common stock into which the Warrants are exercisable and the exercise price will be adjusted to reflect any stock splits, payment of stock dividends, recapitalizations, reclassifications or other similar adjustments in the number of outstanding shares of common stock. The exercise price may also be adjusted to reflect certain dividends or other distributions, including distributions of stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or similar transaction.

The Warrants are classified within additional paid-in capital and reported at their grant date fair value on February 5, 2013 of \$6.4 million. We estimated the fair value of the Warrants using the Black-Scholes option pricing model using the following assumptions:

Expected term	7 years
Expected volatility	50%
Risk-free interest rate	1.4%
Dividend yield	

Notes

The Notes and Warrants were initially recorded at a value of \$14.1 million and \$6.4 million, respectively, based upon the relative fair value allocation of the \$20.5 million of proceeds. Additionally, facility fees and other issuance costs were allocated based on the relative fair value of the Facility and the Warrants. The amount allocated to the Notes was then reduced by the \$1.0 million fair value of the Financing Derivative, such that the Financing Derivative was recorded at its absolute fair value. As a result, the carrying value of the Notes at the inception of the debt was \$12.8 million, resulting in an original issue discount of \$7.7 million. The discount will be accreted to the \$20.5 million face value of the Notes over the expected maturity period of seven years using the effective interest method, with an effective interest rate of 20.6%.

7. Stockholders Equity

Stock Offering

During April 2012, we filed 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 \$150.0 million of our common stock, warrants or debt securities. On May 1, 2012, the registration statement was declared effective by the SEC. On October 5, 2012, we entered into a Controlled Equity Offering Sales Agreement (the Sales Agreement) with Cantor Fitzgerald & Co. (Cantor), pursuant to which we may offer and sell, from time to time, through Cantor, shares of our common stock having an aggregate offering price of up to \$30.0 million through an at-the-market offering. We are not obligated to make any sales of shares under the Sales Agreement. We pay Cantor a commission equal to 3.0% of the gross proceeds from the sale of shares of our common stock under the Sales Agreement and reimburse up to \$50,000 of legal expenses incurred by Cantor. During the quarter ended June 30, 2013, we sold 4.4 million shares of common stock through our at-the-market offering at an average price of \$2.66, with net proceeds of \$11.3 million. As of June 30, 2013, we have sold a total of 8.3 million shares of our common stock at an average price of \$2.51 through our at-the-market offering.

8. Stock Option Plans

As of June 30, 2013, we had three active equity compensation plans, the 2010 Equity Incentive Plan, or 2010 Plan, the 2010 Outside Director Equity Incentive Plan, or 2010 Director Plan, and the 2010 Employee Stock Purchase Plan (the ESPP).

As of June 30, 2013, 786,255 shares of our common stock remain reserved for issuance under our ESPP. Our ESPP permits eligible employees to purchase common stock at a discount through payroll deductions during defined offering periods. Each offering period generally consists of four purchase periods, each purchase period being six months. The price at which the stock is purchased is equal to the lower of 85% of the fair market value of the common stock at the beginning of an offering period or at the end of a purchase period. Shares issued under the ESPP totaled 733,111 and 428,604 shares during the six-month periods ended June 30, 2013 and 2012, respectively. We estimate the value of the employee stock purchase rights on the grant date using the Black-Scholes option pricing model.

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The following table summarizes stock option activity for all stock option plans (in thousands, except per share amounts):

		Comm	non Stock Options Out	standing Weighted
	Shares available for grant	Number of shares	Exercise price	average exercise price
Balances, December 31, 2012	2,872	12,016	\$ 0.20 16.00	\$ 5.37
Additional shares reserved	3,370			
Options granted	(2,025)	2,025	2.11 2.89	2.25
Options exercised		(29)	1.83 2.52	1.88
Options canceled	316	(316)	1.16 16.00	5.12
Balances, June 30, 2013	4,533	13,696	\$ 0.20 16.00	\$ 4.92

Stock-based Compensation

Total stock-based compensation expense for employee stock options and stock purchases under the ESPP, consists of the following (in thousands):

	Three-Mor	Three-Month Periods Ended June 30,		Six-Month Periods Ended	
	J			ne 30,	
	2013	2012	2013	2012	
Cost of revenue	\$ 100	\$ 143	\$ 236	\$ 309	
Research and development	1,024	1,069	2,241	2,202	
Sales, general and administrative	1,320	1,371	2,713	2,259	
Total stock-based compensation expense	\$ 2,444	\$ 2,583	\$ 5,190	\$ 4,770	

We estimated the fair value of employee stock options using the Black-Scholes option pricing model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards.

The fair value of the common stock underlying stock options granted through the date of our IPO, were estimated by our board of directors on the date of grant. The fair value of the shares of common stock underlying stock options has historically been the responsibility of, and determined by, our board of directors. Because there was no public market for our common stock, our board of directors determined fair value of the common stock at the time of grant by considering a number of objective and subjective factors including independent third-party valuations, sales of convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of capital stock and general and industry specific economic outlook, amongst other factors. Our common stock became publicly listed upon our IPO, from which time options granted are issued with an exercise price equal to the closing price on the date of grant.

The fair value of employee stock options was estimated using the following weighted average assumptions:

		Three-Month Periods Ended June 30,		n Periods une 30,
	2013	2012	2013	2012
Expected term in years	6.1	6.1	6.1	6.1
Expected volatility	65.0%	65.0%	65.0%	65.0%
Risk-free interest rate	1.1%	1.0%	1.1%	1.1%
Dividend yield				

Expected term Expected term represents the period that our stock-based awards are expected to be outstanding. Our assumptions about the expected term have been on our historic cancellation and exercise experience and trends as well as our expectations for future periods.

Expected volatility We do not have sufficient trading history to solely rely on the volatility of our own common stock for establishing expected volatility. Therefore, we based our expected volatility on the historical stock volatilities of our common stock as well as several comparable publicly listed companies over a period equal to the expected terms of the options.

Risk-free interest rate The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for zero coupon U.S. Treasury notes with maturities approximately equal to the option s expected term.

Expected dividend yield We have never paid dividends and do not expect to pay dividends in the foreseeable future.

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

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. Forward-looking statements are based on our management s beliefs and assumptions and on information currently available to them. Such forward looking statements include, but are not limited to, statements related to: our expectations regarding our future losses, our expectations regarding our future sources of revenue, the timing of the conversion of our backlog, our expectations regarding our operating expenses; our expectations regarding our interest expense, our financial outlook; our expected revenues, gross margin, research and development expenses, and sales, general and administrative expenses, revenue recognition; our ability to fulfill customer orders; our investments and financing obligations; the effect of global market fluctuations; our expected expenses, including research and development expenses and administrative expenses; our beliefs about our ability to finance our operations; the development and marketability of our products; the potential dilution of current stockholders; our use of any funds raised through the sale of securities; as well as statements of belief and statements of assumptions underlying any of the foregoing. In some cases you can identify forward-looking statements by words such as may. will. should. could. would. expect. plans. anticipates, believes, estimates, projects, predicts, potential and similar expressions intended to identify forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us and described under the heading Risk Factors in Part II, Item 1A of this Quarterly Report on Form 10-Q and our other filings with the SEC. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Quarterly Report on Form 10-Q. You should read this Quarterly Report on Form 10-Q completely and with the understanding that our actual future results may be materially different from those we expect. Except as required by law, we assume no obligation to update these 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.

Overview

We develop, manufacture and market an integrated platform for high resolution genetic analysis. Combining advances in nanofabrication, biochemistry, molecular biology, surface chemistry and optics, we created a technology platform called single molecule, real-time, or SMRT, technology. Our initial focus is to offer our SMRT technology to the DNA sequencing market where we have developed the PacBio *RS* High Resolution Genetic Analyzer and the PacBio RS II Sequencing System. The PacBio *RS* and the PacBio RS II consists of an instrument platform that uses our proprietary consumables, including our SMRT Cells and reagent kits.

We have financed our operations primarily through the issuance of common and convertible preferred stock resulting in \$608.4 million in net proceeds. Since our inception, we have incurred significant net losses and we expect to continue to experience significant losses as we invest in developing and taking advantage of market opportunities for our products, servicing and supporting customers, development of enhancements and updates to existing products, development of future products, and sales and administrative infrastructure. As of June 30, 2013, we had an accumulated deficit of \$577.6 million.

Basis of Presentation

While the trends below are important to understanding and evaluating our financial results, the other transactions, events and trends discussed in Risk Factors in this report may also materially impact our business operations and financial results.

Revenue

During the three- and six-month periods ended June 30, 2012, the majority of our revenue related to the sale of PacBio *RS* instruments and associated consumables and services, and during the three- and six-month periods ended June 30, 2013, the majority of our revenue related to the sale of PacBio *RS* and PacBio RS II instruments and associated consumables and services. Service and other revenue primarily consists of product maintenance agreements, while grant revenue represents amounts earned under research agreements with government entities which are recognized in the period during which the related costs are incurred.

As of June 30, 2013, our backlog was comprised of 10 instruments. We define backlog as purchase orders or signed contracts for systems from customers which we believe are firm and for which we have not yet recognized revenue. We generally expect to convert backlog to revenue within two quarters.

Cost of Revenue

Cost of revenue reflects the direct cost of product components, third party manufacturing services and our internal manufacturing overhead and customer service infrastructure costs incurred to produce, deliver, maintain and support our instruments, consumables, and services.

Product costs include the direct costs incurred to manufacture products and install instruments combined with allocated manufacturing overhead. Manufacturing overhead is determined and capitalized into inventory based on management s estimate of normal manufacturing capacity. Normal capacity is the production level expected to be achieved over a number of periods under normal circumstances with available resources. Our current manufacturing volumes are below expected normal capacities, therefore manufacturing overhead incurred exceeds the amounts absorbed into inventory and included in cost of revenue. During the six-month periods ended June 30, 2013 and 2012, \$3.6 million and \$5.3 million, respectively, of manufacturing overhead was capitalized into inventory. As we engage excess manufacturing resources in product research and development, production of product used internally for research and development, and other research and development support activities, manufacturing costs in excess of amounts reflected in inventory and cost of revenue are expensed as a component of research and development expense during the period in which the expenses are incurred.

Service costs include the direct costs of components used in support, repair and maintenance of customer instruments as well as the cost of personnel and support infrastructure necessary to support the installed customer base. As we have been in the early stages of the commercial launch of our products, the capacity of our service infrastructure has exceeded the demand for installing and servicing customer instruments. Management has estimated the capacity of the existing service infrastructure and has recognized service related cost of revenue based on the installed base. From our initial commercial launch, total service infrastructure costs have generally exceeded the costs associated with the support of customer instruments and such excess costs have been included as a component of sales, general and administrative expense.

Operating Expense

Research and Development Expense. Research and development expense consists primarily of expenses for personnel engaged in the development of our SMRT technology, the design and development of our products, including the PacBio *RS* and PacBio RS II, SMRT Cells and reagent kits and the scientific research necessary to produce commercially viable applications of our technology. These expenses also include prototype-related expenditures, development equipment, supplies, facilities costs and other related overhead.

Sales, General and Administrative Expense. Sales, general and administrative expense consists primarily of personnel-related expense related to our executive, legal, finance, sales, marketing, field service, customer support, and human resource functions, as well as fees for professional services and facility costs. Professional services consist principally of external legal, accounting and other consulting services.

Interest Expense

Interest expense is primarily related to the debt facility entered into during the first quarter of 2013 and includes the amortization of debt discount and other related costs. To a lesser extent, amounts also include interest expense relating to our facility financing obligations resulting from a lease agreement entered into in 2010. We expect interest expense to increase during future periods as a result of the debt issued during the first quarter of 2013 and subsequently as a result of the accounting treatment of the debt as the recorded value accretes to the amount due at maturity.

Other Income (Expense), Net

Other income (expense), net consists primarily of interest income earned on cash and investments, accretion of discounts and amortization of premiums related to investments, net gains or losses on foreign currency transactions, net gains or losses from disposal of fixed assets, net gains or losses resulting from changes in fair value of the Financing Derivative, and foreign income taxes.

Income Taxes

Since inception, we have incurred net losses and have not recorded any U.S. federal or state income tax benefits for such losses as they have been offset by valuation allowances.

Critical Accounting Policies and Estimates

Management s Discussion and Analysis of Financial Condition and Results of Operations is based upon our Condensed Consolidated Financial Statements, which we have prepared in accordance with U.S. generally accepted accounting principles (GAAP). The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, cost of revenue, and operating expenses, and related disclosure of contingent assets and liabilities. Management bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions.

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An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably likely to occur could materially impact the financial statements. During the three-month period

ended June 30, 2013, there have been no significant changes in our critical accounting policies and estimates as compared to the disclosures in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2012 other than the assumptions used to value the Notes, Warrant and Financing Derivative as described above in Part I, Item 1. Financial Statements-Note 6. *Debt Facility* to the consolidated financial statements.

Results of Operations

Comparison of the Three-month Periods Ended June 30, 2013 and 2012

(in thousands, except percentages)	2013	hs Ended June 30, 2012 aaudited)	Increase/ (Decrease)	% Increase/ (Decrease)
Revenue:				
Product revenue	\$ 4,601	\$ 5,827	\$ (1,226)	(21%)
Service and other revenue	1,447	1,284	163	13%
Grant revenue		180	(180)	(100%)
Total revenue	6,048	7,291	(1,243)	(17%)
Cost of Revenue:				
Cost of product revenue	3,322	5,382	(2,060)	(38%)
Cost of service and other revenue	1,667	1,634	33	2%
Total cost of revenue	4,989	7,016	(2,027)	(29%)
Gross profit	1,059	275	784	285%
Operating Expense:				
Research and development	11,682	11,272	410	4%
Sales, general and administrative	9,374	11,558	(2,184)	(19%)
Total operating expense	21,056	22,830	(1,774)	(8%)
Operating loss	(19,997)	(22,555)	2,558	11%
Interest expense	(673)	(69)	(604)	(875%)
Other income (expense), net	199	137	62	45%
Net loss	\$ (20,471)	\$ (22,487)	\$ 2,016	9%

Revenue

Our total revenue for the second quarter of 2013 was \$6.0 million compared to \$7.3 million during the second quarter of 2012. Product revenue in the second quarter of 2013 consisted of approximately \$2.7 million from sales of our PacBio RS II instruments and instrument upgrades and approximately \$1.9 million from sales of consumables compared to approximately \$4.6 million from sales of our PacBio *RS* instruments and approximately \$1.2 million from sales of consumables during the second quarter of 2012. Instrument revenue in the second quarter of 2013 reflects three PacBio RS II instrument installations as compared to seven PacBio *RS* instrument installations during the second quarter of 2012. Service and other revenue of \$1.4 million and \$1.3 million for the second quarters of 2013 and 2012, respectively, was primarily derived from product maintenance agreements sold in conjunction with our instruments.

Gross Profit

Cost of product revenue of \$3.3 million for the second quarter of 2013 reflects the costs relating to the three instruments installed while cost of product revenue of \$5.4 million for the second quarter of 2012 reflects seven instruments. Cost of revenue for the second quarter of 2012 also

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includes a \$0.6 million charge associated with a provision for excess and obsolete inventory.

Research and Development Expense

During the second quarter of 2013, research and development expense increased \$0.4 million, or 4%, compared to the second quarter of 2012. The increase in research and development expense was primarily attributed to an increase of \$0.8 million in manufacturing resources allocated to research and development as a result of decreased commercial production volumes partially offset by decreases of \$0.2 million of facility costs and \$0.2 million of other net expenses. Research and development expense included stock-based compensation expense of \$1.0 million and \$1.1 million during the second quarters of 2013 and 2012, respectively.

Sales, General and Administrative Expense

For the second quarter of 2013, selling, general and administrative expense decreased \$2.2 million, or 19%, compared to the second quarter of 2012. The decrease was largely driven by a \$1.1 million decrease in legal, professional and consulting expenses primarily as a result of decreased class action litigation related expenses. Additionally, marketing and travel related costs decreased by approximately \$0.6 million due primarily to lower expenses incurred for trade show and conference expenses. Sales, general and administrative expense included stock-based compensation expense of \$1.3 million and \$1.4 million during the second quarters of 2013 and 2012, respectively.

Interest Expense

Interest expense increased \$0.6 million from \$0.1 million to \$0.7 million during the second quarters of 2012 and 2013, respectively, primarily as a result of the debt facility entered into during the first quarter of 2013.

Other Income (Expense), Net

Other income (expense), net remained relatively consistent with \$0.2 million in the second quarter of 2013 compared to \$0.1 million in the second quarter of 2012.

Comparison of the Six-month Periods Ended June 30, 2013 and 2012

(in thousands, except percentages)	Ionth Perio 2013 (unau	d End (dited)	2012	Increase/ (Decrease)	% Increase/ (Decrease)
Revenue:					
Product revenue	\$ 8,434	\$	14,542	\$ (6,108)	(42%)
Service and other revenue	2,922		2,337	585	25%
Grant revenue	270		450	(180)	(40%)
Total revenue	11,626		17,329	(5,703)	(33%)
Cost of Revenue:					
Cost of product revenue	6,522		13,989	(7,467)	(53%)
Cost of service and other revenue	3,115		3,217	(102)	(3%)
Total cost of revenue	9,637		17,206	(7,569)	(44%)
Gross profit	1,989		123	1,866	1,517%
Operating Expense:					
Research and development	23,665		23,345	320	1%
Sales, general and administrative	18,928		26,843	(7,915)	(29%)
Total operating expense	42,593		50,188	(7,595)	(15%)
Operating loss	(40,604)		(50,065)	9,461	19%

Interest expense	(1,098)	(139)	(959)	(690%)
Other income (expense), net	127	137	(10)	(7%)
Net loss Revenue	\$ (41,575)	\$ (50,067)	\$ 8,492	17%

Our total revenue for the six-month period ended June 30, 2013 was \$11.6 million compared to \$17.3 million in the six-month period ended June 30, 2012. Product revenue in the six-month period ended June 30, 2013 consisted of approximately \$4.6 million from sales of our instruments and instrument upgrades and approximately \$3.8 million from sales of consumables compared to \$12.5 million from sales of our instruments and \$2.0 million from sales of consumables in the six-month period ended June 30, 2012.

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Instrument revenue in the six-month periods ended June 30, 2013 and 2012 reflects the six and 18 instrument installations and acceptances during the periods, respectively and upgrades during the second quarter of 2013. Service and other revenue of \$2.9 million and \$2.3 million, for the six-month periods ended June 30, 2013 and 2012, respectively, was primarily derived from product maintenance agreements sold in conjunction with our instruments.

Gross Profit

Gross profit of \$2.0 million and \$0.1 million for the six-month periods ended June 30, 2013 and 2012 corresponds to the recognition of revenue on six and 18 instruments, respectively. Cost of product revenue of \$6.5 million for the six-month period ended June 30, 2013 reflects the costs relating to six instruments compared with \$14.0 million for the six-month period ended June 30, 2012 relating to the 18 instruments that were installed and consumables that were shipped during the period. Cost of revenue for the six-month period ended June 30, 2012 also includes \$0.7 million of expense associated with our C2 release in the first quarter of 2012 and a \$0.7 million charge associated with provision for excess and obsolete inventory based on a review of on hand inventory and future demand. Cost of service and other revenue of \$3.1 million and \$3.2 million for the six-month periods ended June 30, 2013 and 2012, respectively, reflect the costs of personnel, materials and support infrastructure necessary to support the installed base of our instruments.

Research and Development Expense

During the six-month period ended June 30, 2013, research and development expenses increased \$0.3 million, or 1%, compared to the same period ended June 30, 2012. The increase was driven primarily by an increase of \$1.6 million in amounts allocated to research and development as a result of decreased commercial production volumes partially offset by decreases of \$0.4 million of facility costs, \$0.4 million of depreciation and \$0.5 million of other net expenses. Research and development expense included stock-based compensation expense of \$2.2 million and \$2.2 million during the six-month periods ended June 30, 2013, and 2012, respectively.

Sales, General and Administrative Expense

For the six-month period ended June 30, 2013, selling, general and administrative expenses decreased \$7.9 million, or 29%, compared to the same period ended June 30, 2012. The decrease was driven primarily by a \$5.5 million decrease in legal, professional and consulting expenses primarily as a result of decreased class action litigation related and legal expenses, including settlement charges of \$1.8 million relating to the resolution of two intellectual property matters. Additionally, marketing and travel related costs decreased by approximately \$1.5 million due partly to lower expenses incurred for trade show and conference expenses and other net expenses decreased by \$0.9 million. Sales, general and administrative expense included stock-based compensation expense of \$2.8 million and \$2.7 million during the six-month periods ended June 30, 2013 and 2012, respectively.

Interest Expense

Interest expense increased \$1.0 million from \$0.1 million to \$1.1 million for the six-month periods ended June 30 2012 and 2013, respectively, primarily as a result of the debt facility entered into during the first quarter of 2013.

Other Income (Expense), Net

Other income (expense), net remained relatively consistent with \$0.1 million net other income in the six-month periods ended June 30, 2012 and 2013.

Liquidity and Capital Resources

Since our inception we have financed our operations primarily through the issuance of common stock and convertible preferred stock. Cash and investments at June 30, 2013 totaled \$107.0 million, compared to \$100.6 million at December 31, 2012. Significant financing activities during the six-month period ended June 30, 2013 included \$19.8 million received through the debt facility entered into with Deerfield on February 5, 2013 and \$20.0 million received through the sale of common stock under our current at-the-market offering program. Excluding proceeds from these two financing transactions, cash and investments decreased by \$33.4 million compared to December 31, 2012, primarily reflecting \$34.0 million of cash used in operating activities and \$0.6 million of fixed asset purchases partially offset by \$1.3 million of proceeds received from equity sales through our employee stock plans.

We believe that 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 including, but not limited to, the financing arrangements as detailed under Financing Activities below. 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 maintain new collaboration and customer arrangements; the progress of our research and development programs; initiation or expansion of research programs and collaborations; the costs involved in preparing, filing, prosecuting, defending and enforcing intellectual property rights; the purchase of patent licenses; 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 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 manufacturing and sale of PacBio *RS* and the PacBio RS II instruments and consumables, development of ongoing product enhancements and future product releases, and support functions related to our selling, general and administrative activities. The net cash used for the three-month periods ended June 30, 2013 and 2012 primarily reflects the net loss for those periods, offset by non-cash operating expenses including depreciation, stock-based compensation, and changes in operating assets and liabilities.

Net cash used in operating activities was \$34.0 million for the six-month period ended June 30, 2013 as compared to \$41.0 million for the six-month period ended June 30, 2012, due primarily to net losses of \$41.6 million and \$50.1 million, respectively, partially offset by depreciation and stock-based compensation of \$8.1 million and \$8.1 million, for the six-month periods ended June 30, 2013 and June 30, 2012, respectively.

Investing Activities

Our investing activities consist primarily of investment purchases, maturities and sales and capital expenditures. Net cash used in investing activities was \$12.7 million for the six-month period ended June 30, 2013, comprised of net purchases and maturities of investments of \$12.1 million and purchases of property and equipment of \$0.6 million. Net cash provided by investing activities during the same period in 2012 was \$13.7 million, comprised of net maturities, sales and purchases of investments of \$14.5 million, partially offset by purchases of property and equipment of \$0.8 million.

Financing Activities

For the six-month period ended June 30, 2013, we received \$19.8 million from the debt facility, \$20.0 million from our common stock at-the-market offering, and \$1.2 million from the issuance of our common stock through the sale of shares under our ESPP and stock option exercises. Our at-the-market offering program allows us to offer and sell shares of our common stock having an aggregate offering price of up to \$30.0 million. As of June 30, 2013 we have sold shares with an aggregate offering price of \$20.8 million. Additional details relating to the debt facility and common stock at-the-market offering are described above in Part I, Item 1. Financial Statements Note 6. *Debt Facility* and Note 7. *Stockholders Equity* to the consolidated financial statements, respectively.

For the six-month period ended June 30, 2012, we received \$2.0 million from the issuance of our common stock through the sale of shares under our ESPP and stock option exercises.

Off-Balance Sheet Arrangements

As of June 30, 2013 we did not have any off-balance sheet arrangements.

In the ordinary course of business, we enter into standard indemnification arrangements. Pursuant to these arrangements, we indemnify, hold harmless, and agree to reimburse the indemnified parties for losses suffered or incurred by the indemnified party in connection with any trade secret, copyright, patent or other intellectual property infringement claim by any third party with respect to its technology, or from claims relating to our performance or non-performance under a contract, any defective products supplied by us, or any negligent acts or omissions, or willful misconduct, committed by us or any of our employees, agents or representatives. The term of these indemnification agreements is generally perpetual after the execution of the agreement. The maximum potential amount of future payments we could be required to make under these agreements is not determinable because it involves claims that may be made against us in future periods, but have not yet been made. To date, we have not incurred costs to defend lawsuits or settle claims related to these indemnification agreements.

We also enter and have entered into indemnification agreements with our directors and officers that may require us to indemnify them against liabilities that arise by reason of their status or service as directors or officers, except as prohibited by applicable law. In addition, we may have obligations to hold harmless and indemnify third parties involved with our fund raising efforts and their respective affiliates, directors, officers, employees, agents or other representatives against any and all losses, claims, damages and liabilities related to claims arising against such parties pursuant to the terms of agreements entered into between such third parties and

the Company in connection with such fund raising efforts. To the extent that such indemnification obligations apply to the lawsuits described above in Part I, Item 1. Financial Statements Note 5. *Contingencies* to the consolidated financial statements, any associated expenses incurred are included within the related accrued litigation expense amounts. No additional liability associated with such indemnification agreements has been recorded at June 30, 2013.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest rate and Market Risk

Our exposure to market risk is confined to our cash, cash equivalents and our investments, all of which have maturities of less than three years. The goals of our investment policy are preservation of capital, fulfillment of liquidity needs and fiduciary control of cash and investments. We also seek to maximize income from our investments without assuming significant risk. To achieve our goals, we maintain a portfolio of cash equivalents and investments in a variety of high credit quality securities. The securities in our investment portfolio are not leveraged, are classified as available-for-sale, and are, due to their relatively short-term nature, subject to minimal interest rate risk. We currently do not hedge interest rate exposure. Because of the short-term maturities of our investments, we do not believe that an increase in market rates would have any material negative impact on the value of our investment portfolio.

Foreign Exchange Risk

The majority of our expense, and capital purchasing activities are transacted in U.S. dollars. However, a portion of our operations consists of sales activities outside of the United States; therefore we have foreign exchange exposures relating to non-U.S. dollar revenues, operating expenses, accounts receivable, accounts payable, and currency balances. Our primary exposure is with the Euro. We designed a hedging policy to mitigate the impact of changes in currency exchange rates on our net cash flow from foreign currency denominated sales.

Our international operations are subject to risks typical of international operations, including, but not limited to, differing economic conditions, changes in political climate, differing tax structures, other regulations and restrictions and foreign exchange rate volatility.

Item 4. Controls and Procedures. (a) Disclosure controls and procedures.

Our management, with the participation of our chief executive officer and our chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC s rules and forms and that such information is accumulated and communicated to our management, including our chief executive officer and our chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

(b) Changes in internal control over financial reporting.

There were no changes in our internal control over financial reporting that occurred during the quarter ended June 30, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings.

Information pertaining to legal proceedings can be found in Part I, Item 1. Financial Statements Note 5. *Contingencies* to the consolidated financial statements, and is incorporated by reference herein.

Item 1A. Risk Factors

You should consider carefully the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K that was filed with the SEC on March 15, 2013, 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 are an early stage commercial company.

Our first commercial product, the PacBio *RS*, was launched in 2011 and our new product, PacBio RS II, was launched in 2013 and, as such, we have limited historical financial data upon which to base our projected revenue, planned operating expense or upon which to evaluate us and our commercial prospects. Based on our limited experience in developing and marketing new products, we may not be able to effectively:

drive adoption of our products;

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;

focus our research and development efforts in areas that generate returns on these efforts;

comply with evolving regulatory requirements applicable to our products;

anticipate and adapt to changes in our market;

maintain and develop strategic relationships with vendors and manufacturers to acquire necessary materials for the production of our products;

scale our manufacturing activities to meet potential demand at a reasonable cost;

avoid infringement and misappropriation of third-party intellectual property;

obtain licenses on commercially reasonable terms to third-party intellectual property;

obtain valid and enforceable patents that give us a competitive advantage;

protect our proprietary technology;

protect our products from any equipment or software-related system failures; and

attract, retain and motivate qualified personnel.

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. Even if profitability is achieved, we may not be able to sustain profitability. We expect to incur substantial losses and negative cash flow 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.

Although we have now commercialized the PacBio RS and launched the PacBio RS II, we cannot be sure that they 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 practical with other current technologies. To accomplish this, we must successfully commercialize, and continue development of, our SMRT technology for use in a variety of life science applications. There can be no assurance that we will be successful in securing additional customers for our products, in particular, our first product which is focused on DNA sequencing. Furthermore, we cannot guarantee that the design of our products, including the initial and subsequent specifications and any enhancements or improvements to those specifications, will be satisfactory to potential customers in the markets we seek to reach. These markets are dynamic, and there can be no assurance that they will develop as quickly as we expect or that they will reach their full potential. 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 may fail to achieve or sustain market acceptance of our products by academic and government research laboratories and pharmaceutical, biotechnology and agriculture companies, among others, across the full range of our intended life science applications. If the market for our products grows more slowly than anticipated, if competitors develop better or more cost-effective products or if we are unable to develop a significant customer base, our future sales and revenue would be materially harmed and our business may not succeed. For example, in September 2011, we implemented a reduction in our workforce due in part to our infrastructure being staffed to support a faster adoption rate for our products. If the adoption rate for our products continues to be slow or does not grow, our business may be adversely affected.

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

On February 5, 2013, we entered into the Facility Agreement with Deerfield, pursuant to which Deerfield provided \$20.0 million in funding to us net of the facility fee. Our net losses since inception and our expectation of incurring substantial losses and negative cash flow for the foreseeable future, combined with indebtedness under our Facility Agreement could:

make it more difficult for us to satisfy our obligations, including under the Facility 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 any of 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 Facility Agreement contains covenants which may adversely impact our business and the failure to comply with such covenants could cause our outstanding indebtedness to become immediately payable.

Our Facility Agreement contains various affirmative and negative covenants, including restrictions on the ability of us and our subsidiaries to incur additional indebtedness or liens on our assets, except as permitted under the Facility Agreement, that impose significant operating and financial restrictions on us, including restrictions on our ability to take actions that may be in our best interests. In addition, we are required to maintain consolidated cash and cash equivalents on the last day of each calendar quarter of not less than \$2.0 million. The Facility Agreement provides for an early repayment of principal in the event we have net sales (as defined in the Facility Agreement) of less than \$41.0 million for the twelve-month period from the beginning of the second calendar quarter of 2014 through the first calendar quarter of 2015, or the Milestone, which may be affected by events beyond our control. If the Milestone is not achieved, at Deerfield s option, one-third of the original principal balance of the Facility will become due, on each of the third, fourth and fifth anniversaries of the date of the Facility Agreement), including a change of control of us or a sale of all or substantially all of our assets. Additionally, the principal balance of the Facility may become immediately due and payable upon an Event of Default (as defined in the Facility Agreement), in which case Deerfield would have the right to require us to repay 100% of the principal amount of the loan, plus any accrued and unpaid interest thereon.

A breach of any of the covenants contained in our Facility Agreement could result in a default under such agreement. If an event of default exists, Deerfield could elect to declare all amounts outstanding under the Facility Agreement to be immediately due and payable. If we were unable to repay amounts payable under our Facility Agreement when due and payable, Deerfield 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 intellectual property, as collateral under the Facility Agreement. If Deerfield accelerates the repayment of borrowings, we may not have sufficient funds to repay our existing indebtedness, which could have a material adverse effect on our liquidity and ability to conduct our business.

Our products are highly complex, with significant support requirements.

In light of the highly complex technology involved in our products, there can be no assurance that we will be able to successfully provide adequate support for our products. Our customers have experienced reliability issues with our PacBio *RS* instruments that we believe are consistent with the introduction of similar new, highly complex products. While we believe that our customers, particularly those who were early adopters of other new DNA sequencing technologies in the past, understand that such issues can be common with novel, highly complex products like the PacBio *RS*, if our products continue to have reliability or other quality issues or require unexpected levels of support, or if our newly introduced PacBio RS II has similar issues, 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 deliver our PacBio *RS* and PacBio RS II instruments with one year of service included in the purchase price with an option to purchase one or more additional years of service. Since launching our PacBio *RS* instrument during 2011, we have incurred significant service and support costs. If service and support costs increase our business and operations may be adversely affected.

We may not be able to produce instruments that consistently achieve the specifications and quality that our customers expect.

We have established performance standards for our commercial products that we may not consistently achieve using our current design and manufacturing processes. If we do not consistently achieve the specifications and quality that our customers expect, customer demand may be negatively affected. Customers may refuse to accept our products in a timely manner or at all, which would adversely affect our revenue. Any inability to meet performance standards may materially impact the commercial viability of our products and harm our business.

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

In order to successfully derive revenue from our products, we need to supply our customers with consumable kits to be used with our instruments and we have limited experience manufacturing these consumable kits. Our customers have experienced variability in the performance of our SMRT Cells. There is no assurance that we will be able to manufacture our consumable kits or SMRT Cells so that they consistently achieve the product specifications and quality that our customers expect. There is also no assurance that we will be able to increase manufacturing yields and decrease costs. Furthermore, we may not be able to increase manufacturing capacity for our consumable kits or SMRT Cells to meet anticipated demand. An inability to manufacture consumable kits and SMRT Cells that consistently meet specifications, in necessary quantities and at commercially acceptable costs, will have a negative material impact on our business.

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, those customers may seek to cancel their orders with us. In addition, 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.

Rapidly changing technology in life sciences could make the products we are developing obsolete unless we continue to develop and manufacture 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 which have unproven market demand, and new products and services developed by us may not gain market acceptance. Our inability to gain market acceptance of new products could harm our future operating results. Our future success also depends on our ability to manufacture new and improved products to meet customer demand in a timely and cost-effective manner, including our ability to resolve manufacturing issues that may arise as we commence production of these complex products. Unanticipated difficulties or delays in replacing existing products with new products or in manufacturing improved or new products in sufficient quantities to meet customer demand could diminish future demand for our products and harm our future operating results.

We may be unable to develop our future commercial applications.

Our future business depends on our ability to execute on our plans to develop and market additional commercial applications of our SMRT technology. Future commercial applications will require significant investments of cash and resources and we may experience unexpected delays or difficulties that could postpone our ability to commercially launch these future applications, which could have a material adverse effect on our business, prospects, operating results and financial condition.

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

We have based our business model on our belief that the market for sequencing products is large and expected to grow significantly. The market is still developing and we cannot quantify the size of the market with certainty. Growth in the market is dependent on increases in the demand for sequencing products from both research institutions and commercial companies. A substantial portion of our potential product sales represent significant capital purchases by customers. Our potential customers include academic and government institutions, genome centers, medical research institutions, pharmaceutical, agricultural, biotechnology and chemical companies. Their capital spending budgets can have a significant effect on the demand for our products. These 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, particularly in light of concerns regarding the federal government budget sequestration, 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 potential customers could significantly reduce the demand for our products. Moreover, we have no control over the timing and amount of purchases by these potential customers, and as a result, revenue from these sources may vary significantly due to factors that can be difficult to forecast. We may

also have to write off excess or obsolete inventory if sales of our products are not consistent with our expectations or the market requirements for our products change due to technical innovations in the marketplace. Any delay or reduction in purchases by potential customers or our inability to forecast fluctuations in demand could harm our future operating results. In addition, if the market for our products is not as large as we expected and if the market does not grow as rapidly as we expected, demand for our products could be adversely affected.

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

We have limited experience in sales and marketing of our products. Our ability to achieve profitability depends on our ability to attract customers for our products. We may be unable to effectively market our products. To perform sales, marketing, distribution and customer support 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 technology;

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 may enlist and have enlisted third parties to assist with sales, distribution and customer support globally or in certain regions of the world. There is no guarantee, when we enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners; there is also no guarantee that we will be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any 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.

If we are unable to manufacture sufficient quantities of our products with sufficient quality by ourselves or with partners in a timely manner, our ability to sell our products may be harmed.

In order to manufacture our products in volume, we need to maintain sufficient internal manufacturing capacity or contract with manufacturing partners, or both. Our technology and the manufacturing process for our products are highly complex, involving a large number of unique parts, and we may encounter difficulties in manufacturing our products. There is no assurance that we will be able to consistently meet the volume and quality requirements necessary to be successful in the market. Manufacturing and product quality issues may arise as we adjust the scale of our production. If our products do not consistently meet our customers performance expectations, our reputation may be harmed, and we may be unable to generate sufficient revenue to become profitable. Any delay or inability in maintaining or expanding our manufacturing capacity to meet customer demand could diminish our ability to sell our products, which could result in lost revenue and seriously harm our business, financial condition and results of operations.

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, in which event our business would be materially harmed.

Our products are complex and involve a large number of unique components, many of which require precision manufacturing. The nature of the 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. If we were required to purchase these components from an alternative source, 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, we will be unable to manufacture and sell our products in a timely fashion or in sufficient quantities or under acceptable terms. Additionally, for some of those components that are currently purchased from a sole or single source supplier, we have not yet arranged for alternative suppliers.

The operations of our third-party manufacturing partners and suppliers could be disrupted by conditions unrelated to our business or operations, including the bankruptcy of the manufacturer or supplier. Certain of our suppliers and logistics centers are located in regions that have been or may be affected by earthquake and tsunami activity, which could disrupt the flow of components and sub-assemblies. A significant natural

disaster, such as an earthquake, a hurricane, volcano, or a flood, could have a material adverse impact on our business, operating results, and financial condition. If our manufacturing partners or suppliers are unable or fail to fulfill their obligations to us, we might not be able to manufacture our products and satisfy customer demand 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 ordering and delivery of our products. We will need to take steps to scale the manufacturing process, including lowering the manufacturing costs of our products as well as improvements to our manufacturing yields and cycle times, manufacturing documentation, and quality assurance and quality control procedures. If we are unable to reduce our manufacturing costs and establish and maintain reliable high volume manufacturing as we scale our operations, our business could be materially harmed.

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, including worker strikes, inclement weather and increased fuel costs. Any failure to deliver products to our customers in a timely and accurate 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 third parties is 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. In addition, some of our consumable products need to be kept at a constant temperature. If our third-party carriers are not able to maintain those temperatures during shipment, our products may be rendered unusable by our customers. The failure to deliver our products in a timely manner may harm our relationship with our customers, increase our costs and otherwise disrupt our operations.

We may encounter difficulties in managing future growth, and these difficulties could impair our profitability.

We expect to experience growth in the future, which may place a strain on our human and capital resources. If we are unable to manage future growth effectively, our business and operating results could suffer. Our ability to manage our operations and costs, including research and development, costs of components, manufacturing, sales and marketing, requires us to continue to enhance our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. If we are unable to scale up and implement improvements to our manufacturing process, develop reliable third-party manufacturers of sub-assemblies and control systems in an efficient or timely manner, or if we encounter deficiencies in existing systems and controls, we will not be able to make available the products required to meet future customer demand for our products. Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

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, engineering and other personnel, our ability to 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. These employees could leave our company with little or no prior notice and would be free to work for a competitor. 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 our ability to attract or retain qualified personnel, including scientists, engineers and others, could prevent us from pursuing collaborations and adversely affect our product development and introductions, business growth prospects, results of operations and financial condition.

Adverse conditions in the global economy and disruption of financial markets may significantly harm our revenue, profitability and results of operations.

The global economy and credit and capital markets have experienced volatility and disruption. Volatility and disruption of financial markets could limit our customers ability to obtain adequate financing or credit to purchase and pay for our products in a timely manner or to maintain operations, which could result in a decrease in sales volume that could harm our results of operations. General concerns about the fundamental soundness of domestic and international economies may also cause our customers to reduce their purchases. Changes in governmental banking, monetary and fiscal policies to address liquidity and increase credit availability may not be effective. We may experience changes in other income as a result of volatility in the global economy, including interest rates and expenses. Significant government investment and allocation of resources to assist the economic recovery of sectors which do not include our customers may reduce the resources available for government grants and related funding for life sciences research and development. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm our sales, profitability and results of operations.

We have raised, and intend to raise, additional financing to fund our existing operations. Equity securities we issue to fund our operations will dilute your ownership and debt securities will have rights senior to common stockholders.

We have raised, and intend 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 Facility Agreement. We have incurred and may further incur

additional debt. Debtholders have rights senior to common stockholders to make claims on our assets and the terms of our existing debt restrict our operations, including our ability to pay dividends on our common stock. Equity securities issued

in financings have diluted and will dilute stockholders ownership in the Company and new equity securities may have priority rights over current investors. For example, shares of common stock issued pursuant to our at-the-market offering, that commenced during the first quarter of 2013, have resulted in dilution to our stockholders. Additionally, Warrants to purchase 5,500,000 shares of our common stock issued to Deerfield in connection with the Facility Agreement could result in additional dilution to our stockholders, and the Facility Agreement contains covenants that restrict our business. We intend to raise additional funds beyond the transactions completed to date, which will result in additional dilution to our stockholders.

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, as well as many of our potential competitors, have greater name recognition, more substantial intellectual property portfolios, longer operating histories, significantly greater resources to invest in new technologies, more substantial experience in new product development and manufacturing capabilities and 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 or potential customers might accept competitive products and services in lieu of purchasing our technology. Increased competition may result in pricing pressures, which could harm our sales, profitability or market share. Our failure to compete effectively could materially and adversely affect our business, financial condition or results of operations.

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

Our PacBio *RS* has a lengthy sales and purchase order cycle because it is a major capital item and generally requires the approval of our customers senior management, and we anticipate that our new PacBio RS II will have a similar cycle. This may contribute to substantial fluctuations in our quarterly operating results, particularly during the periods in which our sales volume is low. 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 operating results have resulted in decreases in our stock price. Such fluctuations also mean that investors may not be able to rely upon our operating results in any particular period as an indication of future performance.

Our products could have unknown defects or errors, which may give rise to claims against us or divert application of our resources from other purposes.

Any product using our SMRT technology will be complex and may develop or contain undetected defects or errors. We cannot provide assurance that material performance problems will not arise. Despite testing, defects or errors may arise in our products, which could result in a failure to achieve increased market acceptance, diversion of development resources, injury to our reputation and increased warranty, service and maintenance costs. We ship our PacBio *RS* and PacBio RS II instruments with one year of service included in the purchase price with an option to purchase one or more additional years of service. We provide a twelve-month warranty period for the PacBio *RS* and PacBio RS II. The warranty is limited to replacing, repairing or giving credit for, at our option, any instrument for which a warranty claim is provided to us within the warranty period. We also provide a warranty for our consumables, but claims must be made within 30 days from the shelf life date or use by date. The warranty is limited to replacing, or at our option, giving credit for, any consumable with defects in material or workmanship. Defects or errors in our products might also discourage customers from purchasing our products. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins. In addition, such defects or errors could lead to the filing of product liability claims against us, 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 assets 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.

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 will be useful with our products or be viewed as useful by our customers or potential customers. A lack of additional available complementary sample preparation and informatics tools may impede the adoption of our products and may adversely impact our business.

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

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 adversely affected. International sales entail a variety of risks, including longer payment cycles and difficulties in collecting accounts receivable outside of the United States, currency exchange fluctuations, challenges in staffing and managing foreign operations, tariffs and other trade barriers, unexpected changes in legislative or regulatory requirements of foreign countries into which we sell our products, difficulties in obtaining export licenses or in overcoming other trade barriers and restrictions resulting in delivery delays and significant taxes or other burdens of complying with a variety of foreign laws. In conducting our international operations, we will be subject to U.S. laws relating to our international activities, as well as foreign laws relating to our activities in other countries. Failure to comply with these laws may subject us to financial and other penalties in the U.S. and foreign countries that could impact our operations or financial condition.

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 currency could make our products more expensive, impacting our ability to compete. Our costs of materials from international suppliers may increase if in order to continue doing business with us they raise their prices 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. The recent global financial downturn has led to a high level of volatility in foreign currency exchange rates and that level of volatility may continue, which could adversely affect our business, financial condition or results of operations.

Ethical, legal, privacy and social concerns 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.

Our products could in the future be subject to regulation by the U.S. Food and Drug Administration or other domestic and international regulatory agencies, which could increase our costs and 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, or 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 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 can market and sell our products. Such regulation and restrictions may materially and adversely affect our business, financial condition and results of operations.

Many countries have laws and regulations that could affect our products. 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 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.

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 contaminat