PACIFIC BIOSCIENCES OF CALIFORNIA INC
Form 10-Q
November 30, 2010
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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 September 30, 2010

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	**16-1590339**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
1380 Willow Road	
Menlo Park, CA 94025	**94025**
(Address of principal executive offices)	**(Zip Code)**

(Registrant s telephone number, including area code)

(650) 521-8000

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

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 ¨ 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 ¨
Non-accelerated filer x (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

Number of shares outstanding of the issuer s common stock as of November 29, 2010: 52,823,019

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Condensed Consolidated Balance Sheets

(Unaudited)

(in thousands except share and per share amounts)	September 30, 2010	December 31, 2009
Assets		
Current assets		
Cash and cash equivalents	$ 62,717	$ 89,232
Investments	50,215	3,503
Accounts receivable	1,052	
Prepaid expenses and other current assets	3,302	1,010
Total current assets	117,286	93,745
Property and equipment, net	12,350	7,142
Other long-term assets	300	211
Total assets	$ 129,936	$ 101,098
Liabilities, Convertible Preferred Stock and Stockholders Equity (Deficit)		
Current liabilities		
Accounts payable	$ 13,211	$ 5,778
Accrued expenses and other current liabilities	8,516	2,641
Deferred revenue	1,052	
Current portion of facility financing obligation	134	
Total current liabilities	22,913	8,419
Lease incentives and other long-term liabilities	2,138	475
Facility financing obligation, less current portion	2,918	
Convertible Preferred Stock warrant liability	292	226
Total liabilities	28,261	9,120
Commitments and contingencies (Note 7)		
Convertible Preferred Stock, $0.0001 par value: Authorized 153,394,052 shares; Issued and outstanding 60,101,338 shares at December 31, 2009 and 74,367,120 shares at September 30, 2010 (Liquidation value of $374,129 as of September 30, 2010)	374,975	269,101
Stockholders equity (deficit)		
Common Stock, $0.0001 par value: Authorized 121,668,835 shares; Issued and outstanding 656,084 shares at December 31, 2009 and 1,249,921 shares at September 30, 2010		
Additional paid-in capital	22,443	14,877

Accumulated other comprehensive income	5	1
Deficit accumulated during the development stage	(295,748)	(192,001)
Total stockholders equity (deficit)	(273,300)	(177,123)
Total liabilities, Convertible Preferred Stock and stockholders equity (deficit)	$ 129,936	$ 101,098

See accompanying notes to the condensed consolidated financial statements.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Condensed Consolidated Statements of Operations

(Unaudited)

(in thousands, except share and per share amounts)	Three-Month Periods Ended September 30, 2010	2009	Nine-Month Periods Ended September 30, 2010	2009	Cumulative Period From July 14, 2000 (Date of Inception) to September 30, 2010
Revenue	$ 220	$	$ 1,394	$	$ 8,318
Operating expenses					
Research and development	32,873	21,121	85,279	51,211	239,609
Sales, general and administrative	8,043	3,447	19,760	8,785	55,108
Total operating expenses	40,916	24,568	105,039	59,996	294,717
Loss from operations	(40,696)	(24,568)	(103,645)	(59,996)	(286,399)
Interest income (expense), net	(3)	90	(38)	417	3,896
Other income (expense), net	(9)	(51)	(64)	(61)	(431)
Net loss	$ (40,708)	$ (24,529)	$ (103,747)	$ (59,640)	$ (282,934)
Basic and diluted net loss per share of Common Stock	$ (39.70)	$ (46.74)	$ (134.07)	$ (122.34)	
Shares used to calculate basic and diluted net loss per share	1,025,326	524,840	773,839	487,483	

See accompanying notes to the condensed consolidated financial statements.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Condensed Consolidated Statements of Cash Flows

(Unaudited)

	Nine-Month Periods Ended September 30,		Cumulative Period From July 14, 2000 (Date of Inception) to September 30,
	2010	2009	2010
Cash flows from operating activities			
Net loss	$ (103,747)	$ (59,640)	$ (282,934)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation	3,703	2,255	14,159
Stock-based compensation	6,268	2,613	19,916
Amortization of deferred financing costs			59
Change in Convertible Preferred Stock warrant liability fair value	66	62	249
Other items		110	22
Changes in assets and liabilities			
Accounts receivable	(1,052)		(1,052)
Prepaid expenses and other current assets	(2,292)	195	(2,891)
Other long-term assets	(89)	(35)	(333)
Accounts payable	7,433	1,964	13,169
Accrued expenses and other current liabilities	7,061	2,029	9,181
Lease incentives and other long-term liabilities	(300)	(148)	176
Net cash used in operating activities	(82,949)	(50,595)	(230,279)
Cash flows from investing activities			
Purchase of property and equipment	(4,030)	(1,565)	(21,491)
Purchase of investments	(76,315)	(25,429)	(199,645)
Sales and maturities of investments	29,607	35,500	149,029
Net cash provided by (used in) investing activities	(50,738)	8,506	(72,107)
Cash flows from financing activities			
Proceeds from issuance of Convertible Preferred Stock, net	105,874	68,010	363,928
Proceeds from exercise of Common Stock options	1,298	322	2,995
Proceeds from exercise of Junior Preferred Stock options		1	20
Repurchases of Common Stock		(3)	(13)
Repurchases of Junior Preferred Stock			(1,727)
Proceeds from issuance of notes payable			4,037
Payment of notes payable		(1,100)	(4,137)
Net cash provided by financing activities	107,172	67,230	365,103
Net increase (decrease) in cash and cash equivalents	(26,515)	25,141	62,717
Cash and cash equivalents at beginning of period	89,232	78,462	

Cash and cash equivalents at end of period	$ 62,717	$ 103,603	$ 62,717
Supplemental disclosure of non-cash investing and financing activities			
Assets acquired under facility lease	2,971		2,971
Additions to property and equipment under tenant improvement allowances	1,910		1,910
Reclassification of Convertible Preferred Stock warrants to liabilities			31

See accompanying notes to the condensed consolidated financial statements.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements

1. Overview

Pacific Biosciences of California, Inc., (Pacific Biosciences , we , us) is developing and commercializing a platform for single molecule, real-time detection of biological events. Our initial focus is on the DNA sequencing market where we have developed and introduced a third generation sequencing platform. We incorporated in the state of Delaware on July 14, 2000 under the name Nanofluidics, Inc., and changed our name to Pacific Biosciences of California, Inc. in 2005. Since inception, substantially all of our resources have been invested in the development and initial commercialization of our single molecule, real-time technologies.

We continue to report as a development stage enterprise since planned principal operations have not yet commenced. Revenue recognized since inception has been limited to research grants received from government grants and does not constitute the commencement of our principal operations.

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

Reverse Stock Split

On September 30, 2010, we effected a 1-for-2 reverse stock split of our outstanding common stock and a proportional adjustment to the conversion ratios for each series of preferred stock. Accordingly, all share and per share amounts for all periods presented in these condensed consolidated financial statements and notes thereto, have been adjusted retroactively, where applicable, to reflect this reverse stock split and adjustment of the preferred stock conversion ratio.

Initial Public Offering

On October 26, 2010, our registration statement on Form S-1 relating to our initial public offering (IPO) was declared effective by the Securities and Exchange Commission (SEC) and our IPO closed on November 1, 2010, whereby we sold 12,500,000 shares of common stock at a price of $16.00 per share. The shares began trading on the NASDAQ Global Select Market under the trading symbol PACB on October 27, 2010. Subsequently on November 1, 2010, our underwriters exercised their overallotment option to purchase an additional 1,875,000 shares of common stock at $16.00 per share, which transaction closed on November 4, 2010. We received net proceeds of approximately $210.4 million from the initial public offering, including proceeds from the underwriter overallotment option, net of underwriting discounts, commissions, and estimated offering costs.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America, or GAAP, for interim financial information and the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, the unaudited interim financial statements reflect all adjustments, which include only normal recurring adjustments necessary for the fair statement of our balances and results for the periods presented. These interim financial statement results are not necessarily indicative of results to be expected for the full fiscal year or any future period.

The balance sheet at December 31, 2009 has been derived from the audited financial statements at that date. The financial statements and related disclosures have been prepared with the presumption that users of the interim financial statements have read or have access to the audited financial statements for the preceding fiscal year. Accordingly, these financial statements should be read in conjunction with the audited financial statements and notes thereto contained in our final prospectus, as filed with the SEC pursuant to Rule 424(b) on October 27, 2010 in connection with our IPO.

Use of Estimates

The preparation of these condensed consolidated 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 condensed consolidated 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, the valuation of common and preferred stock and related warrants and options, stock-based compensation expense and contingencies. Actual results could differ from our estimates, and such differences could be material to our financial position and results of operations.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

Fair Value of Financial Instruments

The carrying amount of certain of our financial instruments, including prepaid expenses, other current assets, other long-term assets, accounts payable, accrued expenses and other current liabilities, approximate fair value due to their short maturities. Based on currently available borrowing rates, the carrying values of the long-term liabilities approximate fair value.

As a basis for determining the fair value of certain of our financial instruments, we utilize a three-tier value hierarchy which prioritizes the inputs used in measuring fair value as follows: (Level I) observable inputs such as quoted prices in active markets; (Level II) inputs other than the quoted prices in active markets that are observable either directly or indirectly; and (Level III) unobservable inputs in which there is little or no market data which requires us to develop our own assumptions. This hierarchy requires us to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. Our financial instruments that are measured at fair value on a recurring basis consist only of cash equivalents, investments and warrant liabilities.

All of our cash equivalents, which include money market funds, are classified within Level I of the fair value hierarchy because they are valued using quoted market prices. Our investments are generally classified as Level II instruments, or instruments valued based on other observable inputs. Our warrant liability is classified within Level III of the fair value hierarchy.

Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the entire fair value measurement requires management to make judgments and consider factors specific to the asset or liability. The following table sets forth our financial instruments that were measured at fair value as of September 30, 2010 and December 31, 2009 by level within the fair value hierarchy (in thousands).

	September 30, 2010				December 31, 2009			
	Level I	Level II	Level III	Total	Level I	Level II	Level III	Total
Assets								
Money Market Funds	$ 57,500	$	$	$ 57,500	$ 87,464	$	$	$ 87,464
Commercial Paper		25,075		25,075				
Corporate Debt Securities		18,643		18,643		3,503		3,503
U.S. Government and Agency Securities		6,497		6,497				
Total assets measured at fair value	$ 57,500	$ 50,215	$	$ 107,715	$ 87,464	$ 3,503	$	$ 90,967
Liabilities								
Convertible Preferred Stock warrants	$	$	$ 292	$ 292	$	$	$ 226	$ 226
Total liabilities measured at fair value	$	$	$ 292	$ 292	$	$	$ 226	$ 226

The change in the fair value of the Level III convertible preferred stock warrant liability is summarized below (in thousands):

	September 30, 2010
Fair value at beginning of period	$ 226
Issuances	

Change in fair value recorded in other income (expense), net		66
Fair value at end of period	$	292

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

Net Loss Per Share

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

	Three-Months Ended September 30,		Nine-Months Ended September 30,	
	2010	2009	2010	2009
Historical net loss per share:				
Numerator				
Net loss	$ (40,708)	$ (24,529)	$ (103,747)	$ (59,640)
Denominator:				
Weighted average shares of common stock outstanding	1,147,535	608,430	845,074	587,184
Less: Shares of common stock subject to repurchase	(122,209)	(83,590)	(71,235)	(99,701)
Weighted average shares used in computation of basis and diluted net loss per share	1,025,326	524,840	773,839	487,483
Basic and diluted net loss per share	$ (39.70)	$ (46.74)	$ (134.07)	$ (122.34)

The following convertible preferred stock, outstanding options, common stock subject to repurchase, and warrants to purchase convertible preferred stock were excluded from the computation of diluted net loss per share for the periods presented because including them would have had an anti-dilutive effect:

	As of September 30,	
	2010	2009
Convertible Preferred Stock (on an as if converted basis)	37,183,560	26,797,589
Options to purchase Common and Preferred Stock	9,327,813	6,135,793
Common Stock subject to repurchase	178,024	76,374
Warrants to purchase Convertible Preferred Stock	25,282	25,282

Recent Accounting Pronouncements

In October 2009, the FASB issued an accounting standards update that provides application guidance on whether multiple deliverables exist, how the deliverables should be separated and how the consideration should be allocated to one or more units of accounting. This update establishes a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence, if available, third-party evidence if vendor-specific objective evidence is not available, or estimated selling price if neither vendor-specific nor third-party evidence is available. We will be required to apply this guidance prospectively for revenue arrangements entered into or materially modified after January 1, 2011. Our revenue to date has been limited to government grant revenue and no revenue has been recognized from the sale of our products. Therefore, adoption of this guidance is not expected to have a material impact on our financial statements.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

3. Investments

The following table summarizes our investments as of September 30, 2010, and December 31, 2009 (in thousands):

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
September 30, 2010				
Commercial Paper	$ 25,075	$	$	$ 25,075
Corporate Debt Securities	18,639	10	(6)	18,643
U.S. Government and Agency Securities	6,496	1		6,497
Total investments	$ 50,210	$ 11	$ (6)	$ 50,215
December 31, 2009				
Corporate Debt Securities	$ 3,502	$ 2	$ (1)	$ 3,503
Total investments	$ 3,502	$ 2	$ (1)	$ 3,503

4. Property and Equipment, Net

During December 2009, we entered into a lease agreement for a manufacturing and office facility, and in 2010 commenced renovations specific to our needs and operating requirements, including improvements and modifications to the facility s structure and principal operating systems. Pursuant to GAAP, this direct involvement renders us the owner of the facility for accounting purposes. During 2010, upon commencement of construction activities, we recorded $1.2 million for the fair value of the facility within property and equipment, net with a corresponding liability recorded to facility financing obligation on the balance sheet.

In addition, pursuant to the terms of the lease arrangement, the landlord provided incentives to fund aspects of the construction project totaling $1.8 million. The tenant improvement allowances afforded by the landlord are reflected on the balance sheet as a component of property and equipment as of September 30, 2010. As we account for the leased facility as the owner of the facility, we depreciate the assets over their expected useful lives.

5. Accrued Expenses and Other Current Liabilities

As of September 30, 2010 and December 31, 2009, our accrued expenses and other current liabilities consisted of the following (in thousands):

	September 30, 2010	December 31, 2009
Salaries and benefits	$ 3,610	$ 1,785
Professional services	520	358
Series F Convertible Preferred Stock issuance costs	1,500	

Capitalized IPO costs	764	
Short-term portion of deferred rent	559	
Other	1,563	498
	$ 8,516	$ 2,641

6. Facility Financing and Debt Obligations

Facility Financing Obligation

In December 2009 we entered into a lease agreement for a manufacturing and office facility. In order for the facility to meet our needs and operating requirements, substantial tenant improvements, including improvements to the structural elements and principal operating systems of the facility, were necessary. The lessor provided a tenant improvement allowance of $1.8 million to apply towards the necessary improvements and we remained obligated for additional amounts over the afforded allowance.

Due to our involvement in and the nature of the renovations made to the facility and our obligations to fund the costs of renovations exceeding the incentives afforded to us, we account for the facility as if we are the owner. During 2010, upon completion of the renovations we recorded $3.0 million of building and leasehold improvement assets, reflecting the $1.2 million fair value of the facility prior to commencing renovations and the $1.8 million of landlord incentives within property and equipment, net and a corresponding liability recorded to facility financing obligation on the balance sheet as of September 30, 2010.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

Based on the allocation of payments, the facility financing obligation bears an implied interest rate of 9.0%. During the nine-month period ended September 30, 2010, we recognized $0.1 million of interest expense in our statement of operations relating to the facility financing obligation.

As of September 30, 2010, the future minimum payments due under the facility financing obligation were as follows (in thousands):

	Financing obligation
2010	$ 99
2011	408
2012	426
2013	444
2014	619
Total Payments	1,996
Less amount representing interest	(1,105)
	891
Property reverting to landlord	2,161
Present value of obligation	3,052
Less current portion of obligation	(134)
Long-term portion of obligation	$ 2,918

As of September 30, 2010 the fair value approximates the carrying value of our note payable and facility financing obligation.

7. Commitments and Contingencies

During February 2010, we entered into a lease agreement for an additional office facility. Pursuant to the terms of the lease agreement, we are required to pay our share of the facility s operating expenses and will be subject to scheduled rent escalations. The lease agreement expires in July 2015, after which we may extend the term for up to three years subject to certain conditions .

Rent expense is recognized on a straight-line basis over the term of the lease. As of September 30, 2010, the future annual minimum lease payments under all noncancelable operating leases with an initial term in excess of one year are as follows (in thousands):

Years ending December 31:	Amount
2010	$ 513
2011	1,835
2012	1,271
2013	1,202
2014	927
Thereafter	500

Total minimum lease payments	$ 6,248

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

8. Convertible Preferred Stock and Junior Preferred Stock

As of September 30, 2010, our convertible preferred stock consisted of the following (dollars in thousands):

Series	Shares Authorized	Shares Outstanding	Proceeds Net of Issuance Costs	Conversion to Junior Preferred Stock	Carrying Amount	Liquidation Value
A	5,405,992	5,405,992	$ 5,237	$	$ 5,237	$ 5,406
B	3,530,768	3,500,000	4,495		4,495	4,550
C	5,342,197	5,322,396	10,669		10,669	10,751
D	12,525,000	12,500,000	49,812		49,812	50,000
E	26,866,790	26,866,790	187,841		187,841	188,068
F	19,659,240	14,265,782	105,874		105,874	108,848
Junior Preferred Stock	80,064,065	6,506,160	281	10,766	11,047	6,506
	153,394,052	74,367,120	$ 364,209	$ 10,766	$ 374,975	$ 374,129

As of December 31, 2009, our convertible preferred stock consisted of the following (dollars in thousands):

Series	Shares Authorized	Shares Outstanding	Proceeds Net of Issuance Costs	Conversion to Junior Preferred Stock	Carrying Amount	Liquidation Value
A	5,405,992	5,405,992	$ 5,237	$	$ 5,237	$ 5,406
B	3,530,768	3,500,000	4,495		4,495	4,550
C	5,342,197	5,322,396	10,669		10,669	10,751
D	12,525,000	12,500,000	49,812		49,812	50,000
E	27,857,195	26,866,790	187,841		187,841	188,068
Junior Preferred Stock	61,395,230	6,506,160	281	10,766	11,047	6,506
	116,056,382	60,101,338	$ 258,335	$ 10,766	$ 269,101	$ 265,281

In June 2010, we issued 13,204,185 shares of Series F convertible preferred stock at $7.63 per share for gross proceeds of $100.7 million and during July 2010, we issued an additional 1,061,597 shares of Series F convertible preferred stock at $7.63 per share for gross proceeds of $8.1 million.

Each share of convertible preferred stock converted on a two-for-one basis into common stock upon the closing of our IPO declared effective by the SEC on October 26, 2010. On November 1 and 4 , 2010, we received net proceeds of approximately $210.4 million including proceeds from the underwriter overallotment option, net of underwriting discounts, commissions, and estimated offering costs.

9. Common Stock

Our amended and restated certificate of incorporation in effect prior to the closing of the IPO authorized us to issue 121,668,835 shares of common stock as of September 30, 2010 with a $0.0001 par value per share. Common stockholders are entitled to dividends when and if declared by our board of directors. There have been no dividends declared to date. The holder of each share of common stock is entitled to one vote.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

10. Stock Option Plans

2005 Stock Plan

The following summarizes option activity under the 2005 Stock Plan for the nine-months ended September 30, 2010:

		Common Stock Options Outstanding		
	Shares available for grant	Number of shares	Exercise price	Weighted average exercise price
Balances, December 31, 2009	2,036,124	6,460,876	$0.70 8.50	$ 3.92
Additional shares reserved	2,500,000			
Options granted	(3,516,084)	3,516,084	$8.50 13.50	$ 10.07
Options exercised		(574,878)	$0.70 8.50	$ 2.85
Options canceled	188,228	(188,228)	$1.96 6.10	$ 6.10
Balances, September 30, 2010	1,208,268	9,213,854	$0.70 13.50	$ 6.29

Stock-based Compensation

Stock-based compensation expense related to options granted to employees and non-employees and stock-based compensation associated with junior preferred stock was allocated to research and development expense, sales, general and administrative expense as follows (in thousands):

	Three-Month Periods Ended September 30,		Nine-Month Periods Ended September 30,		Cumulative Period From July 14, 2000 (Date of Inception) to September 30, 2010
	2010	2009	2010	2009	
Research and development	$ 1,515	$ 773	$ 4,280	$ 2,077	$ 16,337
Sales, general and administrative	747	203	1,988	536	3,579
Total stock-based compensation expense	$ 2,262	$ 976	$ 6,268	$ 2,613	$ 19,916

Employee Stock-based Compensation

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 employee stock options was estimated using the following assumptions:

	Three-Month Periods Ended September 30,		Nine-Month Periods Ended September 30,	
	2010	2009	2010	2009
Expected term	6.05 years	5.7 years	6.0 - 6.05 years	5.7 years
Expected volatility	55%	47%	46 - 55%	47 - 48%
Risk-free interest rate	1.6 - 2.2%	2.4 - 2.6%	1.6 - 2.6%	1.8 - 3.0%
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 The expected volatility was based on the historical stock volatilities of several publicly listed comparable companies over a period equal to the expected terms of the options, as we do not have any trading history to use the volatility of our own common stock.

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

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.

Fair value of common stock The fair value of the shares of common stock underlying the stock options has historically been the responsibility of and determined by our board of directors. Because there has been no public market for our common stock, our board of directors has determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including independent third-party valuations of our common stock, 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. Through the date of the closing of the IPO declared effective by the SEC on October 26, 2010, the fair value of the underlying common stock was determined by our board of directors.

Forfeiture rate We estimate our forfeiture rate based on an analysis of our actual forfeitures and will continue to evaluate the adequacy of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover behavior and other factors. The impact from a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual number of future forfeitures differs from that estimated, we may be required to record adjustments to stock-based compensation expense in future periods.

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PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(A development stage enterprise)

Notes to Condensed Consolidated Financial Statements (Continued)

Each of the inputs discussed above is subjective and generally requires significant management and director judgment to determine.

11. Subsequent Events

Initial Public Offering

On October 26, 2010, our registration statement on Form S-1 relating to our IPO was declared effective by the SEC and our IPO closed on November 1, 2010 whereby we sold 12,500,000 shares of common stock at a price of $16.00 per share. The shares began trading on the NASDAQ Global Select Market on October 27, 2010. Subsequently on November 1, 2010, our underwriters exercised their overallotment option to purchase another an additional 1,875,000 shares of common stock at $16.00 per share, which transaction closed on November 4, 2010. We received net proceeds of approximately $210.4 million from the initial public offering, including proceeds from the underwriter overallotment option, and is net of underwriting discounts, commissions, and estimated offering costs.

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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. 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. We assume no obligation to update these forward-looking statements, whether as a result of new information, future events or otherwise.

Overview

We develop, manufacture and market an integrated platform for genetic analysis. We have developed an approach to study the synthesis and regulation of deoxyribonucleic acid, or DNA. Combining recent advances in nanofabrication, biochemistry, molecular biology, surface chemistry and optics, we created a technology platform called single molecule, real-time, or SMRT, technology. Our SMRT technology uses the natural processing power of enzymes, combined with specially designed reagents and detection systems, to record individual biochemical events as they occur. The ability to observe single molecule events in real time provides the research community with a new tool for investigating basic biochemical processes such as DNA synthesis. We believe our SMRT technology has the potential to advance scientific understanding by providing a window into biological processes that has not previously been open.

Our initial focus is on the DNA sequencing market where we have developed and introduced a third generation sequencing platform, the PacBio *RS*. We believe that the PacBio *RS*, which uses our proprietary SMRT technology, maintains many of the key attributes of currently available sequencing technologies while solving many of the inherent limitations of previous technologies. Our system provides long readlengths, fast time to result, flexibility in experimental design and is designed to be easy to use. The PacBio *RS* consists of an instrument platform and the proprietary products necessary to run the platform, which we call consumables. Our proprietary consumables are currently comprised of our SMRT Cells and three chemical reagent kits. The system is designed to be integrated into existing laboratory workflows and information systems. Customers that have placed orders for our products include research institutions and commercial companies that plan to use the PacBio *RS* for clinical, basic and agricultural research, drug discovery and development, biosecurity and bio-fuels. Our customers are also interested in a number of other potential applications, including molecular diagnostics, food safety and forensics, which may require us to enhance the capabilities of our current products or develop additional products. To date, we have neither commercially launched nor generated any revenue from our products.

Our SMRT technology has the potential to impact scientific study beyond DNA sequencing. We, and our scientific collaborators, have published a number of peer-reviewed articles in journals including *Science*, *Nature* and *Nature Methods* highlighting the power and potential applications of the SMRT platform. Potential applications that have been demonstrated include the study of chemical and structural modifications of DNA and the processing of ribonucleic acid, or RNA, and proteins, although these applications will not be available at commercial launch of the PacBio *RS* . We plan to provide these additional capabilities through enhancements to software and consumables without modifications to the PacBio *RS* hardware.

Limited Production Release Program and Backlog

We instituted a limited production release program pursuant to which we received orders for eleven limited production release instruments from entities such as genome centers, clinical, government and academic institutions and agricultural companies. This program was designed to help us garner quality feedback on the product prior to our full commercial launch scheduled for the first half 2011. We received orders for our limited production release instrument from Baylor College of Medicine, the Broad Institute of MIT and Harvard University, Cold Spring Harbor Laboratory, the U.S. Department of Energy Joint Genome Institute, The Genome Center at Washington University, Monsanto Company, the National Cancer Institute/SAIC-Frederick, the National Center for Genome Resources, the Ontario Institute for Cancer Research, Stanford University and Wellcome Trust Sanger Institute. As of November 15, 2010, we had shipped a total of eleven PacBio *RS* limited production release instruments. Limited production release instruments are designed to provide early access to the technology, while we complete the research, development and testing required for full commercial release. Therefore, performance during the limited production release phase will not be equal to that of the system at commercial release. There will be a continuous evolution of these performance variables, including readlength and throughput, during the limited production release phase as we develop new versions of our software and consumables. During a testing period, which we expect to last at least through the end of 2010, we will be working with these customers to obtain feedback

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and plan to incorporate relevant improvements into the commercial release version of the PacBio *RS*. Generally, each customer is obligated to pay us a deposit after accepting a limited production release instrument, and is entitled to receive an upgrade to a commercial release version of the PacBio *RS,* at which time each customer will be obligated to pay the balance of their order and we will then recognize revenue. While we expect to deliver upgrades to all of these customers, we cannot provide assurance that we will succeed and recognize revenue from our limited production release customers.

As of September 30, 2010, our backlog was approximately $20 million. We define backlog as purchase orders or signed contracts from our customers for which we have not yet recognized revenue. We expect to deliver all orders in our backlog by December 31, 2011, however we do not expect to recognize revenue on any orders prior to December 31, 2010 as we expect to commence deliveries of revenue generating commercial release PacBio *RS* instruments during the first half of 2011. Limited production release customers are entitled to receive an upgrade to the commercial release PacBio *RS* pursuant to the terms of the sales agreements, and as a result we will not recognize instrument revenue from these customers until we fulfill our upgrade obligation and those units satisfy applicable acceptance criteria. Estimating the dollar value of backlog requires significant judgments and estimates. We may never ship these units or receive revenue from these orders, and our backlog may not be indicative of our future revenue. If our orders in backlog do not result in sales, our operating results will suffer.

Financial Overview

We are a development stage company with limited operating history and have not recognized any revenue from sales or related services resulting from our planned principal operations. Our revenue to date has come from U.S. government grants. Our operations to date have been primarily focused on developing our technology, undertaking engineering activities to develop our products and conducting initial marketing of our products. Since our inception, we have incurred significant net losses and we expect to continue to experience significant losses as we invest in research and development, sales and administrative infrastructure. As of September 30, 2010, we had a deficit accumulated during the development stage of $295.7 million and have incurred net losses of $282.9 million since inception.

From inception through September 30, 2010, we have received net proceeds of $363.9 million from the issuance of convertible preferred stock, all of which automatically converted into common stock upon the closing of the IPO in the fourth quarter of 2010. On October 26, 2010, our registration statement on Form S-1 relating to our IPO was declared effective by the SEC and our IPO closed on November 1, 2010, we completed our initial public offering whereby we sold 12,500,000 shares of common stock at a price of $16.00 per share. The shares began trading on the NASDAQ Global Select Market under the trading symbol PACB on October 27, 2010. Subsequently on November 1, 2010, our underwriters exercised their overallotment option to purchase another an additional 1,875,000 shares of common stock at $16.00 per share, which transaction closed on November 4, 2010. We received net proceeds of approximately $210.4 million from the initial public offering, including proceeds from the underwriter overallotment option, net of underwriting discounts, commissions, and estimated offering costs.

Basis of Presentation

Revenue

To date, our revenue has consisted of amounts earned from government grants. The terms of these grants generally provide for reimbursement for certain research and development expenditures incurred by us over a contractually defined period. We expect to receive continued revenue in the future from government grants.

We will recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price to the buyer is fixed or determinable and collectability is reasonably assured.

We anticipate that our future revenue will be generated primarily from sales of our PacBio *RS* instrument and consumables including SMRT Cells, reagent kits and system service agreements. Provided the criteria for revenue recognition has been met, we generally expect to recognize instrument revenue upon delivery and customer acceptance. Service revenue is expected to consist of revenue derived from warranty and service agreements, which will be recognized in the period during which the related services are rendered. The timing of revenue recognition and the amount of revenue actually recognized in each case will be dependent upon a number of considerations and will require significant judgments and estimates based on the terms of each arrangement and the deliverables and obligations set forth therein.

Deliveries and subsequent customer acceptances of limited production release units of our PacBio *RS* will not result in revenue recognition as the contracts pursuant to which the units were delivered require the delivery of a full commercial release unit. Any amounts collected from customers will be deferred until such time as the full commercial release unit has been accepted at which time revenue will be recognized.

Operating Expenses

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*, 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 and supplies, facilities costs and other related overhead. We generally expense research and development costs as they are incurred unless we make non-refundable upfront payments for delivery of future goods or services, in which case we capitalize the payments and recognize the expense in the statement of operations when the goods or services are delivered. In the near term, we expect to hire additional employees, as well as incur contract-related expense, as we continue to invest in the development of our products.

In addition, manufacturing related expenses in 2010 were recorded in research and development expense as we have not yet recorded revenue. We expect that our research and development expense in 2011 will decline as compared to 2010 as we transition to commercial operations.

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Sales, General and Administrative Expense. Sales, general and administrative expense consists primarily of personnel-related expense related to our executive, legal, finance, sales, marketing, human resource, information technology and operations functions, as well as fees for professional services and facility costs. Professional services consist principally of external legal, accounting and other consulting services. We expect sales, general and administrative expense to increase as we incur additional costs related to commercializing our products and operating as a publicly traded company, including increased legal fees, accounting fees and costs of compliance with securities laws and other regulations. In addition, we expect to incur additional costs as we hire personnel and enhance our infrastructure to support the anticipated growth of our business.

Other Income and Expense

Interest Income (Expense), Net. Interest income (expense), net consists primarily of interest income earned on investment balances. Our interest income will vary each reporting period depending on our average investment balances during the period and market interest rates. We expect interest income to fluctuate in the future with changes in average investment balances and market interest rates. Interest income (expense), net also includes interest expense relating to loan and debt agreements and facility financing obligations resulting from lease agreements. We expect interest expense to fluctuate in the future with changes in the obligations.

Other Income (Expense), Net. Other income (expense), net consists primarily of the change in the fair value of our convertible preferred stock warrants. Our outstanding convertible preferred stock warrants are classified as liabilities and, as such, are marked-to-market at each balance sheet date with the corresponding gain or loss from the adjustment recorded as other income (expense), net. We will continue to record adjustments to the fair value of the warrants until they are exercised, automatically converted into warrants to purchase common stock or expire, at which time the warrants will no longer be remeasured at each balance sheet date. Upon the closing of our IPO declared effective by the SEC on October 26, 2010, our outstanding warrants automatically converted into warrants to purchase common stock.

Results of Operations

Comparison of the Nine-month Periods Ended September 30, 2010 and 2009

	Nine-Month Periods Ended September 30,		Increase/ (Decrease)	% Increase/ (Decrease)
	2010	2009		
	(in thousands, except percentages) (unaudited)			
Revenue	$ 1,394	$	$ 1,394	
Research and development	85,279	51,211	34,068	67%
Sales, general and administrative	19,760	8,785	10,975	125%
Loss from operations	(103,645)	(59,996)	43,649	
Interest income (expense), net	(38)	417	(455)	(109)%
Other income (expense), net	(64)	(61)	3	5%
Net loss	(103,747)	(59,640)	44,107	74%

Revenue

Revenue is comprised solely of government grant revenue. Revenue earned is dependent on the grant received, the amount of the grant and subsequent work performed pursuant to the grant. The increase in revenue realized for the nine-month period ended September 30, 2010 compared to the nine-month period ended September 30, 2009 was due to an increase in the amount of worked performed pursuant to an existing grant and a newly awarded grant.

Research and Development Expense

The $34.1 million increase in research and development expense for the nine-month period ended September 30, 2010 compared to the nine-month period ended September 30, 2009 was driven primarily by a $19.5 million increase in prototypes and prototype materials, a $11.6 million increase in personnel-related expense, including stock-based compensation, resulting from increased headcount, and a $3.4 million increase in facility and information technology expense. Research and development expense included stock-based compensation expense of $2.1

million and $4.3 million during the nine-month periods ended September 30, 2009 and 2010, respectively.

Sales, General and Administrative Expense

The $11.0 million increase in sales, general and administrative expense for the nine-month period ended September 30, 2010 compared to the nine-month period ended September 30, 2009 was driven primarily by a $7.2 million increase in personnel related expense, including stock-based compensation, resulting from increased headcount, a $2.9 million increase in promotional and customer support organizational activities, a $1.2 million increase in facility and information technology expense, offset by a $1.3 million decrease in professional services primarily related to patent prosecution. Sales, general and administrative expense included stock-based compensation expense of $0.5 million and $2.0 million during the nine-month periods ended September 30, 2009 and 2010, respectively.

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Interest Income (Expense), Net

The decrease in interest income for the nine-month period ended September 30, 2010 compared to the nine-month period ended September 30, 2009 was due primarily to lower investment balances and lower interest rates earned on our investments. In addition, during 2010 we recorded interest expense as a result of the financing obligation under a lease agreement originating during 2010.

Other Income (Expense), Net

The change in other income (expense), net primarily reflects the remeasurement of our warrant liabilities.

Comparison of the Three-month Periods Ended September 30, 2010 and 2009

	Three-Month Periods Ended September 30,		Increase/ (Decrease)	% Increase/ (Decrease)
	2010	2009		
	(in thousands, except percentages) (unaudited)			
Revenue	$ 220	$	$ 220	
Research and development	32,873	21,121	11,752	56%
Sales, general and administrative	8,043	3,447	4,596	133%
Loss from operations	(40,696)	(24,568)	16,128	66%
Interest income (expense), net	(3)	90	(93)	(103)%
Other income (expense), net	(9)	(51)	(42)	(82)%
Net loss	(40,708)	(24,529)	16,179	66%

Revenue

Revenue is comprised solely of government grant revenue. The increase in revenue realized for the three-month period ended September 30, 2010 compared to the three-month period ended September 30, 2009 was due to an increase in the amount of worked performed pursuant to an existing grant and a newly awarded grant.

Research and Development Expense

The $11.8 million increase in research and development expense for the three-month period ended September 30, 2010 compared to the three-month period ended September 30, 2009 was driven primarily by a $7.1 million increase in prototype and prototype materials, a $3.5 million increase in personnel-related expense, including stock-based compensation, resulting from increased headcount, and a $1.0 million increase in facility and information technology expense. Research and development expense included stock-based compensation expense of $0.8 million and $1.5 million during the three-month periods ended September 30, 2009 and 2010, respectively.

Sales, General and Administrative Expense

The $4.6 million increase in sales, general and administrative expense for the three-month period ended September 30, 2010 compared to the three-month period ended September 30, 2009 was driven primarily by a $2.9 million increase in personnel-related expense, including stock-based compensation, resulting from increased headcount, a $1.2 million increase in promotional and customer support organization activities, a $0.8 million increase in facility and information technology expense, offset by a $0.8 million decrease in professional services related to patent prosecution. Sales, general and administrative expense included stock-based compensation expense of $0.2 million and $0.7 million during the three-month periods ended September 30, 2009 and 2010, respectively.

Interest Income (Expense), Net

The increase in interest income for the three-month period ended September 30, 2010 compared to the three-month period ended September 30, 2009 was primarily a result of higher average investment balances in 2010 as compared to 2009.

Other Income (Expense), Net

The change in other income (expense), net reflects the remeasurement of our convertible preferred stock warrant liability.

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Critical Accounting Policies and Estimates

We believe that the following critical accounting policies involve our more significant judgments, assumptions and estimates and, therefore, could potentially have a significant impact on our consolidated financial statements: revenue recognition, valuation of stock-based awards, leases, and income taxes.

There have been no material changes in the matters for which we make critical accounting estimates in the preparation of our condensed consolidated financial statements during the three- and nine-month periods ended September 30, 2010 as compared to those disclosed in our prospectus filed pursuant to rule 424(b) under the Securities Act with the Securities and Exchange Commission on October 27, 2010.

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Liquidity and Capital Resources

Since our inception, and as of September 30, 2010, we have financed our operations primarily through an aggregate of $363.9 million from private placements of convertible preferred stock. As of September 30, 2010, we had cash, cash equivalents and investments of $112.9 million and no debt obligations. For the nine-month period ended September 30, 2010, we closed private placements of our Series F convertible preferred stock with net proceeds of $105.9 million.

On October 26, 2010, our registration statement on Form S-1 relating to our IPO was declared effective by the SEC and our IPO closed on November 1, 2010, whereby we sold 12,500,000 shares of common stock at a price of $16.00 per share. Subsequently on November 1, 2010, the underwriters exercised their overallotment option to purchase another 1,875,000 shares of common stock at $16.00 per share, which transaction closed on November 4, 2010. We received net proceeds of approximately $210.4 million from the initial public offering, including proceeds from the underwriter overallotment option, net of underwriting discounts, commissions, and estimated offering costs.

The following table summarizes our cash flows activities for the periods indicated.

	Nine-Month Periods Ended September 30,	
	2010	2009
	(in thousands)	
Net cash used in operating activities	$ (82,949)	$ (50,595)
Net cash provided by (used in) investing activities	(50,738)	$ 8,506
Net cash provided by financing activities	107,172	$ 67,230

During the nine-month periods ended September 30, 2009 and 2010, we used $1.6 million and $4.0 million in cash, respectively, to fund capital expenditures. We currently anticipate making significant capital expenditures in the future primarily for purchases of equipment to be used in research and manufacturing. Beyond our investment in research and manufacturing equipment, we expect to invest capital in additional production arrangements, the timing and amount of which will depend on our business and financial outlook and the specifics of the opportunity.

We believe that existing cash, cash equivalents and investments, and the net proceeds from our initial public offering will be sufficient to fund our projected operating requirements for at least 12 months. If we cannot generate a sufficient amount of product revenue, we will need to finance future cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements. Such additional funds may not be available on terms acceptable to us or at all, particularly in light of recent market conditions. If we raise funds by issuing equity securities, the ownership of our stockholders will be diluted and holders of the new equity securities may have priority rights over existing stockholders

Net Cash Used in Operating Activities

Our primary uses of cash from operating activities are for personnel-related expenditures and equipment related to research and development activities. The net cash used for the nine-month periods ended September 30, 2009 and 2010 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 $50.6 million for the nine-month period ended September 30, 2009 as compared to $82.9 million for the nine-month period ended September 30, 2010, driven primarily by net losses of $59.6 million and $103.7 million, respectively, offset by depreciation and stock-based compensation of $4.9 million and $10.0 million, respectively, and changes in operating assets and liabilities of $4.0 million and $10.8 million, respectively, resulting from an increase in accounts payable and accrued liabilities.

Net Cash Provided by (Used in) Investing Activities

Our investing activities consist primarily of net investment purchases, maturities and sales and capital expenditures. Net cash provided by investing activities was $8.5 million for the nine-month period ended September 30, 2009, driven by net maturities of investments of $10.1 million, as compared to net cash used in investing activities of $50.7 million for the nine-month period ended September 30, 2010 driven by net investment purchases of $46.7 million and capital expenditures of $4.0 million.

Net Cash Provided by Financing Activities

For the nine-month period ended September 30, 2009, cash provided by financing activities was $67.2 million, primarily as a result of the receipt of $68.0 million from our sale of Series E convertible preferred stock. For the nine-month period ended September 30, 2010, cash provided by financing activities was $107.2 million, primarily as a result of the receipt of net proceeds of $105.9 million from the sale of our Series F convertible preferred stock and $1.3 million from option exercises.

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Contractual Obligations, Commitments and Contingencies

In December 2009 we entered into a build-to-suit lease agreement for a manufacturing and office facility where we are considered the owner of the project under GAAP. When we are considered the owner of a project, we record the shell of the facility at its fair value at the date construction commences with a corresponding facility financing obligation. During 2010, upon completion of the renovations, we recorded $3.0 million of building and leasehold improvement assets and a corresponding liability to facility financing obligation on the balance sheet. Minimum payments of $0.6 million are due within the next 12 months.

As of September 30, 2010, we had operating lease obligations of $6.2 million, of which the longest remaining lease expires in 2015.

Off-Balance Sheet Arrangements

As of September 30, 2010 we did not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About 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 one year. 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 securities of high credit quality. The securities in our investment portfolio are not leveraged, are classified as available for sale and are, due to their very 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.

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 September 30, 2010 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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PART II OTHER INFORMATION

Item 1. Legal Proceedings.

We are presently involved in a patent interference with Life Technologies Corporation, or Life, related to U.S. Patent No. 7,329,492, that was acquired by Life from its acquisition of Visigen Biotechnologies, Inc., and U.S. Patent Application Serial No. 11/459,182, owned by us relating to a particular method for single molecule sequencing. An interference is a phased process whereby the U.S. Patent and Trademark Office, or USPTO, determines which of two patents, or a patent and a patent application, that claim the same or overlapping subject matter, is entitled to the earliest priority date of invention, and thus which patent or patent application is entitled to be issued covering that same or overlapping subject matter. In this interference, it was determined that we are the senior party in the interference based upon an initially accorded priority date prior to that of the Life patent. The first phase concluded on December 1, 2009, when the parties presented oral arguments to the USPTO s Board of Patent Appeals and Interferences, or BPAI. As of November 29, 2010, no decision has yet been rendered by the BPAI on the parties respective arguments.

On August 27, 2010, we were named as a defendant in a complaint filed by Helicos Biosciences Corporation (Helicos) in the United States District Court for the District of Delaware (Case No. 1:10-CV-00735 SLR). In the complaint, Helicos alleges that we are infringing, inducing others to infringe, and contributing to the infringement by others of two patents in-licensed by Helicos and two patents owned by Helicos, by making, using, and selling our SMRT technology for single molecule sequencing of DNA and teaching customers how to use the SMRT technology and PacBio RS sequencing platform. The four patents asserted by Helicos are U.S. Patent Nos. 7,645,596 and 7,037,687 (each titled Method of Determining the Nucleotide Sequence of Oligonucleotides and DNA Molecules), 7,169,560 (titled Short Cycle Methods for Sequencing Polynucleotides), and 7,767,400 (titled Paired-end Reads in Sequencing by Synthesis). Helicos seeks a permanent injunction enjoining us from further infringement of the asserted patents, and unspecified monetary damages, including enhanced damages under 35 U.S.C. §284, costs, attorneys fees and other relief as the court deems just and proper. While we cannot guarantee any outcome of this lawsuit, we believe we have meritorious claims and defenses against Helicos that we intend to pursue vigorously.

On November 3, 2010, Affymetrix, Inc. (Affymetrix) filed a complaint against us in the Superior Court for the State of California in Santa Clara County. In the complaint, Affymetrix alleges that we have engaged in tortious interference with contractual relationships between Affymetrix and Affymetrix s current and former employees, related to our hiring of former Affymetrix employees. Affymetrix also alleges that we have intentionally interfered with Affymetrix s prospective economic advantage by inducing Affymetrix s current and former employees to sever their employment relationships with Affymetrix. Affymetrix also alleges that we have engaged in a conspiracy with certain unnamed former Affymetrix employees to induce such employees to breach certain contractual obligations to Affymetrix related to our hiring of former Affymetrix employees. In the complaint, Affymetrix is seeking unstated compensatory and consequential damages, unstated exemplary and punitive damages and for a temporary and permanent injunction prohibiting us from soliciting Affymetrix employees and using or disclosing any Affymetrix confidential information. As of November 29, 2010, we have not been served with a copy of the complaint. We believe the Affymetrix complaint is entirely without merit and intend to vigorously defend ourselves against Affymetrix claims.

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

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 final prospectus dated October 26, 2010 filed with the Securities and Exchange Commission, which could materially affect our business, financial condition, results of operations and prospects. The risks described below are not the only risks facing us. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially affect our business, financial condition, results of operations and prospects

Risks Related to Our Business

We are a development stage company with limited operating history.

We may never achieve commercial success and have not yet commercially launched our first product. We have no historical financial data upon which we may base our projected revenue. We have limited historical financial data upon which we may base our planned operating expense or upon which you may evaluate us and our 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;

comply with evolving regulatory requirements applicable to our products;

anticipate and adapt to changes in our market;

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

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

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implement an effective marketing strategy to promote awareness 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;

provide appropriate levels of customer training and support for our products;

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 have generated no revenue from product sales to date. We expect to incur increasing costs as we grow our business. 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.

Since we have not yet commercialized our products, we cannot be sure that they will gain acceptance in the marketplace. Our success depends, in part, on our ability to develop products that displace or supplement current technology, as well as to expand the market for genetic analysis to include new applications that are not practical with current technologies. To accomplish this, we must develop and successfully commercialize our SMRT technology for use in a variety of life science applications. There can be no assurance that we will be successful in securing 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 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 fails to develop or 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.

The products we expect to introduce are highly complex, with unknown 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 complete the development or manufacture of, or to provide adequate support for, our products. If our products have reliability or other quality issues or require unexpected levels of support, our reputation and business could be harmed. We cannot estimate with any certainty the cost of service and support. We intend to ship our Pac Bio *RS* instruments with one year of service included in the purchase price with an option to purchase an additional year of service. If service and support costs are more than we anticipate, our business and operations may be adversely affected.

We may not be able to produce instruments with the specifications required by our customers.

We have developed performance standards for our commercial products that may not be achieved using our current design and manufacturing processes. If the actual performance of the commercial instrument deviates substantially from our target specifications or is below the performance mandated by our customers, 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.

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We may be unable to develop our future commercial applications.

Our future business depends on our ability to execute on our plans to develop, manufacture, and market additional commercial applications of our SMRT technology, including SMRT Kinetic Detection, SMRT Transcription, SMRT RNA Sequencing, SMRT Translation and SMRT Ligand Binding. These 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.

We may be unable to 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 commercialize our products, we will need to supply our customers with consumable kits to be used with our instruments. We have limited experience manufacturing these consumable kits. For example, the manufacture of our SMRT Cells involves complex manufacturing processes. Since we are in an early phase of producing SMRT Cells, our current manufacturing yields are low and therefore the cost of manufacturing these products is high. 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 never earn revenue from our orders in backlog.

Our backlog represents product orders from our customers that we have confirmed and for which we have not yet recognized revenue. We may never ship products represented by this backlog or 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 not to be completed or delayed, 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 will suffer and we may have write-offs associated with excess or obsolete inventory.

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 the products we are developing, 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 that develop as a result of technological and scientific advances. These new market opportunities may be outside the scope of our proven expertise or in areas which have unproven market demand, and the utility and value of new products and services developed by us may not be accepted in the markets served by the new products. 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 these 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 we introduce 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.

A significant portion of our potential sales depends on customers capital spending budgets that may be subject to significant and unexpected variation.

A substantial portion of our potential product sales represent significant capital purchases by customers. Our potential customers include academic and government institutions, medical research institutions, pharmaceutical, biotechnology and chemical companies, and 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, the spending priorities among various types of research equipment and policies regarding capital expenditures during recessionary 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.

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We have limited experience in sales and marketing of our products and, as a result, may be unable to successfully commercialize our products.

We have limited experience in sales and marketing of our products. Our ability to achieve profitability depends on our being able to attract customers for our products. Although members of our sales and marketing team have considerable industry experience and have engaged in marketing activities for our products, in the future we must expand our sales, marketing, distribution and customer support capabilities with the appropriate technical expertise to effectively market our products. To perform sales, marketing, distribution and customer support successfully, we will face a number of risks, including:

- our ability to attract, retain and manage the sales, marketing and service force necessary to commercialize and gain market acceptance for our technology;
- the time and cost of establishing 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 initiate and execute successful commercialization activities.

We may seek to enlist one or more third parties to assist with sales, distribution and customer support globally or in certain regions of the world. There is no guarantee, if we do seek to enter into such arrangements, that we will be successful in attracting desirable sales and distribution partners or 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.

We have limited experience in manufacturing our products. If we are unable to establish manufacturing capacity by ourselves or with partners in a timely manner, commercialization of our products would be delayed, which would result in lost revenue and harm our business.

In order to commercialize our products in volume, we need to either build additional internal manufacturing capacity or contract with one or more manufacturing partners, or both. Our technology and the manufacturing process for our products is highly complex, involving a large number of unique parts, and we may encounter unexpected difficulties in manufacturing our products. There is no assurance that we will be able to continue to build manufacturing capacity internally or find one or more suitable manufacturing partners, or both, to meet the volume and quality requirements necessary to be successful in the market. Manufacturing and product quality issues may arise as we increase 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 establishing or expanding our manufacturing capacity could diminish our ability to develop or 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 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 semiconductor chips, optics and cameras. 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 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. 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. In order to

sustain our commercial launch, which will involve multiple shipments 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 employee 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. Furthermore, if the third-party carriers damage or destroy our instrument, it could take significant time to repair or replace the instrument. 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.

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

We expect to experience rapid and substantial growth, which will place a strain on our human and capital resources. If we are unable to manage this 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, including an expansion of our executive management team. 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 commercialize our technology successfully. Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

Hugh Martin, our Chief Executive Officer, has been diagnosed with a form of cancer, and the impact of this condition on his ability to lead the company in the future may be uncertain.

Mr. Martin has informed us that he has been diagnosed with multiple myeloma, a form of cancer. Although his condition has not had any impact on Mr. Martin s performance in his role as Chief Executive Officer or on the overall management of the company, we can provide no assurance that his condition will not affect his ability to perform the role of Chief Executive Officer in the future. If Mr. Martin becomes unable to continue to perform his role as Chief Executive Officer, we would need to select a new Chief Executive Officer which we may not be able to do easily, and may require other senior management to divert part of their attention from their primary duties, which could have a material adverse effect on our business or operations.

We depend on the continuing efforts of our senior management team and other key personnel. If we lose members of our senior management team or other key personnel or are unable to successfully retain, recruit and train qualified scientists, 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. Many of 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 has been experiencing a significant economic downturn, and global credit and capital markets have experienced substantial 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. 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 may need additional financing to fund our existing operations. Securities we issue to fund our operations could dilute your ownership.

We may decide to raise additional funds through public or private debt or equity financing. Such additional funds may not be available on terms acceptable to us or at all, particularly in light of recent market conditions. If we raise funds by issuing equity securities, the percentage ownership of our stockholders will be reduced, and the new equity securities may have priority rights over your investments. We may delay, limit or eliminate some or all of our proposed operations and research and development if adequate funds are not available.

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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 is likely to 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.

We expect that our sales cycle will be lengthy and unpredictable, which will make it difficult for us to forecast revenue and may increase the magnitude of quarterly fluctuations in our operating results.

Our PacBio *RS* is expected to have a lengthy sales and purchase order cycle because it is a major capital item and generally requires the approval of our customers senior management. 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. These fluctuations also mean that investors will 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 assure you that a material performance problem will not arise. Despite testing, defects or errors may arise in our products, which could result in a failure to achieve market acceptance or expansion, diversion of development resources, injury to our reputation and increased warranty, service and maintenance costs. We intend to ship our PacBio *RS* instruments with one year of service included in the purchase price with an option to purchase an additional year of service. We will provide a twelve-month warranty on the PacBio *RS* . The warranty is limited to replacing, repairing or giving credit for, at our option, any instrument for which written notice of a warranty claim is provided to us within the warranty period. We will also provide a warranty for our consumables, but claims must be made within 90 days from the date of delivery or the shelf life date or use by date, if earlier. 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, which could be costly and time-consuming to defend and result in substantial damages. Although we have product liability insurance, any future product liability insurance that we procure 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 do 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.

Adoption of our products by customers may depend on the availability of informatics tools, some of which may be developed by third parties.

Our commercial success may depend in part upon the development of 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 informatics tools may impede the adoption of our products and may adversely impact our business.

Ethical, legal 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 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 used for the diagnosis or treatment of disease. However, in the future, certain of our products or related applications could be subject to FDA regulation,

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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 contamination at our or our predecessors past or present facilities and at third-party waste disposal sites. We could also be held liable for damages arising out of human exposure to hazardous materials. There can be no assurance that violations of environmental, health and safety laws will not occur as a result of human error, accident, equipment failure or other causes. The failure to comply with past, present or future laws could result in the imposition of substantial fines and penalties, remediation costs, property damage and personal injury claims, investigations, the suspension of production or product sales, loss of permits or a cessation of operations. Any of these events could harm our business, operating results and financial condition. We also expect that our operations will be affected by new environmental, health and safety laws and regulations on an ongoing basis, or more stringent enforcement of existing laws and regulations. Although we cannot predict the ultimate impact of any such new laws and regulations, or such more stringent enforcement, they will likely result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how we manufacture them, which could have a material adverse effect on our business, operating results and financial condition.

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

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

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.

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.

We are subject to existing and potential additional governmental regulation that may impose burdens on our operations, and the markets for our products may be narrowed.

We are subject, both directly and indirectly, to the adverse impact of existing and potential future government regulation of our operations and markets. For example, export of our instruments may be subject to strict regulatory control in a number of jurisdictions. The failure to satisfy export control criteria or to obtain necessary clearances could delay or prevent shipment of products, which could adversely

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affect our revenue and profitability. Moreover, the life sciences industry, which is expected to be one of the primary markets for our technology, has historically been heavily regulated. There are, for example, laws in several jurisdictions restricting research in genetic engineering, which may narrow our markets. Given the evolving nature of this industry, legislative bodies or regulatory authorities may adopt additional regulation that adversely affects our market opportunities. Additionally, if ethical and other concerns surrounding the use of genetic information, diagnostics or therapies become widespread, there may be less demand for our products. See also our risk factor above titled Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our technology. Our business is also directly affected by a wide variety of government regulations applicable to business enterprises generally and to companies operating in the life science industry in particular. See also our risk factors above titled 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 cost and delay our commercialization efforts, thereby materially and adversely affecting our business and results of operations and 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. Failure to comply with these regulations or obtain or maintain necessary permits and licenses could result in a variety of fines or other censures or an interruption in our business operations which may have a negative impact on our ability to generate revenue and could increase the cost of operating our business.

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

Ensuring that we have adequate internal financial and accounting controls and procedures in place to produce accurate financial statements on a timely basis is a costly and time-consuming effort that needs to be re-evaluated frequently. We have in the past discovered, and may in the future discover, areas of our internal financial and accounting controls and procedures that need improvement. Until recently we have limited our accounting and internal control structure to meet the external financial reporting obligations required by the terms of the private equity purchased and held by our investors. The rapid growth of our operations and the planned initial public offering created a need for additional resources within the accounting and finance functions due to the increasing need to produce timely financial information and to ensure the level of segregation of duties customary for a U.S. public company. We have since hired additional resources in the accounting and finance function and continue to reassess the sufficiency of finance personnel in response to these increasing demands and expectations.

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

We expect that we will be required to comply with Section 404 of the Sarbanes-Oxley Act in connection with our annual report on Form 10-K for the year ending December 31, 2011. We expect to expend significant resources in developing the necessary documentation and testing procedures required by Section 404. We cannot be certain that the actions we will be taking to improve our internal controls over financial reporting will be sufficient, or that we will be able to implement our planned processes and procedures in a timely manner. In addition, if we are unable to produce accurate financial statements on a timely basis, investors could lose confidence in the reliability of our financial statements, which could cause the market price of our common stock to decline and make it more difficult for us to finance our operations and growth.

The requirements of being a public company may strain our resources, divert management s attention and affect our ability to attract and retain qualified board members.

As a public company, we incur additional accounting, legal and other expenses associated with our public company reporting requirements. We will also incur costs associated with corporate governance requirements, including requirements under the Sarbanes-Oxley Act of 2002, as well as rules and regulations implemented by the SEC and The NASDAQ Stock Market. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. Furthermore, these rules and regulations could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers. We are currently evaluating and monitoring developments with respect to these rules and regulations, and we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

New laws and regulations as well as changes to existing laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and rules adopted by the SEC and the NASDAQ, would likely result in increased costs to us as we respond to their

requirements.

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

Under Section 382 of the Internal Revenue Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. We believe that we have had one or more ownership changes, as a result of which our existing NOLs are currently subject to limitation. Future changes in our stock ownership, some of

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which are outside of our control, could result in additional ownership changes under Section 382. We are unable to predict the future ownership and other variables considered by, and elections available pursuant to, Section 382 for concluding on the usability of our net operating losses. We may not be able to utilize a material portion of our NOLs, even if we attain profitability.

Risks Related to Our Intellectual Property

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

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

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

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

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

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

us, the extent to which we will be able to enforce our patents against third parties or the extent to which third parties may be able to enforce their patents against us.

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

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

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

In addition to patents, we also rely upon trademarks, trade secrets, copyrights and unfair competition laws, as well as license agreements and other contractual provisions, to protect our intellectual property and other proprietary rights. Despite these measures, any of our intellectual property rights could be challenged, invalidated, circumvented or misappropriated. In addition, we attempt to protect our intellectual property and proprietary information by requiring our employees, consultants and certain academic collaborators to enter into confidentiality and assignment of inventions agreements, and by requiring our third-party manufacturing partners to enter into confidentiality agreements. There can be no assurance, however, that such measures will provide adequate protection for our intellectual property and proprietary information. These agreements may be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets and other proprietary information may be disclosed to others, or others may gain access to or disclose our trade secrets and other proprietary information. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. Additionally, others may independently develop proprietary information and techniques that are substantially equivalent to ours. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

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

Our pending, issued and granted U.S. and foreign patents and patent applications have been, and may in the future be, subject to challenges by third parties asserting prior invention by others or invalidity on various grounds, through proceedings, such as interferences, reexamination or opposition proceedings. For example, we are presently involved in a patent interference with Life Technologies Corporation, or Life, related to U.S. Patent No. 7,329,492, that was acquired by Life in its acquisition of Visigen Biotechnologies, Inc., and U.S. Patent Application Serial No. 11/459,182, owned by us, in which the parties are each claiming entitlement to patent claims directed to a type of single molecule, real-time sequencing technology. For more information on this proceeding, please see Legal Proceedings in Part II, Item 1 of this Quarterly Report on Form 10-Q. Addressing these challenges to our intellectual property can be costly and distract management s attention and resources. Additionally, as a result of these challenges, our patents or pending patent applications may be determined to be unpatentable to us, invalid or unenforceable, in whole or in part. Accordingly, adverse rulings from the relevant patent offices in these proceedings may negatively impact the scope of our intellectual property protection for our products and technology and may adversely affect our business.

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

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

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

Our intellectual property rights involve complex factual, scientific and legal questions. We operate in an industry characterized by significant intellectual property litigation. Even though we may believe that we have a valid patent on a particular technology, other companies may have from time to time taken, and may in the future take, actions that we believe violate our patent rights. Legal actions to enforce these patent rights can be expensive and may involve the diversion of significant management time and resources. Our enforcement actions may not be successful, could give rise to legal claims against us and could result in some of our intellectual property rights being determined to be invalid or not enforceable.

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

Our products are based on complex, rapidly developing technologies. We may not be aware of issued or previously filed patent applications belonging to third parties that mature into issued patents that cover some aspect of our products or their use. In addition, because patent litigation is complex and the outcome inherently uncertain, our belief that our products do not infringe third-party patents of which we are aware or that

such third-party patents are invalid and unenforceable may be determined to be incorrect. As a result, third parties may claim that we infringe their patent rights and may file lawsuits or engage in other proceedings against us to enforce their patent rights. We are presently involved in a lawsuit filed by Helicos Biosciences Corporation that alleges that our products infringe patents owned and in-licensed by Helicos (see Legal Proceedings). In defending this lawsuit, we expect to incur substantial costs, and experience diversion of attention of our management and technical personnel. An unfavorable outcome in this lawsuit could result in our having to pay damages, royalties or both

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to Helicos, and could prevent us from selling some or all of our products. In addition, as we enter new markets, our competitors and other third parties may claim that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. In fact, several companies in our industry, such as Affymetrix, Inc., Life Technologies Corporation, Illumina, Inc. and Complete Genomics, Inc., are involved in patent litigation with each other. Additionally, we have certain obligations to many of our customers to indemnify and defend them against claims by third parties that our products or their use infringe any intellectual property of these third parties. In defending ourselves against any of these claims, we could incur substantial costs, and the attention of our management and technical personnel could be diverted. Even if we have an agreement to indemnify us against such costs, the indemnifying party may be unable to uphold its contractual obligations. To avoid or settle legal claims, it may be necessary or desirable in the future to obtain licenses relating to one or more products or relating to current or future technologies, which could negatively affect our gross margins. We may not be able to obtain these licenses on commercially reasonable terms, or at all. We may be unable to modify our products so that they do not infringe the intellectual property rights of third parties. In some situations the results of litigation or settlement of claims may require that we cease allegedly infringing activities which could prevent us from selling some or all of our products. The occurrence of these events may have a material adverse effect on our business, financial condition or results of operations.

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

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

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

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

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

Risks Relating to Owning Our Common Stock

Our share price may be volatile, and you may be unable to sell your shares at or above the price you paid to acquire it.

The market price of our common stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- actual or anticipated fluctuations in our financial condition and operating results;

announcements of technological innovations by us or our competitors;

overall conditions in our industry and market;

addition or loss of significant customers;

changes in laws or regulations applicable to our products;

actual or anticipated changes in our growth rate relative to our competitors;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel;

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competition from existing products or new products that may emerge;

issuance of new or updated research or reports by securities analysts;

fluctuations in the valuation of companies perceived by investors to be comparable to us;

disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain intellectual property protection for our technologies;

announcement or expectation of additional financing efforts;

sales of our common stock by us or our stockholders;

share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;

the expiration of contractual lock-up agreements with our executive officers, directors and stockholders; and

general economic and market conditions.

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

If securities or industry analysts do not publish research or reports about our business or publish negative reports about our business, our share price and trading volume could decline.

The trading market for our common stock will depend on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

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

The holders of a significant number of shares of our common stock and holders of warrants to purchase shares of common stock will be entitled to rights with respect to registration of such shares under the Securities Act pursuant to an investor rights agreement between such holders and us. If such holders, by exercising their registration rights, sell a large number of shares, they could adversely affect the market price for our common stock. If we file a registration statement for the purpose of selling additional shares to raise capital and are required to include shares held by these holders pursuant to the exercise of their registration rights, our ability to raise capital may be impaired. We filed a registration statement on Form S-8 under the Securities Act to register shares for issuance under our 2004 Equity Incentive Plan, 2005 Stock Plan, 2010 Equity Incentive Plan, 2010 Employee Stock Purchase Plan and 2010 Outside Director Equity Incentive Plan. Each of our 2010 Equity Incentive

Plan, 2010 Employee Stock Purchase Plan and 2010 Outside Director Equity Incentive Plan provides for automatic increases in the shares reserved for issuance under the plan which could result in additional dilution to our stockholders. Once we register these shares, they can be freely sold in the public market upon issuance and vesting, subject to a 180-day lock-up period and other restrictions provided under the terms of the applicable plan and/or the option agreements entered into with option holders.

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

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

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

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

authorize our board of directors to issue, without further action by the stockholders, up to 50,000,000 shares of undesignated preferred stock and up to approximately 948,000,000 shares of authorized but unissued shares of common stock;

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require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;

specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the Board, the Chief Executive Officer or the President;

establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;

establish that our board of directors is divided into three classes, Class I, Class II and Class III, with each class serving staggered terms;

provide that our directors may be removed only for cause; and

provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum.

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

Our large number of authorized but unissued shares of common stock may potentially dilute your stockholdings.

We have approximately 948,000,000 shares of authorized but unissued shares of common stock. Our board of directors may issue shares of common stock from this authorized but unissued pool from time to time without stockholder approval, resulting in the dilution of our existing stockholders.

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

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

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

Recent Sales of Unregistered Securities

From July 1, 2010 to September 30, 2010, we granted stock options to purchase 918,041 shares of our common stock at exercise prices ranging from $12.74 to $13.50 per share to our employees under our 2005 Stock Plan, as amended. From July 1, 2010 to September 30, 2010, we issued and sold an aggregate of 270,183 shares of our common stock to our employees at a price ranging from $0.70 to $8.50 per share for an aggregate of $840,130 pursuant to exercises of options granted under our 2005 Stock Plan, as amended. The sales and issuances of securities in the transactions described above were deemed to be exempt from registration under the Securities Act of 1933, as amended (the Securities Act), in reliance upon Rule 701 promulgated under the Securities Act, as transactions pursuant to compensatory benefit plans and contracts relating to compensation as provided under Rule 701, or Section 4(2) of the Securities Act.

From July 1, 2010 to September 30, 2010, we sold and issued 530,797 shares of Series F convertible preferred stock to four accredited investors, at $15.26 per share, for a total consideration of 8,099,962. From July 1, 2010 to September 30, 2010, we granted 20,930 shares of common stock to two investors, which shares were valued at $13.42 per share, for an aggregate value of $280,880. The sales and issuances of such shares of Series F convertible preferred stock and the grant of common stock were deemed to be exempt from registration under the Securities Act in reliance upon Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering.

Use of Proceeds

Our initial public offering of common stock was effected through a Registration Statement on Form S-1 (File No. 333-168858) that was declared effective by the Securities and Exchange Commission on October 26, 2010, which registered an aggregate of 14,375,000 shares of our common stock. On November 1, 2010, we sold 12,500,000 shares of common stock at an initial public offering price of $16.00 per share, for aggregate gross proceeds of $200 million. The underwriters of the offering were J.P. Morgan Securities Inc., Morgan Stanley & Co. Incorporated, Deutsche Bank Securities Inc. and Piper Jaffray & Co. On November 4, 2010, in connection with the exercise of the underwriters over-allotment option, 1,875,000 additional shares of common stock were sold on our behalf at the initial public offering price of $16.00 per share, for aggregate gross proceeds of $30 million.

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We paid to the underwriters underwriting discounts totaling approximately $16.1 million in connection with the offering. In addition, we incurred expenses of approximately $3.5 million in connection with the offering, which when added to the underwriting discounts paid by us, amount to total expenses of approximately $19.6 million. Thus, the net offering proceeds to us, after deducting underwriting discounts and offering expenses, were approximately $210.4 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning ten percent or more of any class of our equity securities or to any other affiliates.

There was no material change in the use of proceeds from our initial public offering as described in our final prospectus filed with the SEC pursuant to Rule 424(b).

Item 6. Exhibits

The exhibits listed in Exhibit Index immediately preceding the exhibits are filed (other than exhibits 32.1 and 32.2) as part of this Quarterly Report on Form 10-Q and such Exhibit Index is incorporated herein by reference.

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Signatures

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

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

Date: November 30, 2010 By: /s/ SUSAN K. BARNES
Susan K. Barnes

Chief Financial Officer

Date: November 30, 2010 By: /s/ BRIAN B. DOW
Brian B. Dow

Principal Accounting Officer

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Exhibit Index

Exhibit Number	Exhibit Description
3.1	Amended and Restated Certificate of Incorporation
3.2	Amended and Restated Bylaws
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).
32.2	Certification of the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350).