FLUIDIGM CORP
Form 10-Q
May 12, 2011
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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 three months ended March 31, 2011

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: 001-34180

FLUIDIGM CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**77-0513190**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**

7000 Shoreline Court, Suite 100

South San Francisco, California 94080

(Address of principal executive offices) (Zip Code)

(650) 266-6000

Registrant s telephone number, including area code

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

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 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.

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

As of March 31, 2011, there were 19,965,466 shares of the Registrant s common stock outstanding.

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FLUIDIGM CORPORATION

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)

	March 31, 2011 (Unaudited)	December 31, 2010 (Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	$ 55,831	$ 5,723
Available-for-sales securities	21,869	
Accounts receivable (net of allowances of $467 at March 31, 2011 and December 31, 2010)	7,457	8,100
Inventories	4,653	4,893
Prepaid expenses and other current assets	1,033	2,165
Total current assets	90,843	20,881
Property and equipment, net	2,285	2,328
Investment, at cost	1,340	1,340
Other non-current assets	250	252
Total assets	$ 94,718	$ 24,801
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS EQUITY (DEFICIT)		
Current liabilities:		
Accounts payable	$ 4,673	$ 3,155
Accrued compensation and related benefits	1,333	1,904
Other accrued liabilities	2,982	3,379
Deferred revenue, current portion	1,562	1,336
Long-term debt, current portion	7,995	4,561
Line of credit		3,125
Convertible preferred stock warrants		1,052
Total current liabilities	18,545	18,512
Long-term debt, net of current portion	6,343	10,139
Deferred revenue, net of current portion	736	426
Other non-current liabilities	331	341
Total liabilities	25,955	29,418
Commitments and contingencies		
Convertible preferred stock issuable in series: $0.001 par value, 10,000 and 11,269 shares authorized at March 31, 2011 and December 31, 2010, respectively; 0 and 10,296 shares issued and outstanding as of March 31, 2011 and December 31, 2010, respectively		184,550
Stockholders equity (deficit):		
Common stock: $0.001 par value, 200,000 and 18,327 shares authorized at March 31, 2011 and December 31, 2010, respectively; 19,965 and 1,937 shares issued and outstanding as of March 31, 2011	20	2

and December 31, 2010, respectively		
Additional paid-in capital	276,198	10,936
Accumulated other comprehensive loss	(790)	(778)
Accumulated deficit	(206,665)	(199,327)
Total stockholders equity (deficit)	68,763	(189,167)
Total liabilities, convertible preferred stock and stockholders equity (deficit)	$ 94,718	$ 24,801

See accompanying notes.

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FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

(Unaudited)

	Three Months Ended March 31,	
	2011	2010
Revenue:		
Product revenue	$ 8,412	$ 6,264
Collaboration revenue	167	
Grant revenue	118	452
Total revenue	8,697	6,716
Costs and expenses:		
Cost of product revenue	2,913	2,645
Research and development	3,220	3,188
Selling, general and administrative	7,442	6,121
Total costs and expenses	13,575	11,954
Loss from operations	(4,878)	(5,238)
Interest expense	(1,760)	(525)
(Loss) gain from changes in the fair value of convertible preferred stock warrants	(1,483)	277
Gain from expiration of unexercised warrants	765	
Other income (expense), net	66	(125)
Loss before income taxes	(7,290)	(5,611)
Provision for income taxes	(48)	(14)
Net loss	(7,338)	(5,625)
Deemed dividend related to the change in conversion rate of Series E convertible preferred stock	(9,900)	
Net loss attributed to common stockholders	$ (17,238)	$ (5,625)
Net loss per share attributed to common stockholders, basic and diluted	$ (1.60)	$ (3.02)
Shares used in computing net loss per share attributed to common stockholders, basic and diluted	10,754	1,861

See accompanying notes.

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FLUIDIGM CORPORATION

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

(Unaudited)

	Three Months Ended March 31,	
	2011	2010
Operating activities		
Net loss	$ (7,338)	$ (5,625)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	263	324
Stock-based compensation expense	790	429
Loss (gain) from changes in the fair value of convertible preferred stock warrants, net	1,483	(277)
Gain from expiration of unexercised warrants	(765)	
Write-off of debt discount upon note repayment	1,157	
Amortization of debt discount and issuance cost	85	81
Changes in assets and liabilities:		
Accounts receivable	645	1,470
Inventories	240	(139)
Prepaid expenses and other assets	1,135	77
Accounts payable	1,518	278
Deferred revenue	535	135
Other liabilities	(977)	294
Net cash used in operating activities	(1,229)	(2,953)
Investing activities		
Purchases of available-for-sale securities	(21,869)	
Purchases of property and equipment	(220)	(359)
Net cash used in investing activities	(22,089)	(359)
Financing activities		
Proceeds from initial public offering, net of issuance costs	76,859	
Proceeds from exercise of stock options	153	
Proceeds from note	5,000	
Repayment of note	(5,000)	
Repayment of long-term debt	(447)	(455)
Repayment of line of credit	(3,125)	
Net cash provided by (used in) financing activities	73,440	(455)
Effect of foreign exchange rate fluctuations on cash and cash equivalents	(14)	(2)
Net increase (decrease) in cash and cash equivalents	50,108	(3,769)
Cash and cash equivalents at beginning of period	5,723	14,602
Cash and cash equivalents at end of period	$ 55,831	$ 10,833
Supplemental disclosures of cash flow information		
Conversion of convertible preferred stock to common stock upon IPO	$ 184,550	$

Issuance of convertible preferred stock warrants in connection with note and warrant agreement	$	1,157	$	
Extinguishment of convertible preferred stock warrants upon IPO	$	765	$	
Conversion of convertible preferred stock warrants to common stock warrants	$	1,535	$	
Net exercise of convertible preferred stock warrants	$	1,391	$	

See accompanying notes.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

1. Description of Business

Fluidigm Corporation (the Company) was incorporated in the State of California on May 19, 1999, to commercialize microfluidic technology initially developed at the California Institute of Technology. In July 2007, the Company was reincorporated in the State of Delaware. The Company s headquarters are located in South San Francisco, California. The Company develops, manufactures and markets microfluidic systems in the life science and agricultural biotechnology (Ag-Bio) industries. The Company s proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. The Company s microfluidic systems are designed to simplify experimental workflow, increase throughput, reduce costs, and provide quality data. The Company markets systems and consumables to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories, and Ag-Bio companies.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) for interim financial information. These financial statements were prepared following the requirements of the Securities and Exchange Commission (SEC) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. GAAP can be condensed or omitted. These financial statements have been prepared on the same basis as the Company s annual financial statements and, in the opinion of management, reflect all adjustments (consisting only of normal recurring adjustments) that are necessary for a fair presentation of the Company s financial information. The results of operations for the three months ended March 31, 2011 are not necessarily indicative of the results to be expected for the year ending December 31, 2011 or for any other interim period or for any other future year. The balance sheet as of December 31, 2010 has been derived from audited consolidated financial statements at that date but does not include all of the information required by U.S. GAAP for complete financial statements.

The preparation of these condensed consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosures. On an ongoing basis, the Company evaluates its estimates, including critical accounting policies or estimates related to revenue recognition, income tax provisions, stock-based compensation, inventory valuation, and warrants to purchase convertible preferred stock. The Company bases its estimates on historical experience and on various relevant assumptions that the Company believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

The accompanying condensed consolidated financial statements and related financial information should be read in conjunction with the audited consolidated financial statements and the related notes thereto for the year ended December 31, 2010 included in the Company s Annual Report on Form 10-K filed with the SEC.

Amended and Restated Certificate of Incorporation

In February 2011, the Company amended and restated its Certificate of Incorporation. The amendment and restatement increased the total number of shares of stock authorized for issuance from 29,595,999 to 210,000,000, consisting of an increase in the number of shares of common stock authorized for issuance from 18,327,000 to 200,000,000 and a decrease in the number of shares of convertible preferred stock authorized for issuance from 11,268,999 to 10,000,000.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

In January 2011, the Company amended and restated its Certificate of Incorporation decreasing the conversion price of the Series E convertible preferred stock from $24.22 to $18.63 per share. As a result, the Company recognized a deemed dividend of $9,900,000 to reflect the fair value of the additional shares of common stock to be issued as a result of the change in conversion price of the Series E convertible preferred stock. The deemed dividend increased the net loss attributed to common stockholders in the calculation of basic and diluted net loss per share.

Reverse Stock Split

On February 3, 2011, the Company effected a 1 for 1.73 reverse stock split of the Company s issued and outstanding shares of common stock and convertible preferred stock, and changed the par value of the Company s common and preferred stock from $0.0035 per share to $0.001 per share. All issued and outstanding common stock, convertible preferred stock, options to purchase common stock, warrants to purchase convertible preferred stock, and per share amounts contained in these condensed consolidated financial statements have been retroactively adjusted to reflect this reverse stock split and par value change for all periods presented.

Initial Public Offering

On February 9, 2011, the Company s registration statement on Form S-1 relating to an initial public offering (IPO) of its common stock was declared effective by the SEC. Upon the closing of the IPO in February 2011, the Company sold 6,392,083 shares of common stock and received net cash proceeds of approximately $77.0 million. In addition, upon the Company s IPO, all outstanding shares of convertible preferred stock converted by their terms into approximately 11,480,000 shares of common stock with the related carrying value of approximately $184,550,000 reclassified to common stock and additional paid-in capital.

Net Loss per Share Attributed to Common Stockholders

The Company s basic net loss per share attributed to common stockholders is calculated by dividing net loss attributed to common stockholders by the weighted-average number of shares of common stock outstanding for the period. The Company s convertible preferred stock, options to purchase common stock and warrants to purchase convertible preferred stock are considered to be potential common shares but have been excluded from the calculation of diluted net loss per share as their effect is anti-dilutive.

The following potential common shares were excluded from the computation of diluted net loss per share attributed to common stockholders for the interim periods presented because including them would have been anti-dilutive (in thousands):

	March 31, 2011	March 31, 2010
Convertible preferred stock		10,239
Options to purchase common stock	2,164	1,593
Warrants to purchase convertible preferred stock		387

Investment

The Company has a minority equity investment in a privately-held company that is accounted for under the cost method of accounting. Under the cost method of accounting, investments in equity securities are carried at cost and are adjusted only for other-than-temporary declines in value. No such declines have been identified through March 31, 2011.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

Recent Accounting Pronouncements

Revenue Arrangements with Multiple Deliverables

In September 2009, the Financial Accounting Standards Board (FASB) ratified authoritative accounting guidance regarding revenue recognition for arrangements with multiple deliverables. The guidance impacts the determination of when the individual deliverables included in a multiple element arrangement may be treated as separate units of accounting. Additionally, the guidance allows the use of management s best estimate of selling price for individual elements of an arrangement when vendor specific objective evidence or third-party evidence is unavailable. The guidance also requires arrangement consideration to be allocated at the inception of the arrangement to all deliverables using the relative-selling-price method and eliminates the use of the residual method of allocation. This guidance is effective for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. The Company adopted this guidance prospectively on January 1, 2011. The adoption of this standard did not have a material impact on the Company s condensed consolidated financial statements.

Revenue Arrangements with Software Elements

In October 2009, the FASB ratified authoritative accounting guidance that modifies the scope of the software revenue recognition guidance to exclude tangible products that contain both software and non-software components that function together to deliver the product s essential functionality. This guidance is effective for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. This guidance must be adopted in the same period an entity adopts the amended guidance for revenue arrangements with multiple deliverables described in the preceding paragraph. The Company adopted this guidance prospectively on January 1, 2011. The adoption of this standard did not have a material impact on the Company s condensed consolidated financial statements.

Milestone Method of Revenue Recognition

In March 2010, the FASB ratified the milestone method of revenue recognition. Under this new standard, an entity can recognize contingent consideration earned from the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is defined as an event (i) that can only be achieved based in whole or in part on either the Company s performance or on the occurrence of a specific outcome resulting from the Company s performance (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due to the Company. A milestone is substantive if the consideration earned from the achievement of the milestone is consistent with the Company s performance required to achieve the milestone or the increase in value to the collaboration resulting from the Company s performance, relates solely to past performance, and is reasonable relative to all of the other deliverables and payments within the arrangement. The milestone method of revenue recognition is effective for new arrangements or existing arrangements which are materially modified for fiscal years beginning on or after June 15, 2010 and early adoption is permitted. The Company adopted this guidance prospectively on January 1, 2011. The adoption of this standard did not have a material impact on the Company s condensed consolidated financial statements.

3. Collaboration and Grant Agreements

Collaboration Agreement

In May 2010, the Company entered into a collaboration agreement to develop a new product and received an up-front payment of $750,000. Under the agreement, the Company is also eligible for milestone payments for the design and development of product prototypes.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

In March 2011, the Company entered into an amendment to the collaboration agreement and received an additional $300,000. Under the amendment, certain milestones were modified and payment terms associated with satisfaction of the milestones were revised. The $750,000 up-front payment and the $300,000 payment received in March 2011 are being recognized on a straight-line basis through September 30, 2011, which is the Company s estimated period of performance under this agreement.

The Company s collaboration agreement provides for payments to the Company upon the achievement of milestones, such as the design and development of product prototypes. As of March 31, 2011, the collaboration agreement included potential future payments for milestones as defined in the collaboration agreement, as amended, totaling approximately $1.0 million. These product prototypes have not been previously produced by the Company and the achievement of these and future milestones was uncertain at the time the Company entered into the collaboration agreement. The Company considers each of the milestones to be substantive and, accordingly, expects to recognize as revenue future payments received from such milestones as each milestone is achieved. For the three months ended March 31, 2011, the Company did not achieve any milestone. The amount of revenue that would have been recognized under the new milestone method of revenue recognition would not have been different.

4. Inventories

Inventories consist of the following (in thousands):

	March 31, 2011	December 31, 2010
Raw materials	$ 2,479	$ 2,401
Work-in-process	383	357
Finished goods	1,791	2,135
	$ 4,653	$ 4,893

5. Fair Value of Financial Instruments

The carrying values of the Company s financial instruments, including accounts receivable and accounts payable, approximated their fair values due to the short period of time to maturity or repayment. As a basis for considering fair value, the Company follows 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 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 the Company to develop its own assumptions.

The Company s cash equivalents are classified as Level I because they are valued using quoted market prices. The Company s available-for-sale securities are generally classified as Level II because their value is based on other observable inputs. The Company s convertible preferred stock warrants are valued using Level III inputs, the valuation of which is discussed in Note 9.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

The following table sets forth the Company s financial instruments that were measured at fair value by level within the fair value hierarchy (in thousands):

	March 31, 2011				December 31, 2010			
	Level I	Level II	Level III	Total	Level I	Level II	Level III	Total
Assets								
Money market funds	$ 2,878	$	$	$ 2,878	$ 32	$	$	$ 32
U.S. agency securities		66,665		66,665				
Total assets measured at fair value	$ 2,878	$ 66,665	$	$ 69,543	$ 32	$	$	$ 32
Liabilities								
Convertible preferred stock warrants	$	$	$	$	$	$	$ 1,052	$ 1,052
Total liabilities measured at fair value	$	$	$	$	$	$	$ 1,052	$ 1,052

Changes in the fair value of the Company s convertible preferred stock warrants during the three months ended March 31, 2011 were as follows (in thousands):

Balance, beginning of period	$ 1,052
Issuances	1,157
Exercises	(1,392)
Changes in fair value	1,483
Expiration of warrants	(765)
Conversion to common stock warrants	(1,535)
Balance, end of period	$

Following is a summary of the Company s available-for-sale securities recorded in cash equivalents or available-for-sale securities in the Company s condensed consolidated balance sheet (in thousands):

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
As of March 31, 2011:				
Cash equivalents	$ 44,958	$ 4	$ (1)	$ 44,961
Short term	21,705	2	(3)	21,704
U.S. agency securities	$ 66,663	$ 6	$ (4)	$ 66,665

The contractual maturity date of all of the Company s available-for-sale securities is within one year.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

6. Note and Warrant Purchase Agreement

In January 2011, the Company entered into a Note and Warrant Purchase Agreement (the Note Agreement) with existing stockholders, including certain of the Company s officers, under which the Company issued subordinated secured promissory notes (the Notes) with an aggregate principal amount of $5,000,000 bearing interest at 8% per year. The Notes matured on the earliest to occur of the closing of the next financing in which the Company issued and sold shares of capital stock of at least $25,000,000, a change of control as defined in the Note Agreement, or January 6, 2012. The Company s obligations under the Notes were secured by the assets of the Company, excluding intellectual property, and were subordinated to senior indebtedness of the loan agreement entered into in March 2005, as amended (see Note 7) and the Line of Credit (see Note 8). In connection with the Note Agreement, the Company issued warrants to acquire a total of 103,182 shares of Series E-1 convertible preferred stock with an exercise price of $0.02 per share. The fair value of these warrants, based on contemporaneous valuation, was $1,157,000 and was recognized as an original issue discount amortizable over the expected life of the borrowing. In connection with the IPO in February 2011, the warrants were exercised for 103,182 shares of common stock and the Company repaid all principal and interest outstanding under these Notes in February and March 2011. Upon the repayment of the Notes, the unamortized discount of $1,157,000 was immediately recognized as interest expense.

7. Long-Term Debt

The Company entered into a long-term loan agreement in March 2005 that was subsequently amended in 2006, 2008, 2009, and 2010. In connection with this long-term loan agreement and in conjunction with the various amendments thereto, the Company issued a total of 209,960 warrants to purchase shares of convertible preferred stock to the lender. As of March 31, 2011, the outstanding balance under this long-term loan agreement was $14,338,000 with interest accruing at 13.5% per annum and the loan maturing in February 2013. Commencing in March 2011, the Company began making monthly payments of $612,000 for principal and interest and will make an additional payment of $2,263,000 in March 2012. The additional payment is being accreted as interest expense using the effective interest method through the extended maturity date of February 2013. Upon completion of the IPO in February 2011, all 209,960 warrants to purchase preferred stock that were held by the lender were converted to warrants to purchase shares of common stock. The common stock warrants have an exercise price of $12.11 and expire at various dates though 2017. As of March 31, 2011, the Company was in compliance with all loan covenants under this long-term loan agreement.

8. Line of Credit

In December 2010, the Company entered into a bank line of credit agreement (Line of Credit) that is collateralized by the Company s accounts receivable and provided the Company with the ability to borrow up to $4.0 million, subject to certain covenants and other restrictions. The term of the Line of Credit is two years and it bears interest at the greater of (i) 5.50% or (ii) the prime rate, as defined in the Line of Credit, plus 2.25% per year. As of December 31, 2010, the outstanding balance on the Line of Credit was $3,125,000. In February 2011, the Company repaid all outstanding borrowings under the Line of Credit. In March 2011, the Line of Credit was amended to increase the credit limit to $7.0 million. At March 31, 2011, there was no outstanding balance on the Line of Credit and the Company was in compliance with its loan covenants.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

9. Convertible Preferred Stock Warrants

On February 10, 2011, the Company had total outstanding warrants to purchase 489,880 shares of convertible preferred stock that had been granted at various times since 2001. Warrants to purchase the Company s convertible preferred stock were recognized at fair value using the Black-Scholes option-pricing model and classified as liabilities because the warrants may have conditionally obligated the Company to transfer assets at some point in the future. The warrants were subject to re-measurement to fair value at each balance sheet date and any change in fair value was recognized in other income (expense), net, in the condensed consolidated statements of operations. The fair value of these warrants was approximately $3,691,000 at February 10, 2011, which was an increase in fair value of approximately $1,483,000 since December 31, 2010. Upon the closing of the IPO, approximately 103,182 of such warrants were net exercised and the related liability of $1,391,000 was reclassified to additional paid-in capital and 209,960 of such warrants were converted into warrants to purchase common stock and the related liability of $1,535,000 was reclassified to additional paid-in capital. The remaining 176,738 warrants expired unexercised and the related liability of $765,000 was recognized as other income.

10. Stock-Based Compensation

During the three months ended March 31, 2011, the Company granted to certain employees options to purchase 498,000 shares of common stock. Of these options, 438,000 were granted in January 2011 with an exercise price of $8.37 per share and the remainder were granted in March 2011 with exercise prices ranging from $14.31 to $14.90 per share. These options had a total fair value of $2,507,000, of which $488,000 was recognized as compensation expense during the quarter ended March 31, 2011 because 66,500 of such options were fully vested upon grant while the remainder will vest over four years.

The computation of the fair value of stock options and other equity instruments using the Black-Scholes option pricing model requires inputs such as the fair value of the Company s common stock. For options granted prior to the IPO in February 2011, the Company performed a contemporaneous valuation to determine the fair value of its common stock.

The Company recognized stock-based compensation expense of $790,000 and $429,000 during the three months ended March 31, 2011 and 2010, respectively.

11. Income Taxes

Income tax expense for the three months ended March 31, 2011 and March 31, 2010 was $48,000 and $14,000, respectively and was comprised of state and foreign income taxes. The provision for income taxes for the periods differs from the 34% U.S. Federal statutory rate primarily due to maintaining a valuation allowance for U.S. losses and tax assets which the Company does not consider to be realizable.

As of December 31, 2010, the Company had a valuation allowance against the full amount of any net deferred tax assets. The Company provides a valuation allowance against deferred tax assets when it is more likely than not that all or some portion of its deferred tax assets, will not be realized. As of March 31, 2011, the Company had a deferred tax asset of approximately $78 million which is fully offset by a valuation allowance. When realized, the asset will be reflected on the Company s balance sheet and the reversal of the corresponding valuation allowance will result in a tax benefit being recorded in the statement of operations in the respective period.

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FLUIDIGM CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(Unaudited)

The balance of gross unrecognized tax benefits was $4,944,000 and $4,796,000 at March 31, 2011 and December 31, 2010, respectively. As of March 31, 2011, the total amount of unrecognized tax benefits that, if recognized would affect the Company s effective tax rate are not material. The Company does not anticipate any material change in its unrecognized tax benefits over the next twelve months.

12. Information about Geographic Areas

The Company has a single reporting segment and operating unit structure, which is the development, manufacturing, and commercialization of microfluidic systems for the life science and agricultural biotechnology industries.

The following table presents the Company s product revenue by geography based on the billing address of the Company s customers for each period presented (in thousands):

	Three months ended March 31,	
	2011	2010
United States	$ 4,142	$ 3,559
Europe	2,147	1,639
Japan	900	253
Asia Pacific	982	748
Other	241	65
Total	$ 8,412	$ 6,264

The Company s grant revenue is primarily generated in Singapore and collaboration revenue is primarily generated in the United States.

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

The following discussion and analysis should be read together with our condensed consolidated financial statements and the notes to those statements included elsewhere in this Form 10-Q. This Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act, that are based on our management s beliefs and assumptions and on information currently available to our management. The forward-looking statements are contained principally in the sections entitled Risk Factors and this Management s Discussion and Analysis of Financial Condition and Results of Operations. Forward-looking statements include information concerning our possible or assumed future results of operations, business strategies, financing plans, competitive position, industry environment, potential growth opportunities and the effects of competition. Forward-looking statements include statements that are not historical facts and can be identified by terms such as anticipates, believes, could, seeks, estimates, expects, intends, may, plans, potential, predicts, projects, should, will, would or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in Part II, Item 1A, Risk Factors, elsewhere in this Form 10-Q and in our Annual Report on Form 10-K filed with the Securities and Exchange Commission, or SEC. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our management s beliefs and assumptions only as of the date of this Form 10-Q.

Except as required by law, we assume no obligation to update these forward-looking statements, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future. You should read this Form 10-Q completely and with the understanding that our actual future results may be materially different from what we expect.

In this Form 10-Q, we, us and our refer to Fluidigm Corporation and its subsidiaries. We operate on a fiscal year ending December 31.

Overview

We develop, manufacture and market microfluidic systems for growth markets in the life science and agricultural biotechnology, or Ag-Bio, industries. Our proprietary microfluidic systems consist of instruments and consumables, including chips and reagents. These systems are designed to significantly simplify experimental workflow, increase throughput and reduce costs, while providing the excellent data quality demanded by customers. In addition, our proprietary technology enables genetic analysis that in many instances was previously impractical. We actively market three microfluidic systems including eight different commercial chips to leading pharmaceutical and biotechnology companies, academic institutions, diagnostic laboratories and Ag-Bio companies. We have sold over 300 systems to customers in over 20 countries worldwide.

Our total revenue grew from $15.3 million in 2008 to $33.6 million in 2010. We have incurred significant net losses since our inception in 1999 and as of March 31, 2011, our accumulated deficit was $206.7 million.

We distribute our microfluidic systems through our direct sales force and support organizations located in North America, Europe and Asia-Pacific and through distributors or sales agents in several European, Latin American, Middle Eastern and Asia-Pacific countries. Our manufacturing operations are located in Singapore. Our facility in Singapore manufactures our instruments and fabricates all of our chips for commercial sale and some chips for our own research and development purposes. Our South San Francisco facility fabricates chips for our own research and development purposes.

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Critical Accounting Policies, Significant Judgments and Estimates

Our consolidated financial statements and the related notes included elsewhere in this Form 10-Q are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Changes in accounting estimates may occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. We evaluate our estimates and assumptions on an ongoing basis. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that certain critical accounting policies involve a greater degree of judgment and complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to understanding and evaluating our consolidated financial condition and results of operations. 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-month period ended March 31, 2011 as compared to those disclosed in our Annual Report on Form 10-K filed with the SEC on March 28, 2011.

Revenue

We generate revenue from sales of our products, collaboration agreements and government grants. Our product revenue consists of sales of instruments and related services, and consumables, including chips and reagents. We also have entered into collaboration agreements, research and development contracts and have received government grants to conduct research and development activities.

The following table presents our revenue by source for each period presented (in thousands):

	Three Months Ended March 31,	
	2011	2010
Revenue:		
Instruments	$ 4,958	$ 4,120
Consumables	3,454	2,144
Product revenue	8,412	6,264
Collaboration revenue	167	
Grant revenue	118	452
Total revenue	$ 8,697	$ 6,716

The following table presents our product revenue by geography and as a percentage of total product revenue by geography based on the billing address of our customers for each period presented (in thousands):

	Three Months Ended March 31,			
	2011		2010	
United States	$ 4,142	49%	$ 3,559	57%
Europe	2,147	26%	1,639	26%
Japan	900	11%	253	4%
Asia Pacific	982	12%	748	12%
Other	241	2%	65	1%
Total	$ 8,412	100%	$ 6,264	100%

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Grant revenue is primarily generated in Singapore. Collaboration revenue is primarily generated in the United States. As we expand our business internationally, we expect our product revenue from outside of the United States to increase as a percentage of our total product revenue.

Our customers include pharmaceutical and biotechnology companies, academic research institutions, diagnostic laboratories and Ag-Bio companies worldwide. Revenue from our five largest customers comprised 20% and 23% of total revenue in the three months ended March 31, 2011 and the three months ended March 31, 2010, respectively.

Comparison of the Three Months Ended March 31, 2011 and March 31, 2010

Total Revenue

Total revenue increased by $2.0 million, or 30%, to $8.7 million for the three months ended March 31, 2011 as compared to $6.7 million for the three months ended March 31, 2010.

Product Revenue

Product revenue increased by $2.1 million, or 34%, to $8.4 million for the three months ended March 31, 2011 as compared to $6.3 million for the three months ended March 31, 2010. Consumables revenue increased by $1.3 million, or 61%, resulting from our higher installed base of instruments, and instrument revenue increased by $0.8 million, or 20%. Our instrument unit sales volume increased by 35%, primarily driven by our Access Array instrument, which was launched in the second half of 2009. The average selling price for instruments was lower for the three months ended March 31, 2011 compared to the three months ended March 31, 2010 due to increased sales of our Access Array instrument which has a lower average selling price than our BioMark and EP1 instruments.

We expect unit sales of both instruments and consumables to continue to increase in future periods as we continue our efforts to grow our customer base and expand our geographic market coverage. However, we expect the average selling prices of our instruments to fluctuate over time based on product mix.

Collaboration Revenue

Collaboration revenue was $0.2 million for the three months ended March 31, 2011, resulting from a fixed-fee research and development agreement that we entered into in May 2010. The arrangement provided for an up-front fee of $750,000 which was being recognized over the term of the agreement, projected to be fifteen months. In March 2011, we amended the collaboration agreement and received an additional $300,000 payment. Under the amendment, certain milestones and the payment terms associated with satisfaction of the milestones were modified. The total up-front and additional payment of $1.05 million is being recognized on a straight-line basis over the estimated performance period, through September 30, 2011. The arrangement also provides for milestone payments, which payments have been and are expected to be recognized as we achieve each milestone. In the three months ended March 31, 2011, we did not achieve any milestones related to this agreement. In the three months ended March 31, 2010, we did not have any research and development arrangements in place.

Grant Revenue

Grant revenue consists of incentive grants from Singapore Economic Development Board, or EDB, and California Institute for Regenerative Medicine, or CIRM. Grant revenue decreased $0.3 million, or 74%, to 0.1 million for the three months ended March 31, 2011 compared to $0.5 million for the three months ended March 31, 2010. The decrease relates to a reduction in activity under the EDB grant agreement as we reached certain milestones and approached the end of the grant period. Under our incentive grant agreements with EDB, eligible expenses incurred by us in Singapore were $0.3 million in the three months ended March 31, 2011 and $1.2 million in the three months ended March 31, 2010.

Under our agreements with EDB, we are eligible to receive incentive grant payments from EDB, provided we satisfy certain agreed upon targets. Our agreements with EDB provide for incentive funding eligibility through May 2011. From January 1, 2008 through December 31, 2010, we recognized $4.3 million of grant revenue from EDB. During the three months ended March 31, 2011, we recognized an additional $27,000 of grant revenue from EDB. These agreements further provided EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements. Based on correspondence with EDB, we believe that we have satisfied our obligations applicable to our EDB grant revenue through March 31, 2011.

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We expect total grant revenue for 2011 and future periods to decrease significantly compared to 2010 as the first of our EDB grant agreements was completed during 2010 and our second EDB grant agreement will be completed in May 2011. This decrease may be partially offset by new grant revenue from CIRM.

Cost of Product Revenue

The following table presents our cost of product revenue and product margin for each period presented (in thousands, other than percentages):

	Three Months Ended March 31,	
	2011	2010
Cost of product revenue	$ 2,913	$ 2,645
Product margin	65%	58%

Cost of product revenue includes manufacturing costs incurred in the production process, including component materials, assembly labor and overhead; installation; warranty; service; and packaging and delivery costs. In addition, cost of product revenue includes royalty costs for licensed technologies included in our products, provisions for slow-moving and obsolete inventory and stock-based compensation expense. Costs related to collaboration and grant revenue are included in research and development expense.

Cost of product revenue increased $0.3 million, or 10%, to $2.9 million for the three months ended March 31, 2011 from $2.6 million for the three months ended March 31, 2010 due to increased product sales. Cost of product revenue as a percentage of related revenue decreased to 35% for the three months ended March 31, 2011 compared to 42% for the three months ended March 31, 2010. This decrease was due to a favorable product mix, higher chip capacity utilization, improved chip yields and lower instrument costs.

Operating Expenses

The following table presents our operating expenses for each period presented (in thousands):

	Three Months Ended March 31,	
	2011	2010
Research and development	$ 3,220	$ 3,188
Selling, general and administrative	7,442	6,121
Total operating expenses	$ 10,662	$ 9,309

Research and Development

Research and development expense consists primarily of personnel costs, independent contractor costs, prototype and material expenses and other allocated facilities and information technology expenses. We have made substantial investments in research and development since our inception. Our research and development efforts have focused primarily on the tasks required to enhance our technologies and to support development and commercialization of new and existing products and services.

Research and development expense was $3.2 million for each of the three months ended March 31, 2011 and March 31, 2010. During the three months ended March 31, 2011, increases in compensation costs and related expenses of $0.4 million were offset by decreases in equipment related costs and depreciation of $0.3 million and lower consulting and professional fees of $0.1 million, as compared to the three months ended March 31, 2010. We believe that our continued investment in research and development is essential to our long-term competitive position and expect these expenses to increase in future periods.

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Selling, General and Administrative

Selling, general and administrative expense consists primarily of personnel costs for our sales and marketing, business development, finance, legal, human resources and general management, as well as professional services, such as legal and accounting services.

Selling, general and administrative expense increased $1.3 million, or 22%, to $7.4 million for the three months ended March 31, 2011, compared to $6.1 million for the three months ended March 31, 2010. The increase was primarily due to increased compensation costs and related expenses of $0.7 million resulting from increased headcount to support our business and revenue growth, increased advertising and promotional costs of $0.4 million to support our new product introductions and to increase market awareness, increased legal and professional fees of $0.3 million, partially offset by lower rent expense of $0.2 million resulting from our new lease on more favorable terms for our headquarters facility in South San Francisco, California. We expect selling, general and administrative expense to increase in future periods as we continue to grow our sales, technical support, marketing and administrative headcount, support increased product sales, broaden our customer base and incur additional costs to support our expanded global footprint and the overall growth in our business. We also expect legal, accounting and compliance costs to increase as a result of our becoming a public company.

Interest Expense, Interest Income and Other Income and Expense, Net

We receive interest income from our cash and cash equivalents and available-for-sale securities. Conversely, we incur interest expense from our long-term debt, bank line of credit, promissory notes and the amortization of debt discounts related to these items. Until the completion of the IPO, we also recognized income or expense as a result of changes in the fair value of outstanding warrants to purchase shares of our convertible preferred stock. The following table presents these items for each period presented (in thousands):

	Three Months Ended March 31,	
	2011	2010
Interest expense	$ (1,760)	$ (525)
Gain (loss) from changes in the fair value of convertible preferred stock warrants	(1,483)	277
Gain from expiration of unexercised warrants	765	
Other income (expense), net	66	(125)

Interest expense was $1.8 million for the three months ended March 31, 2011 compared to $0.5 million for the three months ended March 31, 2010. The increase is primarily due to $1.2 million of non-cash interest expense in connection with a $5.0 million note and warrant agreement entered into in January 2011. We repaid all principal and interest outstanding under this note in February 2011 upon the completion of our IPO. There was no similar transaction or recognition of expense in the three months ended March 31, 2010. We expect interest expense to decrease in 2011 as we repay our outstanding debt.

(Loss) gain from changes in the fair value of preferred stock was a loss of $1.5 million for the three months ended March 31, 2011 compared to a $0.3 million gain for the three months ended March 31, 2010. The loss in 2011 was due to an increase in the warrant liability fair value through the completion of our IPO on February 10, 2011. Upon completion of our IPO, our outstanding preferred stock warrants were either converted into warrants to purchase common stock or expired unexercised, or were exercised for shares of our common stock. Liabilities related to the expired warrants were reversed and resulted in a gain reflected in other income; liabilities related to the warrants that were converted into warrants to purchase common stock and warrants that were exercised were reclassified to additional paid-in-capital.

Other income (expense) increased $0.2 million, to $0.1 million of income for the three months ended March 31, 2011 compared to a $0.1 million loss for the three months ended March 31, 2010 primarily due to favorable changes in foreign currency exchange gains and losses.

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Liquidity and Capital Resources

Sources of Liquidity

As of March 31, 2011, we had $55.8 million of cash and cash equivalents and $21.9 million of available-for-sale securities. As of March 31, 2011, our working capital totaled $72.3 million. In February 2011, we completed our IPO of common stock which resulted in net proceeds to us of $76.9 million, net of underwriting discounts, commissions and offering expenses. Following the completion of our IPO, we paid the balance on our bank line of credit of $3.125 million, which is collateralized by our accounts receivable and provides us the ability to borrow up to $7.0 million, subject to certain covenants and other restrictions, and paid all principal and interest outstanding of $5.0 million on the note and warrant agreement we entered into in January 2011.

As of March 31, 2011, the outstanding balance under our loan and security agreement was $14.3 million. The loan and security agreement has a maturity date of February 2013 and bears interest of 13.5% per annum upon which interest only payments were paid monthly through February 2011. Commencing in March 2011, we began making monthly payments of $0.6 million for principal and interest and will make an additional payment of $2.3 million in March 2012. The additional payment is being accreted as interest expense through the maturity date of February 2013. As of March 31, 2011, we were in compliance with all loan covenants.

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

	Three Months Ended March 31,	
	2011	2010
Cash flow summary		
Net cash used in operating activities	$ (1,229)	$ (2,953)
Net cash used in investing activities	(22,089)	(359)
Net cash provided by (used in) financing activities	73,440	(455)
Net increase (decrease) in cash and cash equivalents	50,108	(3,769)

Net Cash Used in Operating Activities

We derive cash flows from operations primarily from cash collected from the sale of our products, collaboration and license agreements and grants from certain government entities. Our cash flows from operating activities are also significantly influenced by our use of cash for operating expenses to support the growth of our business. We have historically experienced negative cash flows from operating activities as we have expanded our business and built our infrastructure domestically and internationally and this may continue in the future.

Net cash used in operating activities was $1.2 million during the three months ended March 31, 2011. Net cash used in operating activities primarily consisted of our net loss of $7.3 million, changes in our operating assets and liabilities in the amount of $3.0 million, and non-cash expense items such as stock-based compensation of $0.8 million, depreciation and amortization of our property and equipment of $0.3 million, loss from changes in the fair value of convertible stock warrants of $1.5 million, gain from expiration of unexercised warrants of $0.8 million, and write off of debt discounts upon note repayment of $1.2 million.

Net Cash Used in Investing Activities

Historically, our primary investing activities have consisted of capital expenditures for laboratory, manufacturing and computer equipment and software to support our expanding infrastructure and work force; and purchases, sales and maturities of our available-for-sale securities. We expect to continue to expand our manufacturing capability, primarily in Singapore, and expect to incur additional costs for capital expenditures related to these efforts in future periods.

We used $22.1 million of cash in investing activities during the three months ended March 31, 2011 to invest a portion of the net proceeds from our IPO in available-for-sale securities and for purchases of capital equipment to support our infrastructure and manufacturing operations of $0.2 million.

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Net Cash Provided by (Used In) Financing Activities

Prior to our IPO, we funded our operations principally through issuances of convertible preferred stock and long term debt.

We generated $73.4 million of cash from financing activities during the three months ended March 31, 2011 primarily from net proceeds from our IPO of $76.9 million and $5.0 million from subordinated secured promissory notes with existing stockholders, partially offset by the pay off of our line of credit balance of $3.1 million and repayment of the outstanding principal and interest on the subordinated secured promissory notes of $0.5 million.

Capital Resources

At March 31, 2011, our working capital was $72.3 million, including cash, cash equivalents and available-for-sale securities of $77.7 million. We have a bank line of credit agreement that is collateralized by our accounts receivable and provides us the ability to draw up to $7.0 million, subject to certain covenants and restrictions. In February 2011, we raised approximately $77.0 million from our IPO, net of underwriting discounts, commissions and offering expenses. During the three months ended March 31, 2011, our capital expenditures were $0.2 million. We are estimating capital expenditures to be higher in 2011 compared to 2010 primarily for the expansion of our manufacturing capacity, research and development equipment and sales demonstration and product support instruments to service our global customer base.

We believe our existing cash and cash equivalents including the net proceeds from our IPO, will be sufficient to meet our working capital and capital expenditure needs for at least the next 18 months. However, we may need to raise additional capital to expand the commercialization of our products, fund our operations and further our research and development activities. Our future funding requirements will depend on many factors, including market acceptance of our products, the cost of our research and development activities, the cost of filing and prosecuting patent applications, the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights, the cost and timing of regulatory clearances or approvals, if any, the cost and timing of establishing additional sales, marketing and distribution capabilities, the cost and timing of establishing additional technical support capabilities, the effect of competing technological and market developments and the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

We may require additional funds in the future and we may not be able to obtain such funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs. If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations.

Off-Balance Sheet Arrangements

As of March 31, 2011, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated under the Exchange Act.

Recent Accounting Pronouncements

Information with respect to recent accounting pronouncements is included in Note 1 of the notes to our condensed consolidated financial statements included elsewhere in this Form 10-Q.

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Item 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates. We do not hold or issue financial instruments for trading purposes.

Foreign Currency Exchange Risk

As we expand internationally our results of operations and cash flows will become increasingly subject to fluctuations due to changes in foreign currency exchange rates. Our revenue is generally denominated in the local currency of the contracting party. Historically, the substantial majority of our revenue has been denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States, with a portion of expenses incurred in Singapore, where our manufacturing facility is located. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. Fluctuations in currency exchange rates could harm our business in the future. The effect of a 10% adverse change in exchange rates on foreign denominated cash, receivables and payables as of March 31, 2011 would not have been material. To date, we have not entered into any material foreign currency hedging contracts although we may do so in the future.

Interest Rate Sensitivity

We had cash and cash equivalents of $55.8 million at March 31, 2011. These amounts were held primarily in cash on deposit with banks, money market funds, and U.S. government agency securities which are short-term. We had $21.9 million in available-for-sale securities at March 31, 2011 held primarily in U.S. government agency securities with maturities of less than twelve months. Cash and cash equivalents and available-for-sale securities are held for working capital purposes. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Declines in interest rates, however, will reduce future investment income. If overall interest rates had decreased by 10% during the period presented, our interest income would not have been materially affected.

As of March 31, 2011, the principal amount of our long-term debt outstanding was $14.3 million and we had no outstanding balance on our bank line of credit. The interest rates on our long-term debt are fixed. If overall interest rates had increased by 10% during the period presented, our interest expense would not have been materially affected.

Fair Value of Financial Instruments

We do not have material exposure to market risk with respect to investments. We do not use derivative financial instruments for speculative or trading purposes. However, we may adopt specific hedging strategies in the future.

Item 4. Controls and Procedures

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.

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Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2011 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 not currently engaged in any material legal proceedings.

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Item 1A. Risk Factors.

We operate in a rapidly changing environment that involves numerous uncertainties and risks. The following risks and uncertainties may have a material and adverse effect on our business, financial condition or results of operations. You should consider these risks and uncertainties carefully, together with all of the other information included or incorporated by reference in this Form 10-Q. If any of the risks or uncertainties we face were to occur, the trading price of our securities could decline, and you may lose all or part of your investment.

Risks Related to our Business and Strategy

We have incurred losses since inception, and we expect to continue to incur substantial losses for the foreseeable future.

We have a limited operating history and have incurred significant losses in each fiscal year since our inception, including net losses of $7.3 million, $16.9 million, $19.1 million and $29.5 million during the three months ended March 31, 2011, and the years 2010, 2009 and 2008, respectively. As of March 31, 2011, we had an accumulated deficit of $206.7 million. These losses have resulted principally from costs incurred in our research and development programs and from our selling, general and administrative expenses. We expect to continue to incur operating and net losses and negative cash flow from operations, which may increase, for the foreseeable future due in part to anticipated increases in expenses for research and product development and significant expansion of our sales and marketing capabilities. Additionally, we expect that our selling, general and administrative expenses will increase due to the additional operational and reporting costs associated with being a public company. We anticipate that our business will generate operating losses until we successfully implement our commercial development strategy and generate significant additional revenues to support our level of operating expenses. Because of the numerous risks and uncertainties associated with our commercialization efforts and future product development, we are unable to predict when we will become profitable, and we may never become profitable. Even if we do achieve profitability, we may not be able to sustain or increase our profitability.

If our products fail to achieve and sustain sufficient market acceptance, our revenue will be adversely affected.

Our success depends, in part, on our ability to develop and market products that are recognized and accepted as reliable, enabling and cost effective. Most of our potential customers already use expensive research systems in their laboratories and may be reluctant to replace those systems. Market acceptance of our systems will depend on many factors, including our ability to convince potential customers that our systems are an attractive alternative to existing technologies. Compared to most competing technologies, our microfluidic technology is relatively new, and most potential customers have limited knowledge of, or experience with, our products. Prior to adopting our microfluidic systems, some potential customers may need to devote time and effort to testing and validating our systems. Any failure of our systems to meet these customer benchmarks could result in customers choosing to retain their existing systems or to purchase systems other than ours.

In addition, many customers intend to publish the results of their experiments in scientific and medical journals. Therefore, it is important that our systems be perceived as accurate and reliable by the scientific and medical research community as a whole. Many factors influence the perception of a system including its use by leading research groups and the publication of their results in well regarded journals. Historically, a significant part of our sales and marketing efforts have been directed at convincing industry leaders of the advantages of our systems and encouraging such leaders to publish or present the results of their evaluation of our system. If we are unable to continue to induce leading researchers to use our systems or if such researchers are unable to achieve and publish or present significant experimental results using our systems, acceptance and adoption of our systems will be slowed.

Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.

Our quarterly revenue and results of operations have varied in the past and may continue to vary significantly from quarter-to-quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including: fluctuations in demand for our products; changes in customer budget cycles and capital spending; seasonal variations in customer operations; tendencies

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among some customers to defer purchase decisions to the end of the quarter; the large unit value of our systems; changes in our pricing and sales policies or the pricing and sales policies of our competitors; our ability to design, manufacture and deliver products to our customers in a timely and cost-effective manner; quality control or yield problems in our manufacturing operations; our ability to timely obtain adequate quantities of the components used in our products; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; and fluctuations in foreign currency exchange rates. For example, in 2008 and 2009, we experienced higher sales in the fourth quarter than in the first quarter of the next fiscal year as a result of one or more of the factors described above. The foregoing factors are difficult to forecast, and these, as well as other factors, could materially and adversely affect our quarterly and annual results of operations. In addition, a significant amount of our operating expenses are relatively fixed due to our manufacturing, research and development, and sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. Our results of operations may not meet the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly.

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

Our customer base is primarily composed of pharmaceutical, biotechnology and Ag-Bio companies, academic institutions and life science laboratories that perform analyses for research and commercial purposes. Our success will depend in part upon our ability to increase our market share among these customers, attract additional customers outside of these markets and market new applications to existing and new customers as we develop such applications. Attracting new customers and introducing new applications requires substantial time and expense. For example, it may be difficult to identify, engage and market to customers who are unfamiliar with the current applications of our systems. In addition, certain new applications that we are considering developing are not commonly performed with conventional techniques and therefore may require additional sales efforts to create customer awareness of the utility of these applications. Any failure to expand our existing customer base or launch new applications would adversely affect our ability to increase our revenues.

The life science research and Ag-Bio markets are highly competitive and subject to rapid technological change, and we may not be able to successfully compete.

The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition, new product introductions and strong price competition. We compete with both established and development stage life science research and Ag-Bio companies that design, manufacture and market instruments for gene expression analysis, genotyping, PCR, other nucleic acid detection and additional applications using well established laboratory techniques, as well as newer technologies such as bead encoded arrays, microfluidics, nanotechnology, high-throughput DNA sequencing and inkjet and photolithographic arrays. Most of our current competitors have significantly greater name recognition, greater financial and human resources, broader product lines and product packages, larger sales forces, larger existing installed bases, larger intellectual property portfolios and greater experience and scale in research and development, manufacturing and marketing than we do. For example, companies such as Affymetrix, Inc., Agilent Technologies, Inc., Caliper Life Sciences, Inc., Illumina, Inc., Life Technologies Corporation, Luminex Corporation, Roche Applied Science, NanoString Technologies, Inc., RainDance Technologies, Inc., Sequenom, Inc. and WaferGen Biosystems, Inc. have products that compete in certain segments of the market in which we sell our products, including gene expression analysis, genotyping and sequencing. In addition, a number of other companies and academic groups are in the process of developing novel technologies for life science markets.

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 product or service offerings of our competitors, current or potential customers might accept competitive products and services in lieu of purchasing our technology. We anticipate that we will face increased competition in the future as existing companies and competitors develop new or improved products and as new companies enter the market with new technologies. We may not be able to compete effectively against these organizations. 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 and results of operations.

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We have limited experience in marketing, selling and distributing our products, and we need to expand our direct sales and marketing force or distribution capabilities to adequately address our customers needs.

We have limited experience in marketing, selling and distributing our products. Our BioMark and EP1 systems for genomic analysis were introduced for commercial sale in 2006 and 2008, respectively. Our Access Array system for sample preparation was introduced for commercial sale in 2009. We may not be able to market, sell and distribute our products effectively enough to support our planned growth.

We sell our products primarily through our own sales force and through distributors in certain territories. Our future sales will depend in large part on our ability to develop and substantially expand our direct sales force and to increase the scope of our marketing efforts. Our products are technically complex and used for highly specialized applications. As a result, we believe it is necessary to develop a direct sales force that includes people with specific scientific backgrounds and expertise and a marketing group with technical sophistication. Competition for such employees is intense. We may not be able to attract and retain personnel or be able to build an efficient and effective sales and marketing force, which could negatively impact sales of our products, and reduce our revenues and profitability.

In addition, we may continue to enlist one or more sales representatives and distributors to assist with sales, distribution and customer support globally or in certain regions of the world. If we do seek to enter into such arrangements, we may not be successful in attracting desirable sales representatives and distributors, or we may not be able to enter into such arrangements on favorable terms. If our sales and marketing efforts, or those of any third-party sales representatives and distributors, are not successful, our technologies and products may not gain market acceptance, which would materially impact our business operations.

Our Sales May Be Adversely Affected By Recent Events in Japan.

The recent earthquake and tsunami in Japan and their aftermath have created significant economic uncertainty in that country. Sales to customers located in Japan represented approximately 8% of our product revenue in 2010 and 13% in 2009. As a result, our sales in Japan may be adversely affected.

Our business depends on research and development spending levels of pharmaceutical, Ag-Bio and biotechnology companies and academic, clinical and governmental research institutions and any reduction in such spending could limit our ability to sell our products.

We expect that our revenue in the foreseeable future will be derived primarily from sales of our microfluidic systems and chips to academic institutions and biotechnology, Ag-Bio and pharmaceutical companies and life science laboratories worldwide. Our success will depend upon their demand for and use of our products. Accordingly, the spending policies of these customers could have a significant effect on the demand for our technology. These policies may be based on a wide variety of factors, including the resources available to make purchases, the spending priorities among various types of equipment, policies regarding spending during recessionary periods and changes in the political climate. In addition, academic, governmental and other research institutions that fund research and development activities may be subject to stringent budgetary constraints that could result in spending reductions, reduced allocations or budget cutbacks, which could jeopardize the ability of these customers to purchase our system. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital expenditures by these customers may result in lower than expected system sales and, similarly, reductions in operating expenditures by these customers could result in lower than expected sales of our microfluidic systems and chips. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions;
- changes in government programs that provide funding to research institutions and companies;
- changes in the regulatory environment affecting life science and Ag-Bio companies engaged in research and commercial activities;
- differences in budget cycles across various geographies and industries;

market-driven pressures on companies to consolidate operations and reduce costs;

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mergers and acquisitions in the life science and Ag-Bio industries; and

other factors affecting research and development spending.

Any decrease in our customers budgets or expenditures or in the size, scope or frequency of capital or operating expenditures as a result of the foregoing or other factors could materially and adversely affect our operations or financial condition.

We may not be able to develop new systems or enhance the capabilities of our existing microfluidic systems to keep pace with rapidly changing technology and customer requirements.

Our success depends on our ability to develop new applications for our technology in existing and new markets, while improving the performance and cost effectiveness of our systems. New technologies, techniques or products could emerge that might offer better combinations of price and performance than our current or future product lines and systems. Existing markets for our products, including gene expression analysis, genotyping, digital polymerase chain reaction, or PCR, and single cell analyses, as well as potential markets for our products such as high-throughput DNA sequencing and molecular diagnostics applications, are characterized by rapid technological change and innovation. It is critical to our success for us to anticipate changes in technology and customer requirements and to successfully introduce new, enhanced and competitive technology to meet our customers and prospective customers needs on a timely basis. Developing and implementing new technologies will require us to incur substantial development costs and we may not have adequate resources available to be able to successfully introduce new applications of, or enhancements to, our systems. We cannot guarantee that we will be able to maintain technological advantages over emerging technologies in the future. While we have planned improvements to our BioMark, EP1 and Access Array systems, we may not be able to successfully implement these improvements. If we fail to keep pace with emerging technologies, demand for our systems will not grow and may decline, and our business, revenue, financial condition and operating results could suffer materially. Even if we successfully implement some or all of these planned improvements, we cannot guarantee that our current and potential customers will find our enhanced systems to be an attractive alternative to existing technologies, including our current products.

Emerging market opportunities may not develop as quickly as we expect.

The application of our technologies to molecular diagnostics, single cell analysis, digital PCR and sample preparation for next generation DNA sequencing are emerging market opportunities. We believe these opportunities will take several years to develop or mature and we cannot be certain that these market opportunities will develop as we expect. Although we believe that there will be applications of our technologies in these markets, there can be no certainty of the technical or commercial success our technologies will achieve in such markets. Our success in the emerging markets of molecular diagnostics, single cell analysis, digital PCR and sample preparation for next generation DNA sequencing may depend to a large extent on our ability to successfully market and sell products using our technologies. In addition, in the case of molecular diagnostics, we will need to obtain regulatory approval for such products in the United States and in overseas markets.

Our research and product development efforts may not result in commercially viable products within the timeline anticipated, if at all.

Our business is dependent on the improvement of our existing products, our development of new products to serve existing markets and our development of new products to create new markets and applications that were previously not practical with existing systems. We intend to devote significant personnel and financial resources to research and development activities designed to advance the capabilities of our microfluidic systems technology. Our technology is new and complex and the behavior of fluids and surrounding compounds in a nanoscale environment is difficult to predict in advance. Though we have developed design rules for the implementation of our technology, these are frequently revised to reflect new insights we have gained about the technology. In addition, we have discovered that biological or chemical reactions sometimes behave differently when implemented on our systems rather than in a standard laboratory environment. As a result, research and development efforts may be required to transfer certain reactions to our systems. In the past, product development projects have been significantly delayed when we encountered unanticipated difficulties in implementing a process on our systems. We may have similar delays in the future, and we may not obtain any benefits from our research and development activities. Any delay or failure by us to develop new products or enhance existing products would have a substantial adverse effect on our business and results of operations.

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

The sales cycles for our systems are lengthy, which makes it difficult for us to accurately forecast revenues in a given period, and may cause revenue and operating results to vary significantly from period to period.

Due in part to the high up-front cost associated with our systems, potential customers for our systems typically need to commit significant time and resources to evaluate our technology and their decision to purchase our instruments may be further limited by budgetary constraints and several layers of internal review and approval, which are beyond our control. In addition, the novelty and complexity of our products often requires us to spend substantial time and effort assisting potential customers in evaluating our instruments, including providing demonstrations and benchmarking our products against other available technologies. Even after initial approval by appropriate decision makers, the negotiation and documentation processes for a purchase can be lengthy. As a result of these factors, our sales cycle has varied widely and, in certain instances has been longer than 12 months. The complexity and variability of our sales cycle has made it difficult for us to accurately project quarterly revenues, and we have frequently failed to meet our internal quarterly projections. Moreover, we do not recognize revenue on sales of our systems until the system has been delivered to the customer and our other revenue recognition criteria have been met. This further complicates our ability to project quarterly revenue as we may have entered into a sale agreement with a customer for a system but cannot predict when that customer will take delivery of the system and when we will be able to recognize the revenue. We expect that our sales will continue to fluctuate on a quarterly basis and that our financial results for some periods may be below those projected by securities analysts. Such fluctuations could have a material adverse effect on our business and on the price of our common stock.

We may rely on strategic partnerships for research and development and commercialization purposes.

We have entered into and may continue to enter into strategic partnerships, including collaborations, joint ventures and alliances with other participants in the life science, Ag-Bio and molecular diagnostics industries. For example, in 2010, we entered into a collaboration agreement in molecular diagnostics and a co-marketing agreement in next generation sequencing. If any of our strategic partners were to change their business strategies or development priorities, or encounter research and development obstacles, they may no longer be willing or able to participate in such strategic partnerships which could have a material adverse effect on our business, financial condition and results of operations. In addition, we may not control the strategic partnerships in which we participate. We may also have certain obligations, including some limited funding obligations or take or pay obligations, with regard to our strategic partnerships, joint ventures and alliances. We may be required to relinquish important rights, including intellectual property rights, and control over the development of our product candidates, assume product or other liabilities associated with the use of our products in diagnostic and other applications, agree to restrictions on the use or applications of our products, or otherwise be subject to terms unfavorable to us.

Under our collaboration agreements with Novartis Vaccines & Diagnostics, Inc., or Novartis V&D, our capabilities in digital PCR are being developed for potential in-vitro diagnostics applications, with an initial focus on the development of an NIPD test for fetal aneuploidies. These agreements provide Novartis V&D with an option to exclusively license our technology in the primary field of non-invasive testing for fetal aneuploidies and the secondary field of non-invasive testing of genetic abnormality, disease or condition in a fetus or in a pregnant woman (other than as tested in the primary field), RhD genotyping or carrier status in a pregnant woman and the genetic carrier status of a prospective mother and her male partner. Under these agreements, except with Novartis V&D, we cannot, directly or in collaboration with a third party, use, develop or sell any products or services in the primary field or the secondary field, other than for research applications in the secondary field. The agreements contain technical feasibility milestones in 2010 and 2011 and may be terminated by Novartis V&D at any time. At Novartis V&D s option, these agreements can be extended to encompass further research, development and commercialization of our products in the primary and secondary fields described above, which could take several years or more to complete. The agreements provide that if a test is commercialized, we would supply the required systems and chips for performance of such test.

Our agreements and efforts with Novartis V&D are in their early stages and are subject to numerous conditions, contingencies, development challenges, milestones, royalty and license fees, indemnification obligations, termination rights, change of control and default provisions and regulatory approvals. There can be no assurance that this collaboration will lead to technology, products or services, that such technology, products or services will receive market acceptance, that we will realize any material revenue or other benefits from this collaboration or that the benefits will exceed our costs.

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If our facility becomes inoperable, we will be unable to continue manufacturing our products and as a result, our business will be harmed until we are able to secure a new facility.

We manufacture and assemble all of our products for commercial sale at our facility in Singapore. No other manufacturing or assembly facilities are currently available to us. Our facility and the equipment we use to manufacture our products would be costly to replace and could require substantial lead time to repair or replace. The facility may be harmed or rendered inoperable by natural or man-made disasters, including earthquakes, flooding and power outages, which may render it difficult or impossible for us to perform our research, development and manufacturing for some period of time. The inability to perform our research, development and manufacturing activities, combined with our limited inventory of reserve raw materials and manufactured supplies, may result in the loss of customers or harm our reputation, and we may be unable to reestablish relationships with those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, or at all.

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

We believe that our existing cash and cash equivalents, including the funds we raised in our initial public offering, will be sufficient to meet our anticipated cash requirements for at least the next 15 months. However, we may need to raise substantial additional capital to:

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

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

- market acceptance of our products;
- the cost of our research and development activities;
- the cost of filing and prosecuting patent applications;
- the cost of defending, in litigation or otherwise, any claims that we infringe third-party patents or violate other intellectual property rights;
- the cost and timing of regulatory clearances or approvals, if any;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost and timing of establishing additional technical support capabilities;

the effect of competing technological and market developments; and

the extent to which we acquire or invest in businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

We cannot assure you that we will be able to obtain additional funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs.

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If we do not have, or are not able to obtain, sufficient funds, we may have to delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support or other resources devoted to our products or cease operations. Any of these factors could harm our operating results.

To use our products and our BioMark system in particular, customers typically need to purchase specialized reagents. Any interruption in the availability of these reagents for use in our products could limit our ability to market our products.

Our products and our BioMark system in particular, must be used in conjunction with one or more reagents designed to produce or facilitate the particular biological or chemical reaction desired by the user. Many of these reagents are highly specialized and available to the user only from a single supplier or a limited number of suppliers. Our customers typically purchase these reagents directly from the suppliers, and we have no control over the supply of those materials. In addition, our products are designed to work with these reagents as they are currently formulated. We have no control of the formulation of these reagents, and the performance of our products might be adversely affected if the formulation of these reagents was changed. If one or more of these reagents were to become unavailable or were reformulated, our ability to market and sell our products could be materially and adversely affected.

In addition, the use of a reagent for a particular process may be covered by one or more patents relating to the reagent itself, the use of the reagent for the particular process, the performance of that process or the equipment required to perform the process. Typically, reagent suppliers, who are either the patent holders or their authorized licensees, sell the reagents along with a license or covenant not to sue with respect to such patents. The license accompanying the sale of a reagent often purports to restrict the purposes for which the reagent may be used. If a patent holder or authorized licensee were to assert against us or our customers that the license or covenant relating to a reagent precluded its use with our systems, our ability to sell and market our products could be materially and adversely affected. For example, the current applications of our BioMark system, which represented 44% of our product revenue in 2010, involve real-time polymerase chain reaction, or PCR. Leading suppliers of reagents for PCR reactions include Life Technologies and Roche Applied Science, who are our direct competitors, and their licensees. These PCR reagents are typically sold pursuant to limited licenses or covenants not to sue with respect to patents held by these companies. We do not have any contractual supply agreements for these PCR reagents, and we cannot assure you that these reagents will continue to be available to our customers for use with our systems, or that these patent holders will not seek to enforce their patents against us, our customers, or suppliers.

If we cannot provide quality technical support, we could lose customers and our operating results could suffer.

The placement of our products at new customer sites, the introduction of our technology into our customers existing systems and ongoing customer support can be complex. Accordingly, we need highly trained technical support personnel. Hiring technical support personnel is very competitive in our industry due to the limited number of people available with the necessary biochemistry background and ability to understand our systems at a technical level. To effectively support potential new customers and the expanding needs of current customers, we will need to substantially expand our technical support staff. If we are unable to attract, train or retain the number of highly qualified technical services personnel that our business needs, our business and prospects will suffer.

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

We rely on single source suppliers for certain components and materials used in our systems. Of these single source suppliers, the loss of any of the following would require significant time and effort to locate and qualify an alternative source of supply:

- The chips used in our microfluidic systems are fabricated using a specialized polymer that is available from a limited number of sources. In the past we have encountered quality issues that have reduced our manufacturing yield or required the use of additional manufacturing processes. We do not have a long term contract with our current sole supplier.

- The reader for our BioMark system requires specialized high resolution camera lenses and other components that are available from a limited number of sources.

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Our reliance on these suppliers also subjects us to other risks that could harm our business, including the following:

- we may be subject to increased component costs;
- we may not be able to obtain adequate supply in a timely manner or on commercially reasonable terms;
- our suppliers may make errors in manufacturing components that could negatively affect the efficacy of our systems or cause delays in shipment of our systems; and
- our suppliers may encounter financial hardships unrelated to our demand for components, which could inhibit their ability to fulfill our orders and meet our requirements.

We have in the past experienced quality control and supply problems with some of our suppliers, such as manufacturing errors, and may again experience problems in the future. We may not be able to quickly establish additional or replacement suppliers, particularly for our single source components. Any interruption or delay in the supply of components or materials, or our inability to obtain components or materials from alternate sources at acceptable prices in a timely manner, could impair our ability to meet the demand of our customers and cause them to cancel orders or switch to competitive products.

We may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We have been manufacturing and assembling our products in significant commercial quantities since 2006, and we may encounter unforeseen situations that would result in delays or shortfalls in our production. In addition, our production processes and assembly methods may have to change to accommodate any significant future expansion of our manufacturing capacity. If we are unable to keep up with demand for our products, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors products. Our inability to successfully manufacture our products would have a material adverse effect on our operating results.

All of our commercial products are manufactured at our facility in Singapore. We began commercial production of our chips in Singapore in October 2006 and have transitioned the commercial production of our microfluidic systems to Singapore as well. Production of the elastomeric block that is at the core of our chips is a complex process requiring advanced clean rooms, sophisticated equipment and strict adherence to procedures. Any contamination of the clean room, equipment malfunction or failure to strictly follow procedures can significantly reduce our yield in one or more batches. We have in the past experienced variations in yields due to such factors. Such a drop in yield can increase our cost to manufacture our chips or, in more severe cases, require us to halt the manufacture of our chips until the problem is resolved. Identifying and resolving the cause of a drop in yield can require substantial time and resources.

In addition, developing a chip for a new application may require developing a specific production process for that type of chip. While all of our chips are produced using the same basic processes, significant variations may be required to ensure adequate yield of any particular type of chip. Developing such a process can be very time consuming, and any unexpected difficulty in doing so can delay the introduction of a product.

Our shipments of products to customers are subject to delays or cancellation due to work stoppages or slowdowns, piracy, damage to shipping facilities caused by weather or terrorism, and congestion due to inadequacy of shipping equipment and other causes.

Because all our products are manufactured at our facility in Singapore, we rely on shipping providers to deliver our products to our customers. To the extent that there are disruptions or delays in shipping our products from Singapore or off-loading our products upon arrival at their destination due to labor disputes, tariff or World Trade Organization-related disputes, piracy, physical damage to shipping facilities or equipment caused by severe weather or terrorist incidents, congestion at shipping facilities, inadequate equipment to load, dock and offload our products or energy-related tie-ups or otherwise, or for other reasons, product shipments to our customers will be delayed. Depending on the severity of such consequences, this may have an adverse effect on our financial condition and results of operations.

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If we are unable to recruit and retain key executives and scientists, we may be unable to achieve our goals.

Our performance is substantially dependent on the performance of our senior management and key scientific and technical personnel, particularly Gajus V. Worthington, our President and Chief Executive Officer. We do not maintain fixed term employment contracts with any of our employees. The loss of the services of any member of our senior management or our scientific or technical staff might significantly delay or prevent the development of our products or achievement of other business objectives by diverting management s attention to transition matters and identification of suitable replacements, if any, and could have a material adverse effect on our business. We do not maintain significant key man life insurance on any of our employees.

In addition, our research and product development efforts could be delayed or curtailed if we are unable to attract, train and retain highly skilled employees, particularly, senior scientists and engineers. To expand our research and product development efforts, we need additional people skilled in areas such as molecular and cellular biology, assay development and manufacturing. Competition for these people is intense. Because of the complex and technical nature of our system and the dynamic market in which we compete, any failure to attract and retain a sufficient number of qualified employees could materially harm our ability to develop and commercialize our technology.

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 science, Ag-Bio and molecular diagnostics 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 be unable to manage our anticipated growth effectively.

The rapid growth of our business has placed a significant strain on our managerial, operational and financial resources and systems. To execute our anticipated growth successfully, we must continue to attract and retain qualified personnel and manage and train them effectively. We must also upgrade our internal business processes and capabilities to create the scalability that a growing business demands.

We believe our commercial manufacturing facility located in Singapore is sufficient to meet our short-term manufacturing needs. The current leases for our manufacturing facility in Singapore expire at various times from October 2011 through July 2013. In order to meet the long-term demand for our microfluidic systems, we believe that we will need to add to our existing manufacturing space in Singapore or move all of our manufacturing facilities to a new location in Singapore in 2012. Such a move will involve significant expense in connection with the establishment of new clean rooms, the movement and installation of key manufacturing equipment and modifications to our manufacturing process and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities.

Further, our anticipated growth will place additional strain on our suppliers and manufacturing facilities, resulting in an increased need for us to carefully monitor quality assurance. Any failure by us to manage our growth effectively could have an adverse effect on our ability to achieve our development and commercialization goals.

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Demand for our technology could be reduced by legal, social and ethical concerns surrounding the use of genetic information and biological materials.

Our products may be used to provide genetic information or analyze biological materials from 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 legal, social and ethical concerns, including the genetic engineering or modification of agricultural products, testing for genetic predisposition for certain medical conditions and stem cell research. Governmental authorities could, for safety, social or other purposes, call for limits on or impose regulations on the use of genetic testing or the use of certain biological materials. 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, although not currently subject to regulation by the U.S. Food and Drug Administration or other regulatory agencies as medical devices, could become subject to regulation in the future.

Our products are currently labeled and sold to biotechnology and pharmaceutical companies, academic institutions, and life sciences laboratories for research purposes only, and not diagnostic procedures. As a research only products, they and are not subject to regulation as medical devices by the U.S. Food and Drug Administration, or FDA, or comparable agencies of other countries. However, if we change the labeling of our products in the future to include diagnostic applications, our products or related applications could be subject to the FDA s pre- and post-market regulations. For example, if we wish to label and market our products for use in performing clinical diagnostics, we would first need to obtain FDA premarket clearance or approval. Obtaining FDA clearance or approval can be expensive and uncertain, generally takes several months to years to obtain, and may require detailed and comprehensive scientific and clinical data. Notwithstanding the expense, these efforts may never result in FDA approval or clearance. Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive.

Further, FDA may expand its jurisdiction over our products or the products of our customers, which could impose restrictions on our ability to market and sell our products. For example, our customers may use our research use only products in their own laboratory developed tests, or LDTs, for clinical diagnostic use. FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against LDTs. However, the FDA could assert jurisdiction over some or all LDTs, which may impact our customers uses of our products. A significant change in the way that the FDA regulates our products or the LDTs that our customers develop may require us to change our business model in order to maintain compliance with these laws. The FDA held a meeting in July 2010, during which it indicated that it intends to reconsider its policy of enforcement discretion and to begin drafting a new oversight framework for LDTs. If the FDA imposes significant changes to the regulation of LDTs, or modifies its approach to our research use only tests which may be used by our customers for clinical use, it could reduce our revenues or increase our costs and adversely affect our business, prospects, results of operations or financial condition.

Finally, we may be required to proactively achieve compliance with certain FDA regulations as part of our contracts with customers or as part of our collaborations with third parties. In addition, we may voluntarily seek to conform our manufacturing operations to the FDA s good manufacturing practice regulations for medical devices, known as the Quality System Regulation, or QSR. The QSR is a complex regulatory scheme that governs the methods and documentation covering the design, testing, control, manufacturing, labeling, quality assurance, packaging, storage and shipping of medical device products. The FDA enforces the QSR through periodic unannounced inspections of registered manufacturing facilities. The failure to take satisfactory corrective action in response to an adverse QSR inspection could result in enforcement actions, including a public warning letter, a shutdown of manufacturing operations, a product recall, civil or criminal penalties or other sanctions, which could in turn cause our sales and business to suffer.

Our products could have unknown defects or errors, which may give rise to claims against us and adversely affect market adoption of our systems.

Our microfluidic systems utilize novel and complex technology applied on a nanoliter scale and such systems may develop or contain undetected defects or errors. We cannot assure you that material performance problems, defects or errors will not arise, and as we increase the density and integration of our microfluidic systems, these risks may increase. While we do not provide express warranties that our microfluidic systems will meet performance expectations or be free from defects, we have done so in the past, and expect to in the future in response to customer concerns in order to preserve customer relationships and help foster continued adoption and use of our systems. We typically do provide warranties relating to other parts of our microfluidic systems. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

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In manufacturing our products, we depend upon third parties for the supply of various components. Many of these components require a significant degree of technical expertise to produce. If our suppliers fail to produce components to specification, or if the suppliers, or we, use defective materials or workmanship in the manufacturing process, the reliability and performance of our products will be compromised.

If our products contain defects, we may experience:

- a failure to achieve market acceptance or expansion of our product sales;
- loss of customer orders and delay in order fulfillment;
- damage to our brand reputation;
- increased cost of our warranty program due to product repair or replacement;
- product recalls or replacements;
- inability to attract new customers;
- diversion of resources from our manufacturing and research and development departments into our service department; and
- legal claims against us, including product liability claims, which could be costly and time consuming to defend and result in substantial damages.

The occurrence of any one or more of the foregoing could negatively affect our business, financial condition and results of operations.

We generate a substantial portion of our revenues internationally and are subject to various risks relating to such international activities which could adversely affect our international sales and operating performance.

During 2010, 2009 and 2008, approximately 45%, 46%, and 48%, respectively, of our product revenue was generated from sales to customers located outside of the United States. We believe that a significant percentage of our future revenue will come from international sources as we expand our overseas operations and develop opportunities in additional international areas. In addition, all of our commercial products are manufactured in Singapore. Our international business may be adversely affected by changing economic, political and regulatory conditions in foreign countries. Because the majority of our product sales are currently denominated in U.S. dollars, if the value of the U.S. dollar increases relative to foreign currencies, our products could become more costly to the international consumer and therefore less competitive in international markets, which could affect our financial performance. In addition, if the value of the U.S. dollar decreases relative to the Singapore dollar, it would become more costly in U.S. dollars for us to manufacture our products in Singapore. Furthermore, fluctuations in exchange rates could reduce our revenue, particularly with respect to grant revenue under agreements in Singapore, and affect demand for our products. Engaging in international business inherently involves a number of other difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws;
- export or import restrictions;

laws and business practices favoring local companies;

longer payment cycles and difficulties in enforcing agreements and collecting receivables through certain foreign legal systems;

political and economic instability;

potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers;

difficulties and costs of staffing and managing foreign operations; and

difficulties protecting or procuring intellectual property rights.

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If one or more of these risks occurs, it could require us to dedicate significant resources to remedy, and if we are unsuccessful in finding a solution, our financial results will suffer.

We use hazardous chemicals and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development and manufacturing processes involve the controlled use of hazardous materials, including flammables, toxics, corrosives and biologics. Our operations produce hazardous biological and chemical waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. In addition, our microfluidic systems involve the use of pressurized systems and may involve the use of hazardous materials, which could result in injury. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials. We do not currently maintain separate environmental liability coverage and any such contamination or discharge could result in significant cost to us in penalties, damages and suspension of our operations.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

We first operated as a public company in February 2011. As a public company, we are incurring significant legal, accounting and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act, as well as new rules subsequently implemented by the Securities and Exchange Commission and the NASDAQ Global Market, have imposed various new requirements on public companies, including requiring changes in corporate governance practices. Our management and other personnel are devoting a substantial amount of time to these new compliance initiatives. Moreover, these rules and regulations have increased our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these new rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be impaired, which could adversely affect our business and our stock price.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, with respect to our 2011 fiscal year, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. We currently do not have an internal audit group and we will evaluate the need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the NASDAQ Global Market, the Securities and Exchange Commission or other regulatory authorities, which would require additional financial and management resources.

Some of our programs are partially supported by government grants, which may be reduced, withdrawn, delayed or reclaimed.

We have received and may continue to receive funds under research and economic development programs funded by the governments of Singapore and the United States. Funding by these governments may be significantly reduced or eliminated in the future for a number of reasons. For example, some U.S. programs are subject to a yearly appropriations process in Congress. Similarly, our grants from the Singapore government are part of an official policy to develop a life science industry in Singapore; that policy could change or the role of grants in it could be reduced or eliminated at any time. Grant agreements currently in place with the Singaporean government are set to expire in May 2011. In addition, we may not receive funds under existing or future grants because of budgeting constraints of the agency administering the program. A restriction on the government funding available to us would reduce the resources that we would be able to devote to existing and future research and development efforts. Such a reduction could delay the introduction of new products and hurt our competitive position.

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Our agreements with the Singapore Economic Development Board, or EDB, provide that our continued eligibility for incentive grant payments from EDB is subject to our satisfaction of agreed upon targets for increasing levels of research, development and manufacturing activity in Singapore, including the use of local service providers, the hiring of personnel in Singapore, the incurrence of eligible expenses in Singapore, our receipt of new equity investment and our achievement of certain milestones relating to new product development or completion of specific manufacturing process objectives. These agreements further provide EDB with the right to demand repayment of a portion of past grants in the event that we did not meet our obligations under the applicable agreements.

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

In general, 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. Our existing NOLs may be subject to limitations arising from previous ownership changes, including our initial public offering. If we undergo an ownership change, our ability to utilize NOLs could be further limited by Section 382 of the Internal Revenue Code. Future changes in our stock ownership, some of which are outside of our control, could result in an ownership change under Section 382 of the Internal Revenue Code. We may not be able to utilize a material portion of the NOLs reflected on our balance sheet and for this reason, we have fully reserved against the value of our NOLs on our balance sheet.

Risks Related to Intellectual Property

Our ability to protect our intellectual property and proprietary technology through patents and other means is uncertain.

Our commercial success depends in part on our ability to protect our intellectual property and proprietary technologies. We rely on patent protection, where appropriate and available, as well as a combination of copyright, trade secret and trademark laws, and nondisclosure, confidentiality and other contractual restrictions to protect our proprietary technology. However, these legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. Our pending U.S. and foreign patent applications may not issue as patents or may not issue in a form that will be sufficient to protect our proprietary technology and gain or keep our competitive advantage. Any patents we have obtained or do obtain may be subject to re-examination, reissue, opposition or other administrative proceeding, or may be challenged in litigation, and such challenges could result in a determination that the patent is invalid or unenforceable. In addition, competitors may be able to design alternative methods or devices that avoid infringement of our patents. To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, we are exposed to a greater risk of direct competition. If our intellectual property does not provide adequate protection against our competitors products, our competitive position could be adversely affected, as could our business. Both the patent application process and the process of managing patent disputes can be time consuming and expensive. Furthermore, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States.

The patent positions of companies in the life science and Ag-Bio industries can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in such companies patents has emerged to date in the United States. The laws of some non-U.S. countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

We might not have been the first to make the inventions covered by each of our pending patent applications;

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We might not have been the first to file patent applications for these inventions;

Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies;

It is possible that none of our pending patent applications will result in issued patents, and even if they issue as patents, they may not provide a basis for commercially viable products, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties;

We may not develop additional proprietary products and technologies that are patentable;

The patents of others may have an adverse effect on our business; and

We apply for patents covering our products and technologies and uses thereof, as we deem appropriate. However, we may fail to apply for patents on important products and technologies in a timely fashion or at all.

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

We may be involved in lawsuits to protect or enforce our patents and proprietary rights, to determine the scope, coverage and validity of others proprietary rights, or to defend against third party claims of intellectual property infringement that could require us to spend significant time and money and could prevent us from selling our products or services or impact our stock price.

Litigation may be necessary for us to enforce our patent and proprietary rights and/or to determine the scope, coverage and validity of others proprietary rights. Litigation on these matters has been prevalent in our industry and we expect that this will continue. To determine the priority of inventions, we may have to initiate and participate in interference proceedings declared by the U.S. Patent and Trademark Office that could result in substantial legal fees and could substantially affect the scope of our patent protection. Also, our intellectual property may be subject to significant administrative and litigation proceedings such as invalidity, unenforceability, re-examination and opposition proceedings against our patents. The outcome of any litigation or other proceeding is inherently uncertain and might not be favorable to us, and we might not be able to obtain licenses to technology that we require. Even if such licenses are obtainable, they may not be available at a reasonable cost. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products.

In addition, if we resort to legal proceedings to enforce our intellectual property rights or to determine the validity, scope and coverage of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail.

Our commercial success may depend in part on our non-infringement of the patents or proprietary rights of third parties. Numerous significant intellectual property issues have been litigated, and will likely continue to be litigated, between existing and new participants in the PCR market and competitors may assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. Third parties may assert that we are employing their proprietary technology without authorization. For example, on June 4, 2008 we received a letter from Applied Biosystems, Inc., now Life Technologies Corporation, asserting that our BioMark system for gene expression analysis infringes upon U.S. Patent No. 6,814,934, or the 934 patent, and its foreign counterparts in

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Europe and Canada. The 934 patent is owned by Applied Biosystems, LLC. In response to this letter, we filed suit against Applied Biosystems and Applera in federal district court in the Southern District of New York seeking declaratory judgment of non-infringement and invalidity of the 934 patent. Applied Biosystems and Applera answered our complaint and asserted a counterclaim against us, alleging infringement of the 934 patent. Pursuant to a joint stipulation, the claims and counterclaims were dismissed on January 13, 2009, without prejudice to the parties claims, which can be reasserted.

In addition, our competitors and others may have patents or may in the future obtain patents and claim that use of our products infringes these patents. As we move into new markets and applications for our products, incumbent participants in such markets may assert their patents and other proprietary rights against us as a means of slowing our entry into such markets or as a means to extract substantial license and royalty payments from us.

Patent infringement suits can be expensive, lengthy and disruptive to business operations. We could incur substantial costs and divert the attention of our management and technical personnel in prosecuting or defending against any claims, and may harm our reputation. There can be no assurance that we will prevail in any suit initiated against us by third parties. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us, including treble damages and attorneys fees and costs in the event that we are found to be a willful infringer of third party patents.

In the event of a successful claim of infringement against us, we may be required to obtain one or more licenses from third parties, which we may not be able to obtain at a reasonable cost, if at all. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products to avoid infringing third-party patents or proprietary rights. Defense of any lawsuit or failure to obtain any required licenses on favorable terms could prevent us from commercializing our products, and the risk of a prohibition on the sale of any of our products could adversely affect our ability to grow and gain market acceptance for our products.

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

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

We engage in discussions regarding possible commercial, licensing and cross-licensing agreements with third parties from time to time. For example, we have engaged in such discussions with Caliper Life Sciences regarding its microfluidic patent portfolio and we have engaged in such discussions with Life Technologies regarding the 934 patent and other patents owned by the parties, including patents in the field of digital PCR. There can be no assurance that these discussions will lead to the execution of commercial license or cross-license agreements or that such agreements will be on terms that are favorable to us. If these discussions are successful, we could be obligated to pay license fees and royalties to such third parties. If these discussions do not lead to the execution of mutually acceptable agreements, one or more of the parties involved in such discussions could resort to litigation to protect or enforce its patents and proprietary rights or determine the scope, coverage and validity of the proprietary rights of others. In addition, if we enter into cross-licensing agreements, there is no assurance that we will be able to effectively compete against others who are licensed under our patents.

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

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core integrated fluidic circuit and multi-layer soft lithography technologies. We do not own the patents that underlie these licenses. Our rights to use the technology we license are subject to the negotiation of, continuation of and compliance with the terms of those licenses. In some cases, we do not control the prosecution, maintenance, or filing of the patents to which we hold licenses, or the enforcement of these patents against third parties. Some of our patents and patent applications were either acquired from another company who acquired those patents and patent applications from yet another company, or are licensed from a third party. Thus, these patents and patent applications are not written by us or our attorneys, and we did not have control over the drafting and prosecution. The former patent owners and our licensors might not have given the same attention to the drafting and prosecution of these patents and applications as we would have if we had been the owners of the patents and applications and had control over the drafting and prosecution. We cannot be certain that drafting and/or prosecution of the licensed patents and patent applications by the licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights.

Our rights to use the technology we license are subject to the validity of the owner s intellectual property rights. Enforcement of our licensed patents or defense or any claims asserting the invalidity of these patents is often subject to the control or cooperation of our licensors. Legal action could be initiated against the owners of the intellectual property that we license. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent these other companies or institutions from continuing to license intellectual property that we may need to operate our business.

Certain of our licenses contain provisions that allow the licensor to terminate the license upon specific conditions. Our rights under the licenses are subject to our continued compliance with the terms of the license, including the payment of royalties due under the license. Termination of these licenses could prevent us from marketing some or all of our products. Because of the complexity of our products and the patents we have licensed, determining the scope of the license and related royalty obligation can be difficult and can lead to disputes between us and the licensor. An unfavorable resolution of such a dispute could lead to an increase in the royalties payable pursuant to the license. If a licensor believed we were not paying the royalties due under the license or were otherwise not in compliance with the terms of the license, the licensor might attempt to revoke the license. If such an attempt were successful, we might be barred from producing and selling some or all of our products.

We are subject to certain manufacturing restrictions related to licensed technologies that were developed with the financial assistance of U.S. governmental grants.

We are subject to certain U.S. government regulations because we have licensed technologies that were developed with U.S. government grants. In accordance with these regulations, these licenses provide that products embodying the technologies are subject to domestic manufacturing requirements. If this domestic manufacturing requirement is not met, the government agency that funded the relevant grant is entitled to exercise specified rights, referred to as march-in rights , which if exercised would allow the government agency to require the licensors or us to grant a non-exclusive, partially exclusive or exclusive license in any field of use to a third party designated by such agency. All of our microfluidic systems revenue is dependent upon the availability of our chips, which incorporate technology developed with U.S. government grants. As of December 2010, all of our commercial products, including microfluidic systems and chips are manufactured at our facility in Singapore. The federal regulations allow the funding government agency to grant, at the request of the licensors of such technology, a waiver of the domestic manufacturing requirement. Waivers may be requested prior to any government notification. We have assisted the licensors of these technologies with the analysis of the domestic manufacturing requirement, and, in December 2008, one of the licensors applied for a waiver of the domestic manufacturing requirement with respect to certain patents. In July 2009, the funding government agency granted the requested waiver of the domestic manufacturing requirement for a three year period commencing in July 2009. If in the future it were to be determined that we are in violation of the domestic manufacturing requirement and additional waivers of such requirement were either not requested or not granted, then the U.S. government could exercise its march-in rights. In addition, these licenses contain provisions relating to compliance with this domestic manufacturing requirement. If it were determined that we are not in compliance with these provisions and such non- compliance constituted a material breach of the licenses, the licenses could be terminated. Either the exercise of march-in rights or the termination of one or more of our licenses could materially adversely affect our business, operations and financial condition.

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

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

Risks Related to Our Common Stock

We expect that our stock price will fluctuate significantly, and holders may have difficulty selling their shares.

Prior to our initial public offering, there had been no public market for shares of our common stock. Our stock is currently traded on the NASDAQ Global Market, but we can provide no assurance that there will be active trading on that market or any other market in the future. If there is not active trading market or if the volume of trading is limited, holders of our common stock may have difficulty selling their shares. In addition, the trading price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. These factors include:

- actual or anticipated quarterly variation in our results of operations or the results of our competitors;
- announcements by us or our competitors of new commercial products, significant contracts, commercial relationships or capital commitments;
- issuance of new or changed securities analysts reports or recommendations for our stock;
- developments or disputes concerning our intellectual property or other proprietary rights;
- commencement of, or our involvement in, litigation;
- market conditions in the life science, Ag-Bio and molecular diagnostics sectors;
- failure to complete significant sales;
- manufacturing disruptions that could occur if we were unable to successfully expand our production in our current or an alternative facility;
- any future sales of our common stock or other securities;
- any major change to the composition of our Board or management; and

general economic conditions and slow or negative growth of our markets.

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

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If securities or industry analysts publish unfavorable research about our business or cease to cover our business, our stock price and trading volume could decline.

The trading market for our common stock may rely in part on the research and reports that equity research analysts publish about us and our business. We do not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

Future sales of shares could cause our stock price to decline.

If stockholders holding shares of our common stock purchased prior to our public offering sell, or indicate an intention to sell, substantial amounts of their common stock in the public market the trading price of our common stock could decline. As of March 31, 2011 we had outstanding a total of 19,965,466 shares of common stock of which only the 6,392,083 shares of common stock sold in our public offering are currently freely tradable, without restriction, in the public market. Each of our directors and officers, and certain of our stockholders, has entered into lock-up agreements with the underwriter of our initial public offering that restrict their ability to sell or transfer their shares. The lock-up agreements pertaining to our public offering are in effect through August 8, 2011, although they may be extended for up to an additional 34 days under certain circumstances. Our underwriters, however, may, in their sole discretion, permit our officers, directors and other current stockholders who are subject to the contractual lock-up to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, based on shares outstanding as of March 31, 2011, up to an additional 13,573,383 shares of common stock will be eligible for sale in the public market, 2,354,862 of which are held by directors and executive officers and will be subject to volume limitations under Rule 144 under the Securities Act and various vesting agreements. In addition, 2,103,963 shares of common stock that are issuable upon exercise of outstanding options as of March 31, 2011 will become eligible for sale in the public market to the extent permitted by the provisions of various vesting agreements, the lock-up agreements and Rules 144 and 701 under the Securities Act. If these additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

Our directors and executive officers will continue to have substantial control over and could limit your ability to influence the outcome of key transactions, including changes of control.

As of March 31, 2011, our current executive officers, directors and their affiliates beneficially owned or controlled approximately 14% of the outstanding shares of our common stock. Accordingly, these executive officers, directors and their affiliates, acting as a group, can have substantial influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets or any other significant corporate transactions. These stockholders may also delay or prevent a change of control of us, even if such a change of control would benefit our other stockholders. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors perception that conflicts of interest may exist or arise.

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 may have the effect of delaying or preventing a change of control or changes in our management, including provisions that:

- authorize our board of directors to issue, without further action by the stockholders, up to 10,000,000 shares of undesignated preferred stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of the board, the Chief Executive Officer or the President;

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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 three year terms;

provide that our directors may be removed only for cause;

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;

specify that no stockholder is permitted to cumulate votes at any election of directors; and

require a super-majority of votes to amend certain of the above-mentioned provisions.

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.

We have broad discretion in the use of the net proceeds from our initial public offering and may not use them effectively.

We have broad discretion in the application of the net proceeds from our initial public offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. We intend to use the net proceeds from our initial public offering for sales and marketing activities, including expansion of our sales force to support the ongoing commercialization of our products; for research and product development activities; for facilities improvements and the purchase of manufacturing and other equipment; and for working capital and other general corporate purposes. We may also use a portion of our net proceeds to acquire and invest in complementary products, technologies or businesses; however, we currently have no agreements or commitments to complete any such transaction. We have not allocated these net proceeds for any specific purposes. We might not be able to yield a significant return, if any, on any investment of these net proceeds. Stockholders will not have the opportunity to influence our management s decisions on how to use the net proceeds, and our failure to apply the funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

We have paid no cash dividends on any of our classes of capital stock to date, have contractual restrictions against paying cash dividends and currently intend to retain our future earnings to fund the development and growth of our business. As a result, capital appreciation, if any, of our common stock will be stockholders sole source of gain for the foreseeable future.

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

Sales of Unregistered Securities

Between January 1, 2011 to March 31, 2011, we sold securities in transactions that were not registered under the Securities Act as set forth below.

We granted stock options to purchase 437,404 shares of our common stock at an exercise price of $8.3732 per share to certain of our employees, officers and directors under our 2009 Equity Incentive Plan, as amended, or 2009 Plan. In addition, we issued and sold an aggregate of 15,112 shares of our common stock to certain of our employees at prices ranging from $4.0828 to $4.4461 per share for an aggregate of $65,265 pursuant to exercises of options granted under the 2009 Plan. The sales and issuances of securities in these transactions were deemed to be

exempt from registration under 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.

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In January 2011, we issued and sold subordinated secured promissory notes with an aggregate principal amount of $5.0 million and warrants to purchase an aggregate of 103,182 shares of our preferred stock at an exercise price of $0.02 per share for aggregate consideration of $5.0 million to a total of 49 accredited investors, all of whom were existing investors of the Company and had substantial pre-existing relationships with us. Upon the closing of our IPO in February 2011, we issued an aggregate of 103,182 shares of common stock as the result of the exercise or net exercise of all of these warrants. These transactions did not involve any underwriters, underwriting discounts or commissions, or any public offering, and we believe that each transaction was exempt from the registration requirements of the Securities Act in reliance on Section 4(2) of the Securities Act as transactions by an issuer not involving a public offering.

Use of Proceeds

On February 9, 2011, our registration statements on Form S-1 (Nos. 333-170965 and 333-172146) relating to our IPO were declared effective by the SEC. Our IPO closed on February 15, 2011, and the net proceeds to us after under writing discounts, commissions, and offering expenses were approximately $77.0 million. Through March 31, 2011, the net proceeds have been applied as follows: $5.0 million for the repayment of promissory notes issued in January 2011, $3.1 million for the repayment of our bank line of credit, $1.6 million for research and development expenses, $3.7 million for general corporate purposes including selling, general and administrative expenses, and $0.2 million for capital expenditures.

There has been no material change in the planned use of proceeds from our IPO from that described in the final prospectus filed with the SEC pursuant to Rule 424(b) on February 10, 2011.

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Item 6. Exhibits.

Exhibit Number	Description	Incorporated by Reference From Form	Incorporated by Reference From Exhibit Number	Date Filed
4.8A	Business Financing Modification Agreement dated March 31, 2011, by and between Bridge Bank, National Association, and the registrant.	Form 8-K	4.8A	April 4, 2011
10.18	Offer Letter dated May 3, 2010 to Fredric Walder and Addendum thereto dated November 8, 2010.	Form 8-K	10.18	April 4, 2011
10.21A(1)	Amendment #1, executed on March 29, 2011 and effective as of March 15, 2011, to the Collaboration and Option Agreement dated May 17, 2010, by and between Novartis Vaccines & Diagnostics, Inc. and the registrant.	Form 8-K	10.21A	April 4, 2011
31.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Filed herewith		
31.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Filed herewith		
32.1(2)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Furnished herewith		
32.2(2)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Furnished herewith		

(1) Confidential treatment was requested with respect to certain portions of this exhibit. Omitted portions were filed separately with the SEC.

(2) In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 33-8238 and 34-47986, Final Rule: Management s Reports on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-Q and will not be deemed filed for purposes of Section 18 of the Exchange Act. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference.

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SIGNATURES

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

FLUIDIGM CORPORATION

Dated: May 11, 2011

By: /s/ Gajus V. Worthington
Gajus V. Worthington
President and Chief Executive Officer

Dated: May 11, 2011

By: /s/ Vikram Jog
Vikram Jog
Chief Financial Officer

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EXHIBIT LIST

Exhibit Number	Description	Incorporated by Reference From Form	Incorporated by Reference From Exhibit Number	Date Filed
4.8A	Business Financing Modification Agreement dated March 31, 2011, by and between Bridge Bank, National Association, and the registrant.	Form 8-K	4.8A	April 4, 2011
10.18	Offer Letter dated May 3, 2010 to Fredric Walder and Addendum thereto dated November 8, 2010.	Form 8-K	10.18	April 4, 2011
10.21A(1)	Amendment #1, executed on March 29, 2011 and effective as of March 15, 2011, to the Collaboration and Option Agreement dated May 17, 2010, by and between Novartis Vaccines & Diagnostics, Inc. and the registrant.	Form 8-K	10.21A	April 4, 2011
31.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Filed herewith		
31.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Filed herewith		
32.1(2)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of President and Chief Executive Officer	Furnished herewith		
32.2(2)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 of Chief Financial Officer	Furnished herewith		

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