

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

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**FORM 10-Q**

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(Mark One)

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

For the quarterly period ended March 31, 2015

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

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**FLUIDIGM CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

77-0513190  
(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)

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

Indicate by check mark whether the registrant has submitted electronically 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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>

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

As of April 30, 2015, there were 28,784,622 shares of the Registrant's common stock outstanding.

**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, 2015	December 31, 2014
	(Unaudited)	(Note 2)
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 36,982	\$ 33,713
Short-term investments	79,424	81,588
Accounts receivable (net of allowances of \$76 at March 31, 2015 and \$120 at December 31, 2014)	19,577	22,384
Inventories	17,394	15,991
Prepaid expenses and other current assets	1,856	2,221
Total current assets	155,233	155,897
Long-term investments	18,508	27,499
Property and equipment, net	14,053	13,889
Other non-current assets	3,729	3,966
Developed technology, net	99,400	102,200
Goodwill	104,108	104,108
Total assets	\$ 395,031	\$ 407,559
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 5,502	\$ 5,919
Accrued compensation and related benefits	4,840	6,874
Other accrued liabilities	7,216	9,664
Deferred revenue, current portion	7,346	6,928
Total current liabilities	24,904	29,385
Convertible notes, net	195,512	195,455
Deferred tax liability	25,344	26,152
Deferred revenue, net of current portion	5,096	4,357
Other non-current liabilities	1,722	1,791
Total liabilities	252,578	257,140
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value, 10,000 shares authorized, no shares issued and outstanding at March 31, 2015 and December 31, 2014	—	—
Common stock, \$0.001 par value, 200,000 shares authorized at March 31, 2015 and December 31, 2014; 28,715 and 28,341 shares issued and outstanding as of March 31, 2015 and December 31, 2014, respectively	29	28
Additional paid-in capital	469,132	461,362
Accumulated other comprehensive loss	(600)	(794)
Accumulated deficit	(326,108)	(310,177)
Total stockholders' equity	142,453	150,419
Total liabilities and stockholders' equity	\$ 395,031	\$ 407,559

See accompanying notes.

**FLUIDIGM CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
*(In thousands, except per share amounts)*  
*(Unaudited)*

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
<b>Revenue:</b>		
Product revenue	\$ 26,646	\$ 25,449
License revenue	83	112
Grant revenue	—	163
<b>Total revenue</b>	<b>26,729</b>	<b>25,724</b>
<b>Costs and expenses:</b>		
Cost of product revenue	10,646	8,704
Research and development	9,990	7,646
Selling, general and administrative	20,094	15,257
Acquisition-related expenses	—	10,696
<b>Total costs and expenses</b>	<b>40,730</b>	<b>42,303</b>
Loss from operations	(14,001)	(16,579)
Interest expense	(1,453)	(1,026)
Other (expense) income, net	(1,120)	48
Loss before income taxes	(16,574)	(17,557)
Benefit from income taxes	643	2,143
<b>Net loss</b>	<b>\$ (15,931)</b>	<b>\$ (15,414)</b>
Net loss per share, basic and diluted	\$ (0.56)	\$ (0.57)
Shares used in computing net loss per share, basic and diluted	28,468	26,900

See accompanying notes.

**FLUIDIGM CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**  
*(In thousands)*  
*(Unaudited)*

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
Net loss	\$ (15,931)	\$ (15,414)
Other comprehensive (loss) income, net of tax		
Unrealized gain on available-for-sale securities	55	1
Foreign currency translation adjustment	139	(29)
Other comprehensive income (loss), net of tax	194	(28)
Total comprehensive loss	<u>\$ (15,737)</u>	<u>\$ (15,442)</u>

See accompanying notes.

**FLUIDIGM CORPORATION**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
*(In thousands)*  
*(Unaudited)*

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
<b>Operating activities</b>		
Net loss	\$ (15,931)	\$ (15,414)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,338	920
Stock-based compensation expense	4,068	3,379
Acquisition-related share-based awards acceleration expense	—	2,648
Amortization of developed technology	2,800	1,400
Non-cash charges for sale of inventory revalued at the date of acquisition	—	517
Changes in assets and liabilities:		
Accounts receivable, net	3,096	(601)
Inventories	(1,321)	(2,511)
Prepaid expenses and other current assets	422	(435)
Other non-current assets	150	(3,103)
Accounts payable	(512)	2,514
Deferred revenue	1,294	949
Other current liabilities	(4,328)	(552)
Other non-current liabilities	(876)	(258)
Net cash used in operating activities	(9,800)	(10,547)
<b>Investing activities</b>		
Acquisition, net of cash acquired	—	(113,190)
Purchases of investments	—	(15,003)
Proceeds from sales and maturities of investments	11,100	8,775
Purchase of intangible assets	(120)	—
Purchases of property and equipment	(909)	(1,813)
Net cash provided by (used in) investing activities	10,071	(121,231)
<b>Financing activities</b>		
Proceeds from issuance of convertible notes, net	—	195,212
Proceeds from exercise of stock options	3,732	2,287
Net cash provided by financing activities	3,732	197,499
Effect of foreign exchange rate fluctuations on cash and cash equivalents	(734)	42
Net increase in cash and cash equivalents	3,269	65,763
Cash and cash equivalents at beginning of period	33,713	35,261
Cash and cash equivalents at end of period	\$ 36,982	\$ 101,024
<b>Supplemental cash flow information:</b>		
Issuance of common stock and options related to acquisition	\$ —	\$ 78,196

See accompanying notes.

**FLUIDIGM CORPORATION**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(Unaudited)**

## 1. Description of Business

Fluidigm Corporation (we, our, or us) was incorporated in the State of California in May 1999 to commercialize microfluidic technology initially developed at the California Institute of Technology. In July 2007, we were reincorporated in Delaware. Our headquarters are located in South San Francisco, California.

We create, manufacture, and market innovative technologies and life-science tools focused on the exploration and analysis of single cells, as well as the industrial application of genomics, based upon our core microfluidics and mass cytometry technologies. We sell instruments and consumables, including integrated fluidic circuits (IFCs), assays, and reagents, to academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and agricultural biotechnology (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) and 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 have been condensed or omitted, and accordingly the balance sheet as of December 31, 2014 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. These financial statements have been prepared on the same basis as our 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 our financial information. The results of operations for the three months ended March 31, 2015 are not necessarily indicative of the results to be expected for the year ending December 31, 2015 or for any other interim period or for any other future year. All intercompany accounts and transactions have been eliminated upon consolidation.

The preparation of these condensed consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. On an ongoing basis, we evaluate our estimates, including critical accounting policies or estimates related to revenue recognition, income tax provisions, stock-based compensation, inventory valuation, allowances for doubtful accounts, and useful lives of long-lived assets. We base our estimates on historical experience and on various relevant assumptions that we believe 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, 2014 included in our Annual Report on Form 10-K filed with the SEC.

### Net Loss per Share

Our basic and diluted net loss per share is calculated by dividing net loss by the weighted-average number of shares of common stock outstanding for the period. Restricted stock units and options to purchase common stock are considered to be potentially dilutive common shares but have been excluded from the calculation of diluted net loss per share as their effect is anti-dilutive for all periods presented.

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

	Three Months Ended March 31,	
	2015	2014
Stock options, restricted stock units and restricted stock awards	3,940	3,927
Convertible notes	3,598	3,598
<b>Total</b>	<b>7,538</b>	<b>7,525</b>

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

### Accumulated Other Comprehensive Loss

The components of accumulated other comprehensive loss, net of tax, for the three months ended March 31, 2015 are summarized as follows (in thousands):

	Net Unrealized Gain (Loss) on Marketable Securities	Foreign Currency Translation Adjustment	Accumulated Other Comprehensive Loss
Balance at December 31, 2014	\$ (49)	\$ (745)	\$ (794)
Other comprehensive income	55	139	194
Balance at March 31, 2015	\$ 6	\$ (606)	\$ (600)

### Business Combinations

Assets acquired and liabilities assumed as part of a business acquisition are generally recorded at their fair value at the date of acquisition. The excess of purchase price over the fair value of assets acquired and liabilities assumed is recorded as goodwill. Determining fair value of identifiable assets, particularly intangibles, and liabilities acquired also requires management to make estimates, which are based on all available information and in some cases assumptions with respect to the timing and amount of future revenues and expenses associated with an asset. Accounting for business acquisitions requires management to make judgments as to whether a purchase transaction is a multiple element contract, meaning that it includes other transaction components such as a settlement of a preexisting relationship. This judgment and determination affects the amount of consideration paid that is allocable to assets and liabilities acquired in the business purchase transaction (See Note 4).

### Long-lived Assets, including Goodwill

Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment on an annual basis during the fourth quarter or whenever events or changes in circumstances indicate the carrying amount of these assets may not be recoverable. We first conduct an assessment of qualitative factors to determine whether it is more likely than not that the fair value of our reporting unit is less than its carrying amount. If we determine that it is more likely than not that the fair value of our reporting unit is less than its carrying amount, we then conduct a two-step test for impairment of goodwill. In the first step, we compare the fair value of our reporting unit to its carrying value. If the fair value of our reporting unit exceeds its carrying value, goodwill is not considered impaired and no further analysis is required. If the carrying value of the reporting unit exceeds its fair value, then the second step of the impairment test must be performed in order to determine the implied fair value of the goodwill. If the carrying value of the goodwill exceeds its implied fair value, then an impairment loss equal to the difference would be recorded.

We evaluate our finite lived intangible assets for indicators of possible impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. If any indicator of impairment exists, we assess the recoverability of the affected intangible assets by determining whether the carrying value of the asset can be recovered through undiscounted future operating cash flows. If impairment is indicated, we estimate the asset's fair value using future discounted cash flows associated with the use of the asset, and adjust the carrying value of the asset accordingly.

### Recent Accounting Pronouncements

In April 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2015-03, Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs. This guidance is intended to simplify the presentation of debt issuance costs. These amendments require that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. It will be effective for our interim and annual financial statements beginning in the first quarter of 2016 and early adoption is permitted. We will apply the guidance in ASU 2015-03 in our financial statements commencing in the first quarter of 2016, which will result in a reclassification of approximately \$1.0 million from Other assets to Convertible notes, net.

### 3. Convertible Notes

On February 4, 2014, we closed an underwritten public offering of \$201.3 million aggregate principal amount of our 2.75% Senior Convertible Notes due 2034 (Notes) pursuant to an underwriting agreement, dated January 29, 2014. The Notes accrue interest at a rate of 2.75% per year, payable semi-annually in arrears on February 1 and August 1 of each year, commencing August 1, 2014. The Notes will mature on February 1, 2034, unless earlier converted, redeemed, or repurchased in accordance

with the terms of the Notes. The initial conversion rate of the Notes is 17.8750 shares of our common stock, par value \$0.001 per share, per \$1,000 principal amount of Notes (which is equivalent to an initial conversion price of approximately \$55.94 per share). The conversion rate will be subject to adjustment upon the occurrence of certain specified events. Holders may surrender their Notes for conversion at any time prior to the stated maturity date. On or after February 6, 2018 and prior to February 6, 2021, we may redeem any or all of the Notes in cash if the closing price of our common stock exceeds 130% of the conversion price for a specified number of days, and on or after February 6, 2021, we may redeem any or all of the Notes in cash without any such condition. The redemption price of the Notes will equal 100% of the principal amount of the Notes plus accrued and unpaid interest. Holders may require us to repurchase all or a portion of their Notes on each of February 6, 2021, February 6, 2024, and February 6, 2029 at a repurchase price in cash equal to 100% of the principal amount of the Notes plus accrued and unpaid interest. If we undergo a fundamental change, as defined in the terms of the Notes, holders may require us to repurchase the Notes in whole or in part for cash at a repurchase price equal to 100% of the principal amount of the Notes plus accrued and unpaid interest.

In February 2014, we received \$195.2 million, net of underwriting discounts, from the issuance of the Notes and incurred approximately \$1.1 million in offering-related expenses. We used \$113.2 million of the net proceeds to fund the cash portion of the consideration payable by us in connection with our acquisition of DVS Sciences, Inc. (now Fluidigm Sciences Inc.) (DVS) (See Note 4). Interest expense related to the Notes was approximately \$1.5 million and \$1.0 million for the three months ended March 31, 2015 and 2014, respectively. Approximately \$2.8 million of accrued interest under the Notes became due and was paid during the three months ended March 31, 2015.

#### 4. Acquisition

On February 13, 2014 (Acquisition Date), we acquired DVS primarily to broaden our addressable single-cell biology market opportunity and complement our existing product offerings. DVS develops, manufactures, markets, and sells high-parameter single-cell protein analysis systems and related reagents and data analysis tools. DVS's principal market is the life sciences research market consisting of drug development companies, government research centers, and universities worldwide.

The contractual price for the acquisition was \$207.5 million, subject to certain adjustments as specified in the merger agreement. The aggregate purchase price was determined to be \$199.9 million, as detailed in the table below (in thousands):

	<b>Estimated Fair Value</b>	
Cash	\$	126,048
Issued 1,759,007 shares of Fluidigm common stock		76,805
Acquisition consideration paid at Acquisition Date		202,853
Accelerated stock compensation <sup>(1)</sup>		(6,690)
Estimated fair value of vested Fluidigm equivalent stock options <sup>(2)</sup>		4,039
Working capital adjustment		(269)
<b>Aggregate purchase price</b>	<b>\$</b>	<b>199,933</b>

- (1) As a part of the acquisition, we accelerated vesting of certain DVS stock options and shares of restricted stock, and incurred a \$6.7 million expense, based upon the per share consideration paid to holders of shares of DVS common stock as of February 13, 2014. This expense is accounted for as a separate transaction and reflected in the acquisition-related expenses line of the condensed consolidated statements of operations.
- (2) In conjunction with the acquisition, we assumed all outstanding DVS stock options and unvested shares of restricted stock and converted, as of the Acquisition Date, the unvested stock options outstanding under the DVS stock option plan into unvested stock options to purchase approximately 143,000 shares of Fluidigm common stock and the unvested DVS restricted stock into approximately 186,000 shares of restricted Fluidigm common stock, retaining the original vesting schedules. The fair value of all converted share-based awards was \$14.6 million, of which \$4.0 million was attributed to the pre-combination service period and was included in the calculation of the purchase price. The remaining fair value will be recognized over the awards' remaining vesting periods subsequent to the acquisition. The fair value of the Fluidigm equivalent share-based awards as of the Acquisition Date was estimated using the Black-Scholes valuation model.

Approximately 885,000 shares of Fluidigm common stock, with a fair value of \$38.6 million as of the Acquisition Date, representing 50.3030% of the shares otherwise payable to the former stockholders of DVS, were deposited into escrow. These shares comprise a portion of the merger consideration and are being held in escrow to secure indemnification obligations under the merger agreement, if any, for a period of 13 to 18 months following the Acquisition Date, subject to any then pending indemnification claims. Under the terms of the merger agreement, fifty percent (50.0%) of the aggregate shares subject to the indemnification escrow were eligible for release on March 13, 2015 (Initial Release Date), and the balance of the shares would

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

become eligible for release on August 13, 2015, provided that in each case shares will continue to be held in escrow in amounts that we may reasonably determine in good faith to be necessary to satisfy any claims for which we have delivered a notice of claim which has not been fully resolved between us and the representative of the former stockholders of DVS (Stockholder Representative). Prior to the Initial Release Date, we submitted escrow claim notices under the terms of the merger agreement. On April 9, 2015, the Stockholder Representative provided notices objecting to our claims. We are currently in discussions with the Stockholder Representative regarding the claims. Pursuant to the terms of the merger agreement, if the parties do not reach an agreement by May 9, 2015, either party may seek to resolve the dispute by filing an action with the Court of Chancery of the State of Delaware. As of the date of this filing, no shares have been released from the escrow, and we cannot predict whether the dispute will result in litigation, whether we would prevail in any such litigation, and whether and to what extent we will be able to recover shares from the escrow.

### Net Assets Acquired

The transaction has been accounted for using the acquisition method of accounting which requires that assets acquired and liabilities assumed be recognized at their fair values as of the Acquisition Date. The following table summarizes the assets acquired and liabilities assumed as of the Acquisition Date (in thousands):

	<b>Allocation of purchase price</b>
Cash and cash equivalents	\$ 8,405
Accounts receivable, net	7,698
Inventories	3,489
Prepaid expenses and other current assets	1,482
Property and equipment, net	1,202
Developed technology	112,000
Goodwill	104,108
Other non-current assets	88
<b>Total assets acquired</b>	<b>238,472</b>
Accounts payable	(1,114)
Accrued compensation and related benefits	(761)
Other accrued liabilities	(1,204)
Deferred revenue, current portion	(1,844)
Tax payable	(45)
Deferred tax liability	(31,942)
Deferred revenue, net of current portion	(1,629)
<b>Net assets acquired</b>	<b>\$ 199,933</b>

The following table provides details of intangible assets acquired in connection with the DVS acquisition as of March 31, 2015 (in thousands, except years):

	<u>Gross</u>	<u>Accumulated Amortization</u>	<u>Net</u>	<u>Useful Life (years)</u>
Developed technology	\$ 112,000	\$ (12,600)	\$ 99,400	10

We recognized \$2.8 million and \$1.4 million in intangible asset amortization expense during the three months ended March 31, 2015 and 2014, respectively.

The \$104.1 million of goodwill recognized as part of the transaction is attributable primarily to expected synergies and other benefits from the acquisition, including expansion of our addressable market from the single-cell genomics market to the larger single-cell biology market and the ability to leverage our larger global commercial sales organization and infrastructure to expand awareness of DVS's products and technology. Goodwill is not expected to be deductible for income tax purposes. There were no changes in goodwill between December 31, 2014 and March 31, 2015.

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

**Acquisition Costs**

Acquisition-related expenses were \$10.7 million for the three months ended March 31, 2014 and primarily included accelerated vesting of certain DVS restricted stock and options, and consulting, legal, and investment banking fees. These costs are included within the acquisition-related expenses line of the condensed consolidated statements of operations.

**5. Balance Sheet Details****Inventories**

Inventories consist of the following (in thousands):

	March 31, 2015	December 31, 2014
Raw materials	\$ 5,953	\$ 4,670
Work-in-process	3,322	3,524
Finished goods	8,119	7,797
	<u>\$ 17,394</u>	<u>\$ 15,991</u>

**Property and Equipment, net**

Property and equipment, net consisted of the following (in thousands):

	March 31, 2015	December 31, 2014
Computer equipment and software	\$ 4,144	\$ 3,905
Laboratory and manufacturing equipment	18,875	17,592
Leasehold improvements	5,519	4,988
Office furniture and fixtures	1,702	1,804
	<u>30,240</u>	<u>28,289</u>
Less accumulated depreciation and amortization	(17,299)	(16,360)
Construction-in-progress	1,112	1,960
Property and equipment, net	<u>\$ 14,053</u>	<u>\$ 13,889</u>

**Intangible Assets**

The total intangible assets, which includes developed technology as a result of the DVS acquisition and other intangible assets included in Other non-current assets, was \$101.1 million as of March 31, 2015. The estimated future amortization expense of intangible assets as of March 31, 2015 is as follows (in thousands):

	Amount
2015 (remainder of year)	\$ 8,748
2016	11,496
2017	11,481
2018	11,417
2019	11,326
Thereafter	46,654
	<u>\$ 101,122</u>

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

**6. Fair Value of Financial Instruments**

As a basis for considering fair value, we follow 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 us to develop our own assumptions.

Our cash equivalents, which include money market funds, are classified as Level I because they are valued using quoted market prices. Our investments are generally classified as Level II because their value is based on valuations using significant inputs derived from or corroborated by observable market data. Depending on the security, the income and market approaches are used in the model driven valuations. Inputs of these models include recently executed transaction prices in securities of the issuer or comparable issuers and yield curves.

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

	March 31, 2015				December 31, 2014			
	Level I	Level II	Level III	Total	Level I	Level II	Level III	Total
<b>Assets</b>								
Money market funds	\$ 15,898	\$ —	\$ —	\$ 15,898	\$ 10,220	\$ —	\$ —	\$ 10,220
U.S. government and agency securities	—	97,932	—	97,932	—	109,087	—	109,087
<b>Total assets measured at fair value</b>	<b>\$ 15,898</b>	<b>\$ 97,932</b>	<b>\$ —</b>	<b>\$ 113,830</b>	<b>\$ 10,220</b>	<b>\$ 109,087</b>	<b>\$ —</b>	<b>\$ 119,307</b>

There were no transfers in and out of Level I and Level II fair value measurement categories during the three months ended March 31, 2015 and 2014, and there were no changes in the valuation techniques used.

The following is a summary of investments at March 31, 2015 and December 31, 2014 (in thousands):

	March 31, 2015			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
U.S. government and agency securities	\$ 97,926	\$ 12	\$ (6)	\$ 97,932

  

	December 31, 2014			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Estimated Fair Value
U.S. government and agency securities	\$ 109,136	\$ 3	\$ (52)	\$ 109,087

The contractual maturity dates of \$79.5 million of our investments are within one year from March 31, 2015. The contractual maturity dates of our remaining securities are less than eighteen months from March 31, 2015.

Based on an evaluation of securities that were in a loss position, we did not recognize any other-than-temporary impairment charges for the three months ended March 31, 2015 and 2014. None of these investments have been in a continuous loss position for more than 12 months. Our conclusion that these losses are not “other-than-temporary” is based on the high credit quality of the securities, their short remaining maturity periods, and our intent and ability to hold such securities until the date of recovery of their respective market values or maturity.

The estimated fair value of the Notes is based on a market approach. The estimated fair value was approximately \$213.8 million (par value \$201.3 million) as of March 31, 2015 and represents a Level II valuation. When determining the estimated fair value of our long-term debt, we used a commonly accepted valuation methodology and market-based risk measurements that are indirectly observable, such as credit risk.

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

The following is a summary of our cash and cash equivalents (in thousands):

	March 31, 2015	December 31, 2014
Cash	\$ 21,084	\$ 23,493
Money market funds	15,898	10,220
Cash and cash equivalents	\$ 36,982	\$ 33,713

## 7. Commitments and Contingencies

### Operating Leases

On April 9, 2013, we entered into an amendment (the 2013 Amendment) to the lease agreement dated September 14, 2010 (as amended, the Lease) relating to the lease of office and laboratory space at our corporate headquarters located in South San Francisco, California. The 2013 Amendment provided for an expansion of the premises covered under the Lease, effective April 1, 2014; an extension of the term of the Lease to April 30, 2020 with an option to renew for an additional five years; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The 2013 Amendment also provided for an allowance of approximately \$0.7 million for tenant improvements, \$0.2 million of which was unused by March 31, 2015 and will be used to offset base rent obligations, and an additional allowance of approximately \$0.5 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease.

On June 4, 2014, we entered into an additional amendment to the Lease (the June 2014 Amendment), which provided for an expansion of the premises covered under the Lease by approximately 13,000 square feet, effective October 1, 2014; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The June 2014 Amendment also provided for an allowance of approximately \$0.2 million for tenant improvements, which was fully utilized by March 31, 2015, and an additional allowance of approximately \$0.1 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately \$2.3 million as of March 31, 2015.

On September 15, 2014, we entered into an additional amendment to the Lease (the September 2014 Amendment), which provided for an expansion of the premises covered under the Lease by approximately 9,000 square feet, effective October 1, 2014; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The September 2014 Amendment also provided for an allowance of approximately \$0.2 million for tenant improvements. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately \$1.6 million as of March 31, 2015.

On October 14, 2013, Fluidigm Singapore Pte. Ltd., our wholly-owned subsidiary (Fluidigm Singapore), accepted an offer of tenancy (Singapore Lease) from HSBC Institutional Trust Services (Singapore) Limited, as trustee of Ascendas Real Estate Investment Trust (Landlord), relating to the lease of a new facility located in Singapore. Pursuant to the terms of the Singapore Lease, Fluidigm Singapore took possession of the facility commencing on March 3, 2014 for a term of 99 months, and the Singapore Lease and rental obligations thereunder commenced on June 3, 2014. The Singapore Lease also provides Fluidigm Singapore with an option to renew the Singapore Lease for an additional 60 months at the then prevailing market rent, and on similar terms as the existing Singapore Lease. In June 2014, Fluidigm Singapore leased additional space of approximately 2,400 square feet in the same building as the new facility on the same terms as the Singapore Lease (the June 2014 Singapore Lease). We completed the consolidation of our Singapore manufacturing operations in the new space in July 2014 and the site qualification was completed in August 2014. The leases relating to our prior manufacturing facility in Singapore terminated on August 31, 2014. In April 2015, Fluidigm Singapore leased additional space of approximately 10,000 square feet in the same building on the same terms as the Singapore Lease (the April 2015 Singapore Lease). In connection with the April 2015 Singapore Lease, Fluidigm Singapore will terminate the June 2014 Singapore Lease on June 30, 2015. The total future minimum lease payments which will be paid through June 2022, are approximately \$4.5 million as of March 31, 2015.

In connection with our acquisition of DVS (See Note 4), we acquired the operating leases for facilities in Sunnyvale, California and Markham, Ontario, Canada, which expire in July 2016 and January 2016, respectively. The Canada lease includes an option to renew the lease for an additional five years at the then prevailing market rent, and on similar terms as the existing

lease. We recognize rent expense on a straight-line basis over the non-cancelable lease term. The total future minimum lease payments for the operating leases in Sunnyvale, California and Markham, Ontario, Canada are approximately \$368,000 as of March 31, 2015.

## Warranty

We accrue for estimated warranty obligations at the time of product shipment. Management periodically reviews the estimated fair value of its warranty liability and records adjustments based on the terms of warranties provided to customers, historical and anticipated warranty claim experience. Activity for our warranty accrual for the three months ended March 31, 2015 and 2014, which is included in other accrued liabilities, is summarized below (in thousands):

	Three Months Ended March 31,	
	2015	2014
Beginning balance	\$ 1,178	\$ 344
Warranty accrual, net	(114)	767
Ending balance	\$ 1,064	\$ 1,111

## Legal Matters

From time to time, we may be subject to various legal proceedings and claims arising in the ordinary course of business. We assess contingencies to determine the degree of probability and range of possible loss for potential accrual in our financial statements. An estimated loss contingency is accrued in the financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Pursuant to the terms of a patent cross license agreement with Applied Biosystems, LLC (a subsidiary of Life Technologies Corporation, or Life, and now part of Thermo Fisher Scientific), we were obligated to make a \$1.0 million payment to Life upon satisfaction of certain conditions. We do not believe that the conditions triggering the payment obligation have been met; however, on October 16, 2013, Life provided notice that the \$1.0 million payment was due and payable under the license agreement. We accrued a loss contingency of \$1.0 million on September 30, 2013 and on January 30, 2014, we paid Life the amount due while reserving our rights with respect to such matter. Among other reasons, we made the payment to avoid what would have been, in our view, an improper termination of our license to certain Life patent filings under the agreement, which could have subjected our relevant product lines to risks associated with patent infringement litigation.

## 8. Stock-Based Compensation

During the three months ended March 31, 2015 and 2014, we granted certain employees options to purchase 276,000 and 352,000 shares of common stock, respectively. The options granted during the three months ended March 31, 2015 had exercise prices ranging from \$38.53 to \$44.20 and a total grant date fair value of \$5.5 million. The options granted during the three months ended March 31, 2014 had exercise prices ranging from \$44.07 to \$47.55 and a total grant date fair value of \$9.2 million.

During the three months ended March 31, 2015 and 2014, we granted certain employees 349,000 and 285,000 restricted stock units, respectively. The restricted stock units granted during the three months ended March 31, 2015 had fair market values ranging from \$37.45 to \$44.20 and a total grant date fair value of \$14.3 million. The restricted stock units granted during the three months ended March 31, 2014 had fair market values ranging from \$42.43 to \$47.55 and a total grant date fair value of \$13.2 million. The fair value of restricted stock units is determined based on the value of the underlying common stock on the date of grant.

The expenses relating to these options and restricted stock units will be recognized over their respective four-year vesting periods.

We recognized stock-based compensation expense of \$4.1 million and \$3.4 million during the three months ended March 31, 2015 and 2014, respectively. As of March 31, 2015, we had \$18.0 million and \$24.2 million of unrecognized stock-based compensation costs related to stock options and restricted stock units, respectively, which are expected to be recognized over a weighted average period of 2.6 years and 3.5 years, respectively.

In conjunction with the DVS acquisition, we assumed all outstanding DVS stock options and unvested shares of restricted stock (See Note 4). As of March 31, 2015, we had \$0.8 million and \$0.02 million of unrecognized stock-based compensation costs related to the assumed stock options and restricted stock, respectively, which are expected to be recognized over a remaining weighted average period of 1.5 years and 0.1 years, respectively.

**FLUIDIGM CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**  
**(unaudited)**

**9. Income Taxes**

Income taxes are primarily comprised of state and foreign income taxes. The provision or benefit for income taxes for the periods presented differs from the 34% U.S. Federal statutory rate primarily due to maintaining a valuation allowance for U.S. losses and tax assets, which we do not consider to be realizable. Income tax expense primarily consists of amounts payable in foreign jurisdictions.

**10. Information about Geographic Areas**

We operate in one reporting segment, which is the development, manufacturing, and commercialization of life science analytical and preparatory systems consisting of instruments and consumables for academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies in growth markets, such as single-cell biology and production genomics.

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

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
United States	\$ 13,711	\$ 11,238
Europe	6,916	6,382
Japan	1,873	4,354
Asia-Pacific	3,332	2,092
Other	814	1,383
Total	<u>\$ 26,646</u>	<u>\$ 25,449</u>

Our license and grant revenues are primarily generated in the United States. No individual customer represented more than 10% of our revenues for the three month periods ended March 31, 2015 and 2014.

## **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 section 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 cash flow, revenue, sources of revenue and results of operations, operating and other expenses, unit sales, business strategies, financing plans, expansion of our business, 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.*

*“Fluidigm,” the Fluidigm logo, “Access Array,” “Biomark,” “C1,” “CyTOF,” “Delta Gene,” “EP1,” “Juno,” and “SNP Type,” are trademarks or registered trademarks of Fluidigm Corporation. Other service marks, trademarks, and trade names referred to in this Form 10-Q are the property of their respective owners.*

*In this Form 10-Q, “we,” “us,” and “our” refer to Fluidigm Corporation and its subsidiaries.*

### **Overview**

We create, manufacture, and market innovative technologies and life-science tools focused on the exploration and analysis of single cells, as well as the industrial application of genomics, based upon our core microfluidics and mass cytometry technologies. We sell instruments and consumables, including integrated fluidic circuits, or IFCs, assays, and reagents, to academic institutions, clinical laboratories, and pharmaceutical, biotechnology, and agricultural biotechnology, or Ag-Bio, companies.

We distribute our 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 primarily located in Singapore and Canada. Our facility in Singapore manufactures our genomics instruments, several of which are assembled at facilities of our contract manufacturers in Singapore, with testing and calibration of the assembled products performed at our Singapore facility. All of our IFCs for commercial sale and some IFCs for our research and development purposes are also fabricated at our Singapore facility. Our proteomics analytical instruments are manufactured at our facility in Canada. We also manufacture IFCs for research and development, assays, and reagents at our facilities in South San Francisco, California.

Our total revenue grew from \$71.2 million in 2013 to \$116.5 million in 2014 (including \$20.7 million in revenue from the sales of CyTOF 2 systems and related consumables following our acquisition of DVS in February 2014), and for the three months ended March 31, 2015, our total revenue was \$26.7 million. We have incurred significant net losses since our inception in 1999 and, as of March 31, 2015, our accumulated deficit was \$326.1 million.

### **Critical Accounting Policies, Significant Judgments and Estimates**

Our condensed 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 condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, 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 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.

Except as otherwise disclosed, there have been no material changes in our critical accounting policies and estimates in the preparation of our condensed consolidated financial statements during the three months ended March 31, 2015 compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2014, as filed with the SEC on February 26, 2015.

## Results of Operations

The following table presents our historical condensed consolidated statements of operations data for the three months ended March 31, 2015 and 2014, and as a percentage of total revenue for the respective periods (\$ in thousands):

	Three Months Ended			
	March 31,			
	2015	2015	2014	2014
<b>Revenue:</b>				
Total revenue	\$ 26,729	100 %	\$ 25,724	100 %
<b>Costs and expenses:</b>				
Cost of product revenue	10,646	40	8,704	34
Research and development	9,990	37	7,646	30
Selling, general and administrative	20,094	75	15,257	59
Acquisition-related expenses	—	—	10,696	41
Total costs and expenses	40,730	152	42,303	164
Loss from operations	(14,001)	(52)	(16,579)	(64)
Interest expense	(1,453)	(6)	(1,026)	(4)
Other (expense) income, net	(1,120)	(4)	48	—
Loss before income taxes	(16,574)	(62)	(17,557)	(68)
Benefit from income taxes	643	2	2,143	8
Net loss	\$ (15,931)	(60)%	\$ (15,414)	(60)%

### Revenue

We generate revenue from sales of our products, license agreements, and government grants. Our product revenue consists of sales of instruments and related services, and consumables, including IFCs, assays, and other reagents. We have entered into license agreements 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,	
	2015	2014
<b>Revenue:</b>		
Instruments	\$ 15,820	\$ 15,107
Consumables	10,826	10,342
Product revenue	26,646	25,449
License revenue	83	112
Grant revenue	—	163
Total revenue	\$ 26,729	\$ 25,724

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):

	<b>Three Months Ended March 31,</b>			
	<b>2015</b>		<b>2014</b>	
United States	\$ 13,711	51%	\$ 11,238	44%
Europe	6,916	26%	6,382	25%
Japan	1,873	7%	4,354	17%
Asia-Pacific	3,332	13%	2,092	8%
Other	814	3%	1,383	6%
Total	<u>\$ 26,646</u>	<u>100%</u>	<u>\$ 25,449</u>	<u>100%</u>

Our customers include academic research institutions, clinical laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies worldwide. Total revenue from our five largest customers in each of the periods presented comprised 11% and 19% of our total revenue in the three months ended March 31, 2015 and 2014, respectively.

#### **Comparison of the Three Months Ended March 31, 2015 and March 31, 2014**

##### ***Total Revenue***

Total revenue increased by \$1.0 million, or 4%, to \$26.7 million for the three months ended March 31, 2015, compared to \$25.7 million for the three months ended March 31, 2014.

##### ***Product Revenue***

Product revenue increased by \$1.2 million, or 5%, to \$26.6 million for the three months ended March 31, 2015, compared to \$25.4 million for the three months ended March 31, 2014.

Instrument revenue increased by \$0.7 million, or 5%, primarily driven by higher unit sales of our preparatory systems, including the C1 system and the recently introduced Juno system; increased revenue from service offerings; higher unit sales of the EP1 system; and to a lesser extent, increased unit sales of the CyTOF 2 system and contributions from our other new products. The revenue increase was partially offset by a significant decrease in unit sales of Biomark HD systems and negative effects of foreign currency of \$0.8 million.

Consumables revenue increased by \$0.5 million, or 5%, primarily due to growth in C1 IFC unit sales volume, higher antibody consumable sales, and to a lesser extent, higher sales of reagents. The revenue increase was partially offset by a decrease in analytical IFC unit volume and assay sales and negative effects of foreign currency of \$0.7 million. Annualized IFC pull-through for our genomics analytical systems was below our historical range of \$40,000 to \$50,000 per system due to volatility based on timing of large production genomics customer purchases, within our expected range of \$15,000 to \$25,000 per system for our genomics preparatory systems, and within the historical range of \$50,000 to \$70,000 per system for our proteomics analytical systems. IFC pull-through is determined by dividing the applicable IFC revenue for a specific period by the number of genomics analytical or preparatory systems, as applicable, in our installed base at the beginning of the period. Similarly, consumables pull-through for proteomics analytical systems is determined by dividing the related consumables revenue for a specific period by the number of proteomics analytical systems in our installed base at the beginning of the period. The IFC and consumables pull-through amounts are annualized by multiplying the pull-through amounts by a ratio, the numerator of which equals 12 and the denominator of which equals the number of months in the specific period.

We expect total unit sales of both instruments and consumables to increase over time as we continue our efforts to grow our customer base, expand our geographic market coverage, and launch new products. However, we expect the average selling prices of our products to fluctuate over time based on market conditions, product mix, and currency fluctuations.

##### ***Grant Revenue***

Grant revenue consists of a grant from California Institute for Regenerative Medicine, or CIRM. Our CIRM grant was awarded in 2011 in the amount of \$1.9 million to be earned over a three-year period which ended in April 2014. The CIRM grant revenue is recognized as the related research and development services are performed and costs associated with the grants are recognized as research and development expense during the period incurred.

We did not receive any grant revenue for the three months ended March 31, 2015. Grant revenue was \$0.2 million for the three months ended March 31, 2014.

**Cost of Product Revenue**

The following table presents our cost of product revenue and product margin for each period presented (\$ in thousands):

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
Cost of product revenue	\$ 10,646	\$ 8,704
Product margin	60%	66%

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

Cost of product revenue increased by \$1.9 million, or 22%, to \$10.6 million for the three months ended March 31, 2015 from \$8.7 million for the three months ended March 31, 2014. Cost of product revenue for the three months ended March 31, 2015 includes \$2.8 million of amortization of acquired intangible assets resulting from our acquisition of DVS Sciences, Inc., or DVS, an increase of \$1.4 million when compared to the comparable period in 2014, partially offset by charges from inventory step-up expensed during 2014 related to the acquisition of approximately \$0.5 million. Overall cost of product revenue as a percentage of related revenue was 40% and 34%, including 10.5 and 7.5 percentage points related to these charges, for the three months ended March 31, 2015 and 2014, respectively. Product margin declined 6 percentage points for the three months ended March 31, 2015 compared to the corresponding period in 2014 primarily because of the net increase in acquisition-related charges described above, net negative effects of foreign currency exchange rate changes on revenues and production costs, higher consumables manufacturing costs, and higher stock based compensation expenses; partially offset by higher service revenue margin, and lower instrument warranty and royalty costs.

**Operating Expenses**

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

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
Research and development	\$ 9,990	\$ 7,646
Selling, general and administrative	20,094	15,257
<b>Total</b>	<b>\$ 30,084</b>	<b>\$ 22,903</b>

**Research and Development**

Research and development expense consists primarily of personnel and 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 enhancing our technologies and supporting development and commercialization of new and existing products and services.

Research and development expense increased \$2.3 million, or 31%, to \$10.0 million for the three months ended March 31, 2015, compared to \$7.6 million for the three months ended March 31, 2014, primarily because of higher headcount and compensation-related costs of \$1.2 million, increases in lab supplies and equipment costs of \$0.7 million, and other expenses of \$0.4 million. These increases resulted from additional expenses to support the growth of our business and the development of our products and services, including additional expenses relating to the acquired DVS operations for the full quarter in 2015 compared to a partial quarter in the prior year.

We believe that our continued investment in research and development is essential to our long-term competitive position and these expenses may increase in future periods.

**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 for the three months ended March 31, 2015 increased \$4.8 million, or 32%, to \$20.1 million, compared to \$15.3 million for the three months ended March 31, 2014, primarily driven by higher headcount and compensation-related costs of \$3.5 million, increases in legal, accounting and other outside services costs of \$0.7 million, increases in facilities leasing costs of \$0.6 million, and increases in travel and related costs of \$0.2 million, partly offset by integration-related costs of \$0.3 million incurred in the prior year. These increases resulted from additional expenses to expand our worldwide commercial capabilities and support our growth, including additional expenses relating to the acquired DVS operations for the full quarter in 2015 compared to a partial quarter in the prior year. 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 expanding global footprint and the overall growth in our business.

**Acquisition-Related Expenses**

Acquisition-related expenses of \$10.7 million incurred during the three months ended March 31, 2014 primarily included accelerated vesting of certain DVS restricted stock and stock options, and consulting, legal, and investment banking fees relating to our acquisition of DVS.

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

We have incurred interest expense and amortization of debt discount related to our long-term debt. The following table presents interest expense and other (expense) income, net for each period presented (in thousands):

	<b>Three Months Ended March 31,</b>	
	<b>2015</b>	<b>2014</b>
Interest expense	\$ (1,453)	\$ (1,026)
Other (expense) income, net	(1,120)	48
<b>Total</b>	<b>\$ (2,573)</b>	<b>\$ (978)</b>

On February 4, 2014, we closed an underwritten public offering of \$201.3 million aggregate principal amount of our 2.75% Senior Convertible Notes due 2034, or the Notes. The Notes accrue interest at a rate of 2.75% per year, payable semi-annually in arrears on February 1 and August 1 of each year, commencing August 1, 2014. The Notes will mature on February 1, 2034, unless earlier converted, redeemed, or repurchased in accordance with the terms of the Notes.

Interest expense for the three months ended March 31, 2015 increased by \$0.4 million compared to the three months ended March 31, 2014 due to accrual of interest under the terms of the Notes for a full quarter in 2015, as compared to a partial quarter in 2014.

Other expense for the three months ended March 31, 2015 increased by \$1.1 million compared to the three months ended March 31, 2014 primarily due to \$1.3 million of losses from revaluation of certain foreign currency denominated assets and liabilities due to strengthening of the U.S. dollar during the first quarter of 2015 compared to 2014.

**Liquidity and Capital Resources****Sources of Liquidity**

As of March 31, 2015, our principal sources of liquidity consisted of \$37.0 million of cash and cash equivalents and \$97.9 million of investments. As of March 31, 2015, our working capital excluding deferred revenue totaled \$137.7 million.

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

	Three Months Ended March 31,	
	2015	2014
<i>Cash flow summary</i>		
Net cash used in operating activities	\$ (9,800)	\$ (10,547)
Net cash used in investing activities	10,071	(121,231)
Net cash provided by financing activities	3,732	197,499
Net decrease in cash and cash equivalents	3,269	65,763

#### ***Net Cash Used in Operating Activities***

We derive cash flows from operations primarily from cash collected from the sale of our products, 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 \$9.8 million for the three months ended March 31, 2015, compared to \$10.5 million for the three months ended March 31, 2014, a decrease of \$0.7 million. The cash used in operating activities in the first three months of 2015 resulted from a net loss of \$15.9 million, adjusted for \$8.2 million in non-cash charges and a \$2.1 million net increase in working capital. The significant non-cash charges included stock-based compensation expense, amortization of intangible assets, and depreciation and amortization. The net increase in working capital was driven primarily by a net decrease in other liabilities and accounts payable, and increased inventory balances, partially offset by a decrease in accounts receivable, prepaid and other assets, and an increase in deferred revenue. Our net loss, adjusted for non-cash and non-operating items, and deferred revenue increased by \$1.4 million for the three months ended March 31, 2015 compared to the same period in 2014, which included \$10.7 million of acquisition related charges. This was primarily due to increased operating expenses, including a full quarter impact of the acquired DVS operations in 2015, as compared to a partial quarter impact in 2014.

#### ***Net Cash Provided by (Used in) Investing Activities***

Our primary investing activities consist of purchases, sales, and maturities of our short-term and long-term investments, and capital expenditures for manufacturing, laboratory, and computer equipment and software to support our expanding infrastructure and work force. We expect to continue to expand our manufacturing capability, including improvements in manufacturing productivity, and expect to incur additional costs for capital expenditures related to these efforts in future periods. In addition, we expect to continue to incur costs for capital expenditures for demonstration units and loaner equipment to support our sales and service efforts, and computer equipment and software to support our growth.

Net cash provided by investing activities was \$10.1 million during the three months ended March 31, 2015. Net cash provided by investing activities primarily consisted of \$11.1 million of proceeds from sales and maturities of investments, partially offset by capital expenditures of \$0.9 million and purchase of intangible assets \$0.1 million primarily to support growth in our employee base worldwide and our growth in manufacturing operations.

#### ***Net Cash Provided by Financing Activities***

Net cash provided by financing activities was \$3.7 million during the three months ended March 31, 2015 and consists of proceeds received in connection with the exercise of options for our common stock.

#### ***Capital Resources***

At March 31, 2015, our working capital excluding deferred revenue was \$137.7 million, including cash, cash equivalents, and short-term investments of \$116.4 million. We believe our existing cash, cash equivalents, and investments will be sufficient to meet our working capital and capital expenditure needs for at least the next 18 months. However, we may experience lower than expected cash generated from operating activities or greater than expected capital expenditures, cost of revenue, or operating expenses, and we may need to raise additional capital to expand the commercialization of our products, expand and fund our operations, further our research and development activities, or acquire or invest in a business. 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 associated with litigation or disputes relating to intellectual property rights or otherwise, 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, and the effect of competing technological and market developments. In the future, we may acquire businesses or technologies from third parties, and we may decide to raise additional capital through debt or equity financing to the extent we believe this is necessary to successfully complete these acquisitions. We currently have no material commitments or agreements relating to any such acquisitions.

If we require additional funds in the future, 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, research and development, or other resources devoted to our products or cease operations.

#### **Off-Balance Sheet Arrangements**

As of March 31, 2015, 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.

#### **Contractual Obligations and Commitments**

On April 9, 2013, we entered into an amendment (the 2013 Amendment) to the lease agreement dated September 14, 2010 (as amended, the Lease) relating to the lease of office and laboratory space at our corporate headquarters located in South San Francisco, California. The 2013 Amendment provided for an expansion of the premises covered under the Lease, effective April 1, 2014; an extension of the term of the Lease to April 30, 2020 with an option to renew for an additional five years; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The 2013 Amendment also provided for an allowance of approximately \$0.7 million for tenant improvements, \$0.2 million of which was unused by March 31, 2015 and will be used to offset base rent obligations, and an additional allowance of approximately \$0.5 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease.

On June 4, 2014, we entered into an additional amendment to the Lease (the June 2014 Amendment), which provided for an expansion of the premises covered under the Lease by approximately 13,000 square feet, effective October 1, 2014; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The June 2014 Amendment also provided for an allowance of approximately \$0.2 million for tenant improvements, which was fully utilized by March 31, 2015, and an additional allowance of approximately \$0.1 million for tenant improvements, which, if used, will be repaid in equal monthly payments with interest at a rate of 9% per annum over the remaining term of the Lease. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately \$2.3 million as of March 31, 2015.

On September 15, 2014, we entered into an additional amendment to the Lease (the September 2014 Amendment), which provided for an expansion of the premises covered under the Lease by approximately 9,000 square feet, effective October 1, 2014; payment of base rent with rent escalation; and payment of certain operating expenses during the term of the Lease. The September 2014 Amendment also provided for an allowance of approximately \$0.2 million for tenant improvements. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately \$1.6 million as of March 31, 2015.

On October 14, 2013, Fluidigm Singapore Pte. Ltd., our wholly-owned subsidiary (Fluidigm Singapore), accepted an offer of tenancy (Singapore Lease) from HSBC Institutional Trust Services (Singapore) Limited, as trustee of Ascendas Real Estate Investment Trust (Landlord), relating to the lease of a new facility located in Singapore. Pursuant to the terms of the Singapore Lease, Fluidigm Singapore took possession of the facility commencing on March 3, 2014 for a term of 99 months, and the Singapore Lease and rental obligations thereunder commenced on June 3, 2014. The Singapore Lease also provides Fluidigm Singapore with an option to renew the Singapore Lease for an additional 60 months at the then prevailing market rent, and on similar terms as the existing Singapore Lease. In June 2014, Fluidigm Singapore leased additional space of approximately 2,400 square feet in the same building as the new facility on the same terms as the Singapore Lease (the June 2014 Singapore Lease). We completed the consolidation of our Singapore manufacturing operations in the new space in July 2014 and the site qualification was completed in August 2014. The leases relating to our prior manufacturing facility in Singapore terminated on August 31, 2014. In April 2015, Fluidigm Singapore leased additional space of approximately 10,000 square feet in the same

building on the same terms as the Singapore Lease (the April 2015 Singapore Lease). In connection with the April 2015 Singapore Lease, Fluidigm Singapore will terminate the June 2014 Singapore Lease on June 30, 2015. The total future minimum lease payments, which will be paid through June 2022, are approximately \$4.5 million as of March 31, 2015.

In connection with our acquisition of DVS (as discussed in Note 4 of our notes to the condensed consolidated financial statements), we acquired the operating leases for facilities in Sunnyvale, California and Markham, Ontario, Canada, which expire in July 2016 and January 2016, respectively. The Canada lease includes an option to renew the lease for an additional five years at the then prevailing market rent, and on similar terms as the existing lease. We recognize rent expense on a straight-line basis over the non-cancelable lease term. The total future minimum lease payments for the operating leases in Sunnyvale, California and Markham, Ontario, Canada are approximately \$368,000 as of March 31, 2015.

### **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 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 and Canada where our manufacturing facilities are located. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. We experienced foreign currency losses of \$1.3 million for the three months ended March 31, 2015 primarily due to the strengthening of the U.S. dollar, whereas the impact of foreign currency fluctuations in the three months ended March 31, 2014 was not material. To date, we have not entered into any foreign currency hedging contracts although we may do so in the future. As our international operations grow, we will continue to reassess our approach to manage our risk relating to fluctuations in currency rates.

#### ***Interest Rate Sensitivity***

We had cash and cash equivalents of \$37.0 million at March 31, 2015. These amounts were held primarily in cash on deposit with banks and cash equivalents. We had \$97.9 million in investments at March 31, 2015 held primarily in U.S. government and agency securities. The contractual maturity dates of \$79.5 million of our U.S. government and agency securities are within one year from March 31, 2015. The contractual maturity dates of our remaining U.S. government and agency securities are less than eighteen months from March 31, 2015. Cash and cash equivalents and investments 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 periods presented, our interest income 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**

#### ***Evaluation of 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 of March 31, 2015. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2015, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

#### ***Changes in Internal Control Over Financial Reporting***

There were no changes in our internal control over financial reporting that occurred during the three months ended March 31, 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

***Limitations on the Effectiveness of Controls***

Control systems, no matter how well conceived and operated, are designed to provide a reasonable, but not an absolute, level of assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Because of the inherent limitations in any control system, misstatements due to error or fraud may occur and not be detected.

## PART II. OTHER INFORMATION

### Item 1. Legal Proceedings.

We are not currently engaged in any material legal proceedings.

### 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 Fluidigm's Business and Strategy**

**Market opportunities may not develop as quickly as we expect, limiting our ability to successfully sell our products, or our product development and strategic plans may change and our entry into certain markets may be delayed, if it occurs at all.**

The application of our technologies to single-cell biology (across genomics and proteomics) and production genomics applications 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. The future growth of the single-cell biology market and the success of our products depend on many factors beyond our control, including recognition and acceptance by the scientific community, and the growth, prevalence, and costs of competing methods of genetic and protein analysis. If the market for single-cell biology and production genomics do not develop as we expect, our business may be adversely affected. Additionally, our success in these markets may depend to a large extent on our ability to successfully sell products using our technologies. If we are not able to successfully market and sell our products, or to achieve the revenue or margins we expect, our operating results may be harmed and we may not recover our product development and marketing expenditures. In addition, our product development and strategic plans may change, which could delay or impede our entry into these markets.

**Our financial results and revenue growth rates have varied significantly from quarter-to-quarter and year-to-year due to a number of factors, and a significant variance in our operating results or rates of growth, if any, could lead to substantial volatility in our stock price.**

Our revenue, results of operations and revenue growth rates have varied in the past and may continue to vary significantly from quarter-to-quarter or year-to-year. For example, in 2011, 2012, and 2014, we experienced higher sales in the fourth quarter than in the first quarter of the next fiscal year. Although this was not the case in the fourth quarter of 2013 compared to the first quarter of 2014, this historical trend resumed in 2015, and we expect it to continue. Additionally, for the quarter ended March 31, 2015, we experienced a year-over-year revenue growth rate that was substantially lower than revenue growth rates experienced in other periods since our initial public offering. We may experience substantial variability in our product mix from period-to-period as revenue from sales of our instruments relative to sales of our consumables may fluctuate or deviate significantly from expectations. Variability in our quarterly or annual results of operations, mix of product revenue, or rates of revenue growth, if any, may lead to volatility in our stock price as research analysts and investors respond to these fluctuations. These fluctuations are due to numerous factors that are difficult to forecast, including: fluctuations in demand for our products; changes in customer budget cycles and capital spending; seasonal variations in customer operations; tendencies 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, market, sell, 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 materials or components used in our products, which in certain cases are purchased through sole and single source suppliers; new product introductions and enhancements by us and our competitors; unanticipated increases in costs or expenses; our complex, variable and, at times, lengthy sales cycle; global economic conditions; and fluctuations in foreign currency exchange rates. Additionally, we have certain customers who have historically placed large orders in multiple quarters during a calendar year. A significant reduction in orders from one or more of these customers could adversely affect our revenue and operating results, and if these customers defer or cancel purchases or otherwise alter their purchasing patterns, our financial results and actual results of operations could be significantly impacted. Other unknown or unpredictable factors also could harm our results.

The foregoing factors, as well as other factors, could materially and adversely affect our quarterly and annual results of operations and rates of revenue growth, if any. Since our initial public offering, we have experienced significant revenue growth, and we may not achieve similar growth rates in future periods. You should not rely on our operating results for any prior quarterly or annual period as an indication of our future operating performance. If we are unable to maintain adequate revenue growth, our operating results could suffer and our stock price could decline. 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 shortfall relative to our anticipated revenue could magnify the adverse impact of such shortfalls on our results of operations. We expect that our sales will continue to fluctuate on an annual and quarterly basis and that our financial results for some periods may be below those projected by securities analysts, which could significantly decrease the price of our common stock.

**We have incurred losses since inception, and we may 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 \$15.9 million, \$52.8 million, and \$16.5 million during the three months ended March 31, 2015 and years 2014 and 2013, respectively. As of March 31, 2015, we had an accumulated deficit of \$326.1 million. These losses have resulted principally from costs incurred in our research and development programs, and from our manufacturing costs and selling, general, and administrative expenses. We believe that our continued investment in research and development, sales, and marketing is essential to our long-term competitive position and future growth, and we expect these expenses will increase in future periods. We also expect that our selling, general, and administrative expenses will continue to increase due to the additional operational costs associated with the growth of our business. Until we are able to generate additional revenue to support our level of operating expenses, we will continue to incur operating and net losses and negative cash flow from operations. 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.

**The carrying value of long-lived and intangible assets may become impaired and result in an impairment charge.**

As of March 31, 2015, we had approximately \$205.2 million of intangible assets, net of amortization, and goodwill. In addition, if in the future we acquire additional complementary businesses or technologies, a substantial portion of the value of such assets may be recorded as intangible assets or goodwill. The carrying amounts of intangible assets and goodwill are affected whenever events or changes in circumstances indicate that the carrying amount of any asset may not be recoverable. Such events or changes might include a significant decline in market share, a significant decline in revenues, a significant increase in losses or decrease in profits, rapid changes in technology, failure to achieve the benefits of capacity increases and utilization, significant litigation arising out of an acquisition, or other matters. Adverse events or changes in circumstances may affect the estimated undiscounted future operating cash flows expected to be derived from intangible assets and goodwill. If at any time we determine that an impairment has occurred, we will be required to reflect the impaired value as a charge, resulting in a reduction in earnings in the quarter such impairment is identified and a corresponding reduction in our net asset value. The potential recognition of impairment in the carrying value, if any, could have a material and adverse effect on our financial condition and results of operations.

**If our research and product development efforts do not result in commercially viable products within anticipated timelines, if at all, our business and results of operations will be adversely affected.**

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 technology. We have developed design rules for the implementation of our technology that 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. Furthermore, many such reactions take place within the confines of single cells, which have also demonstrated unexpected behavior when grown and manipulated within microfluidic environments. As a result, research and development efforts may be required to transfer certain reactions and cell handling techniques 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 and release new products or product enhancements would have a substantial adverse effect on our business and results of operations.

**If one or more of our manufacturing facilities become unavailable or inoperable, we will be unable to continue manufacturing our instruments, IFCs, assays, and/or reagents and, as a result, our business will be harmed until we are able to secure a new facility.**

We manufacture all of our genomics analytical and preparatory instruments and integrated fluidic circuits, or IFCs, for commercial sale at our facility in Singapore, our proteomics analytical instruments for commercial sale at our facility in Canada, and our assays and reagents for commercial sale at our facility in South San Francisco. No other manufacturing facilities are currently available to us, particularly facilities of the size and scope required by our Singapore and Canada operations. Our facilities and the equipment we use to manufacture our instruments, IFCs, assays, and reagents would be costly to replace and could require substantial lead time to repair or replace. Our facilities may be harmed or rendered inoperable by natural or man-made disasters, which may render it difficult or impossible for us to manufacture our products for some period of time. If any of our facilities become unavailable to us, we cannot provide assurances that we will be able to secure a new manufacturing facility on acceptable terms, if at all. The inability to manufacture our products, combined with our limited inventory of 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. If our manufacturing capabilities are impaired, we may not be able to manufacture and ship our products in a timely manner, which would adversely impact our business.

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

We may encounter unforeseen situations in the manufacturing and assembly of our products that would result in delays or shortfalls in our production. For example, our production processes and assembly methods may have to change to accommodate any significant future expansion of our manufacturing capacity, which may increase our manufacturing costs, delay production of our products, reduce our product margin, and adversely impact our business.

Additionally, all of our IFCs for commercial sale are manufactured at our facility in Singapore. Production of the elastomeric block that is at the core of our IFCs 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. A drop in yield can increase our cost to manufacture our IFCs or, in more severe cases, require us to halt the manufacture of our IFCs until the problem is resolved. Identifying and resolving the cause of a drop in yield can require substantial time and resources.

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

If our manufacturing activities are adversely impacted, or if we are otherwise unable to keep up with demand for our products by successfully manufacturing, assembling, testing, and shipping our products in a timely manner, our revenue could be impaired, market acceptance for our products could be adversely affected and our customers might instead purchase our competitors' products.

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

We rely on single and sole source suppliers for certain components and materials used in our products. Additionally, several of our instruments are assembled at the facilities of contract manufacturers in Singapore. We do not have long term contracts with our suppliers of these components and materials or our assembly service providers. The loss of a single or sole source supplier of any of the following components and/or materials would require significant time and effort to locate and qualify an alternative source of supply, if at all:

- The IFCs used in our microfluidic systems are fabricated using a specialized polymer, and other specialized materials, that are 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.
- Specialized pneumatic and electronic components for our C1 system are available from a limited number of sources.

- The electron multiplier detector included in the CyTOF system and certain metal isotopes used with the CyTOF system are purchased from sole source suppliers.
- The nickel sampler cone used with the CyTOF system is purchased from single source suppliers and is available from a limited number of sources.
- The raw materials for our Delta Gene and SNP Type assays and Access Array target-specific primers are available from a limited number of sources.

Our reliance on single and sole source suppliers and assembly service providers also subjects us to other risks that could harm our business, including the following:

- we may be subject to increased component or assembly costs;
- we may not be able to obtain adequate supply or services in a timely manner or on commercially reasonable terms;
- our suppliers or service providers may make errors in manufacturing or assembly of components that could negatively affect the efficacy of our products or cause delays in shipment of our products; and
- our suppliers or service providers may encounter capacity constraints or financial hardships unrelated to our demand for components or services, 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, or assembly service providers. Any interruption or delay in the supply of components or materials or assembly of our instruments, or our inability to obtain components, materials, or assembly services 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.

**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 some competing technologies, our technology is relatively new, and most potential customers have limited knowledge of, or experience with, our products. Prior to adopting our 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, it is important that our systems be perceived as accurate and reliable by the scientific and medical research community as a whole. Historically, a significant part of our sales and marketing efforts has 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 and our ability to increase our revenue would be adversely affected.

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

Our customer base is primarily composed of academic institutions, clinical laboratories that use our technology to develop tests, and pharmaceutical, biotechnology, and agricultural biotechnology, or Ag-Bio, companies 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 require 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. Any failure to expand our existing customer base or launch new applications would adversely affect our ability to increase our revenue.

**The life science research and applied 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 companies that design, manufacture, and market instruments and consumables for gene expression analysis, single-cell targeted gene expression or protein expression analysis, single nucleotide polymorphism genotyping, or SNP genotyping, polymerase chain reaction, or PCR, digital PCR, other nucleic acid detection, flow cytometry, cell imaging, and additional applications using well established laboratory techniques, as well as newer technologies such as bead encoded arrays, microfluidics, nanotechnology, high-throughput DNA sequencing, microdroplets, 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., Agena Bioscience, Inc., Agilent Technologies, Inc., Becton, Dickinson and Company, Bio-Rad Laboratories, Inc., Danaher Corporation, Illumina, Inc., Life Technologies Corporation (now part of Thermo Fisher Scientific Inc.), LGC Limited, Luminex Corporation, Millipore Corporation, NanoString Technologies, Inc., PerkinElmer, Inc. (through its acquisition of Caliper Life Sciences, Inc.), RainDance Technologies, Inc., Roche Diagnostics Corporation, Sony Corporation, Thermo Fisher Scientific Inc., and WaferGen Bio-systems, Inc. have products that compete in certain segments of the market in which we sell our products.

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. Increased competition is likely to result in pricing pressures, which could reduce our profit margins and increase our sales and marketing expenses. In addition, mergers, consolidations, or other strategic transactions between two or more of our competitors, or between our competitor and one of our key customers, could change the competitive landscape and weaken our competitive position, adversely affecting our business.

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

We expect that our revenue in the foreseeable future will be derived primarily from sales of our systems and IFCs to academic institutions, clinical laboratories that use our technology to develop tests, and pharmaceutical, biotechnology, and Ag-Bio companies 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 concerns regarding any future federal government budget sequestrations, the availability of resources 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 products. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers. For example, reductions in capital and operating expenditures by these customers may result in lower than expected sales of our systems and IFCs. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions;
- natural disasters;
- 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;
- 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, could materially and adversely affect our operations or financial condition.

**We may not be able to develop new products or enhance the capabilities of our existing systems to keep pace with rapidly changing technology and customer requirements, which could have a material adverse effect on our business, revenue, financial condition, and operating results.**

Our success depends on our ability to develop new products and applications for our technology in existing and new markets, while improving the performance and cost-effectiveness of our systems. New technologies, techniques, or products could emerge that might offer better combinations of price and performance than our current or future product lines and systems. Existing markets for our products, including single-cell biology and production genomics, 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 and cost-effective 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 typically plan improvements to our 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. In addition, if we introduce enhanced systems but fail to manage product transitions effectively, customers may delay or forgo purchases of our systems and our operating results may be adversely affected by product obsolescence and excess inventory. 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.

**Being a medical device manufacturer and seeking approval and/or clearance for our products by the U.S. Food and Drug Administration, or FDA, and foreign regulatory authorities will take significant time and expense and may not result in FDA clearance or approval for the intended uses we believe are commercially attractive. If our products are successfully approved and/or cleared, we will be subject to ongoing and extensive regulatory requirements, which would increase our costs and divert resources away from other projects. If we fail to comply with these requirements, our business and financial condition could be adversely impacted.**

Our products are currently labeled, promoted and sold to academic institutions, life sciences laboratories, and pharmaceutical, biotechnology, and Ag-Bio companies for research purposes only, or RUO, and cannot be used for diagnostic tests or as medical devices as currently marketed. Before we can begin to label and market our products for use as, or in the performance of, clinical diagnostics in the United States, thereby subjecting them to FDA regulation as medical devices, we would be required to obtain premarket 510(k) clearance or pre-market approval from the FDA, unless an exception applies.

We recently announced our plan to register with the FDA as a medical device manufacturer and list some of our products with the FDA pursuant to an FDA Class I listing for general purpose laboratory equipment within the next 12 months. While this regulatory classification is exempt from certain FDA requirements, such as the need to submit a premarket notification commonly known as a 510(k), and most of the requirements of the FDA's Quality System Regulations, or QSRs, we will be subject to ongoing FDA "general controls," which include compliance with FDA regulations for labeling, inspections by the FDA, complaint evaluation, corrections and removals reporting, promotional restrictions, reporting adverse events or malfunctions for our products, and general prohibitions against misbranding and adulteration.

In addition, we plan to submit 510(k) premarket notifications to the FDA to obtain FDA clearance of certain of our products on a selected basis. Although we plan to submit 510(k)s, it is possible that the FDA will take the position that a more burdensome premarket application, such as a premarket approval application or a de novo application is required for some of our products. If such applications are required, greater time and investment would be required to obtain FDA approval. Even if the FDA agrees that a 510(k) is appropriate, FDA clearance can be expensive and time consuming. It generally takes a significant amount of time to prepare a 510(k), including conducting appropriate testing on our products, and several months to years for the FDA to review a submission. Notwithstanding the effort and expense, FDA clearance or approval may be denied for some or all of our products.

Even if we were to obtain regulatory approval or clearance, it may not be for the uses we believe are important or commercially attractive.

If we receive regulatory clearance or approval for our products, we will be subject to ongoing FDA obligations and continued regulatory oversight and review, including the general controls listed above and the FDA's QSRs for our manufacturing operations. In addition, we may be required to obtain a new 510(k) clearance before we can introduce subsequent modifications or improvements to our products. We may also be subject to additional FDA post-marketing obligations, any or all of which would increase our costs and divert resources away from other projects. If we are not able to maintain regulatory compliance with applicable laws, we may be prohibited from marketing our products for use as, or in the performance of, clinical diagnostics and/or may be subject to fines, injunctions, and civil penalties; recall or seizure of products; operating restrictions; and criminal prosecution.

We intend to seek similar regulatory clearance or approval for our products in countries outside of the United States. Sales of our products outside the United States will be subject to foreign regulatory requirements, which vary greatly from country to country. As a result, the time required to obtain clearances or approvals outside the United States may differ from that required to obtain FDA clearance or approval and we may not be able to obtain foreign regulatory approvals on a timely basis or at all. Clearance or approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one foreign regulatory authority does not ensure approval by regulatory authorities in other countries or by the FDA. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain required approvals could impair our ability to commercialize our products for diagnostic use outside of the United States.

**Our products could become subject to regulation as medical devices by the FDA or other regulatory agencies, before we have obtained regulatory clearance or approval to market our products for diagnostic purposes, which would adversely impact our ability to market and sell our products and harm our business.**

As products that are currently labeled, promoted and intended for RUO, our products are not currently subject to regulation as medical devices by the FDA or comparable agencies of other countries. However, the FDA or comparable agencies of other countries could disagree with our conclusion that our products are currently intended for research use only or deem our current marketing and promotional efforts as being inconsistent with research use only products. For example, our customers may elect to use our research use only labeled products in their own laboratory developed tests, or LDTs, for clinical diagnostic use. The FDA has historically exercised enforcement discretion in not enforcing the medical device regulations against laboratories offering LDTs. However, on October 3, 2014, the FDA issued two draft guidance documents that set forth the FDA's proposed risk-based framework for regulating LDTs, which are designed, manufactured, and used within a single laboratory. The draft guidance documents provide the anticipated details through which the FDA would propose to establish an LDT oversight framework, including premarket review for higher-risk LDTs, such as those that have the same intended use as FDA-approved or cleared companion diagnostics currently on the market. The FDA held a public workshop and accepted comments on the two draft guidance documents and is currently assessing next steps for the regulation of LDTs. At the same time, various legislative proposals have been floated that would take differing approaches to the regulation of LDTs. It is also possible that companies or associations will attempt to bring litigation against the FDA arguing that the FDA lacks legal authority over LDTs. We cannot predict how these various efforts will be resolved, how FDA will regulate LDTs in the future, or how that regulatory system will impact our business.

Additionally, on November 25, 2013, the FDA issued Final Guidance "Distribution of In Vitro Diagnostic Products Labeled for Research Use Only." The guidance emphasizes that the FDA will review the totality of the circumstances when it comes to evaluating whether equipment and testing components are properly labeled as RUO. The final guidance states that merely including a labeling statement that the product is for research purposes only will not necessarily render the device exempt from the FDA's clearance, approval, and other regulatory requirements if the circumstances surrounding the distribution of the product indicate that the manufacturer knows its product is, or intends for its product to be, offered for clinical diagnostic uses. These circumstances may include written or verbal marketing claims or links to articles regarding a product's performance in clinical applications and a manufacturer's provision of technical support for clinical applications.

If the FDA modifies its approach to our products labeled and intended for RUO, or otherwise determines our products or related applications should be subject to additional regulation as in vitro diagnostic devices based upon our customers' use of our products for clinical diagnostic or therapeutic purposes, before we have obtained regulatory clearance or approval to market our products for diagnostic purposes, our ability to market and sell our products could be impeded and our business, prospects, results of operations and financial condition may be adversely affected. In addition, if the FDA determines that our products labeled for RUO were intended, based on a review of the totality of circumstances, for use in clinical investigation or diagnosis, those products could be considered misbranded or adulterated under the Federal Food, Drug, and Cosmetic Act and subject to recall or other enforcement action.

**Compliance or the failure to comply with current and future regulations, such as environmental regulations enacted in the European Union, could cause us significant expense and adversely impact our business.**

We are subject to many federal, state, local, and foreign regulations relating to various aspects of our business operations. Governmental entities at all levels are continuously enacting new regulations, and it is difficult to identify all applicable regulations and anticipate how such regulations will be implemented and enforced. We continue to evaluate the necessary steps for compliance with applicable regulations. To comply with applicable regulations, we have and will continue to incur significant expense and allocate valuable internal resources to manage compliance-related issues. In addition, such regulations could restrict our ability to expand or equip our facilities, or could require us to acquire costly equipment or to incur other significant expenses to comply with the regulations. For example, the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive, or RoHS, and the Waste Electrical and Electronic Equipment Directive, or WEEE, enacted in the European Union, regulate the use of certain hazardous substances in, and require the collection, reuse, and recycling of waste from, products we manufacture. Certain of our products sold in these countries may become subject to RoHS and WEEE requirements. These and similar regulations that have been or are in the process of being enacted in other countries may require us to redesign our products, use different types of materials in certain components, or source alternative components to ensure compliance with applicable standards, and may reduce the availability of parts and components used in our products by negatively impacting our suppliers' ability to source parts and components in a timely and cost-effective manner. Any such redesigns, required use of alternative materials, or limited availability of parts and components used in our products may detrimentally impact the performance of our products, add greater testing lead times for product introductions, reduce our product margins, or limit the markets for our products, and if we fail to comply with any present and future regulations, we could be subject to future fines, penalties, and restrictions, such as the suspension of manufacturing of our products or a prohibition on the sale of products we manufacture. Any of the foregoing could adversely affect our business, financial condition, or results of operations.

**If we are unable to recruit and retain key executives, scientists, and technical support personnel, we may be unable to achieve our goals. We may have difficulty attracting, motivating, and retaining executives and other key employees in light of our recent acquisition.**

Our performance is substantially dependent on the performance of our senior management, particularly Gajus V. Worthington, our president and chief executive officer. Additionally, to expand our research and product development efforts, we need key scientists skilled in areas such as molecular and cellular biology, assay development, and manufacturing. We also need highly trained technical support personnel with the necessary scientific background and ability to understand our systems at a technical level to effectively support potential new customers and the expanding needs of current customers. Competition for these people is intense. Because of the complex and technical nature of our systems 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.

The loss of the services of any member of our senior management or our scientific or technical support 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. 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. We do not maintain fixed term employment contracts or significant key man life insurance with any of our employees.

Additionally, as a result of our acquisition of DVS Sciences Inc. (now Fluidigm Sciences Inc.), key Fluidigm Sciences employees became entitled to receive a portion of the acquisition consideration, the payment of which could provide sufficient financial incentive for certain officers and employees to no longer pursue employment with the combined business. In particular, we have identified several key Fluidigm Sciences employees, including key scientific and technical employees, who have been important to the development of Fluidigm Sciences' products and technologies, and we have implemented employment compensation arrangements in connection with the acquisition to ensure these individuals' continued employment with us. We cannot provide assurances that these arrangements will sufficiently incentivize these key employees to remain with us. If these key employees depart, we may incur significant costs in identifying, hiring, and retaining replacements for departing employees, which could substantially reduce or delay our ability to realize the anticipated benefits of the acquisition.

**If we are unable to integrate future acquisitions successfully, our operating results and prospects could be harmed.**

In addition to our recent acquisition, we may make additional acquisitions to improve our product offerings or expand into new markets. Our future acquisition strategy will depend on our ability to identify, negotiate, complete, and integrate acquisitions and, if necessary, to obtain satisfactory debt or equity financing to fund those acquisitions. Mergers and acquisitions are inherently

risky, and any transaction we complete may not be successful. Our acquisition of DVS was our first acquisition of another company. Any merger or acquisition we may pursue would involve numerous risks, including but not limited to the following:

- difficulties in integrating and managing the operations, technologies, and products of the companies we acquire;
- diversion of our management's attention from normal daily operation of our business;
- our inability to maintain the key business relationships and the reputations of the businesses we acquire;
- our inability to retain key personnel of the acquired company;
- uncertainty of entry into markets in which we have limited or no prior experience and in which competitors have stronger market positions;
- our dependence on unfamiliar affiliates and customers of the companies we acquire;
- insufficient revenue to offset our increased expenses associated with acquisitions;
- our responsibility for the liabilities of the businesses we acquire, including those which we may not anticipate; and
- our inability to maintain internal standards, controls, procedures, and policies.

We may be unable to secure the equity or debt funding necessary to finance future acquisitions on terms that are acceptable to us. If we finance acquisitions by issuing equity or convertible debt securities, our existing stockholders will likely experience dilution, and if we finance future acquisitions with debt funding, we will incur interest expense and may have to comply with financial covenants and secure that debt obligation with our assets.

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

The global credit and financial markets have in recent years experienced volatility and disruptions, including diminished liquidity and credit availability, increased concerns about inflation and deflation, and the downgrade of U.S. debt and exposure risks on other sovereign debts, decreased consumer confidence, lower economic growth, volatile energy costs, increased unemployment rates, and uncertainty about economic stability. 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 clinical research and development. Continuation or further deterioration of these financial and macroeconomic conditions could significantly harm our sales, profitability, and results of operations.

**We generate a substantial portion of our revenue internationally and are subject to various risks relating to such international activities, which could adversely affect our sales and operating performance. In addition, any disruption or delay in the shipping or off-loading of our products, whether domestically or internationally, may have an adverse effect on our financial condition and results of operations.**

During the three months ended March 31, 2015 and years 2014 and 2013, approximately 49%, 49%, 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 international operations and develop opportunities in other countries. Engaging in international business inherently involves a number of difficulties and risks, including:

- required compliance with existing and changing foreign regulatory requirements and laws, such as the RoHS and WEEE directives, which regulate the use of certain hazardous substances in, and require the collection, reuse, and recycling of waste from, products we manufacture;

- required compliance with anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, data privacy requirements, labor laws, and anti-competition regulations;
- 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;
- unstable economic, political, and regulatory conditions;
- 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.

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.

In addition, a majority of our product sales are currently denominated in U.S. dollars and fluctuations in the value of the U.S. dollar relative to foreign currencies could decrease demand for our products and adversely impact our financial performance. For example, 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, or if the value of the U.S. dollar decreases relative to the Singapore dollar or the Canadian dollar, it would become more costly in U.S. dollars for us to manufacture our products in Singapore and/or in Canada. Additionally, our expenses are generally denominated in the currencies of the countries in which our operations are located, which is primarily in the United States, with a portion of expenses incurred in Singapore and Canada where a significant portion of our manufacturing operations are located. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We have experienced and will continue to experience fluctuations in our net income or loss as a result of transaction gains or losses related to revaluing certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. For example, experienced foreign currency losses of \$1.3 million, \$1.1 million, and \$0.5 million for the three months ended March 31, 2015 and years ended December 31, 2014 and 2013, respectively. Fluctuations in currency exchange rates could have an adverse impact on our financial results in the future.

We rely on shipping providers to deliver products to our customers globally. Labor, 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, energy-related tie-ups, or other factors could disrupt or delay shipping or off-loading of our products domestically and internationally. Such disruptions or delays may have an adverse effect on our financial condition and results of operations.

**We are subject to risks related to taxation in multiple jurisdictions and if taxing authorities disagree with our interpretations of existing tax laws or regulations, our effective income tax rate could be adversely affected and we could have additional tax liability.**

We are subject to income taxes in both the United States and certain foreign jurisdictions. Significant judgments based on interpretations of existing tax laws or regulations are required in determining the provision for income taxes. For example, we have made certain interpretations of existing tax laws or regulations based upon the operations of our business internationally and we have implemented intercompany agreements based upon these interpretations and related transfer pricing analyses. If the U.S. Internal Revenue Service or other taxing authorities disagree with the positions, our effective income tax rate could be adversely affected and we could have additional tax liability, including interest and penalties. We are currently reviewing our corporate structure and tax positions and such review may result in a change in how we structure our international business operations, which may have an adverse effect on our income tax liability. Our effective income tax rate could also be adversely affected by changes in the mix of earnings in tax jurisdictions with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in existing tax laws or tax rates, changes in the level of non-deductible expenses (including share-based compensation), changes in our future levels of research and development spending, mergers and acquisitions, or the result of

examinations by various tax authorities. Payment of additional amounts upon final adjudication of any disputes could have a material impact on our results of operations and financial position.

**If we are unable to manage our anticipated growth effectively, our business could be harmed.**

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 facilities located in Singapore, Canada, and California, are sufficient to meet our short-term manufacturing needs. The current lease for our manufacturing facility in Singapore expires in June 2022. In the event that we need to add to our existing manufacturing space in Singapore or move our manufacturing facility to a new location in Singapore, such a move will involve significant expense and efforts in connection with the establishment of new clean rooms and the recommissioning of key manufacturing equipment, and we cannot assure you that such a move would not delay or otherwise adversely affect our manufacturing activities. We cannot provide assurances that we will be able to secure a lease on a different manufacturing facility on acceptable terms and on a timely basis, if at all, to meet our future manufacturing needs.

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.

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

Our systems utilize novel and complex technology 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 systems, these risks may increase. We generally provide warranties that our systems will meet performance expectations and will be free from defects. We also provide warranties relating to other parts of our systems. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins.

In manufacturing our products, including our systems, IFCs, and assays, we depend upon third parties for the supply of various components, many of which require a significant degree of technical expertise to produce. In addition, we purchase certain products from third-party suppliers for resale. If our suppliers fail to produce components to specification or provide defective products to us for resale and our quality control tests and procedures fail to detect such errors or defects, or if we or our suppliers 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.

In addition, certain of our products are marketed for use with products sold by third parties. For example, our Access Array system is marketed as compatible with all major next-generation DNA sequencing instruments. If such third-party products are not produced to specification, are produced in accordance with modified specifications, or are defective, they may not be compatible with our products. In such case, the reliability and performance of our products may be compromised.

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

**To use our products, our Biomark and CyTOF systems 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, our Biomark and CyTOF systems 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. Although we sell reagents for use with certain of our products, our customers may purchase these reagents directly from third-party 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 over the formulation of reagents sold by third-party suppliers, and the performance of our products might be adversely affected if the formulation of these reagents is 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, our Biomark system involves real-time quantitative PCR, or qPCR. Leading suppliers of reagents for real-time qPCR reactions include Life Technologies Corporation (now part of Thermo Fisher Scientific) and Roche Diagnostics Corporation, who are our direct competitors, and their licensees. These real-time qPCR 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 real-time qPCR 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 are unable to expand our direct sales and marketing force or distribution capabilities to adequately address our customers' needs, our business may be adversely affected.**

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 revenue 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 and adversely impact our business operations.

**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, 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 may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses.

Our compliance with Section 404 requires 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 continue to evaluate our need for additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we do not comply with the requirements of Section 404, or if we or our independent registered public accounting firm identify 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 Select Market, or NASDAQ, the SEC or other regulatory authorities, which would require additional financial and management resources.

**Risks associated with a company-wide implementation of an enterprise resource planning, or ERP, system may adversely affect our business and results of operations or the effectiveness of internal control over financial reporting.**

We have been implementing a company-wide ERP system to handle the business and financial processes within our operations and corporate functions. ERP implementations are complex and time-consuming projects that involve substantial expenditures on system software and implementation activities that can continue for several years. ERP implementations also require transformation of business and financial processes in order to reap the benefits of the ERP system. Our business and results of operations may be adversely affected if we experience operating problems and/or cost overruns during the ERP implementation process, or if the ERP system and the associated process changes do not give rise to the benefits that we expect. If we do not effectively implement the ERP system as planned or if the system does not operate as intended, our business, results of operations, and internal controls over financial reporting may be adversely affected.

**Our future capital needs are uncertain and we may need to raise additional funds in the future, which may cause dilution to stockholders or may be upon terms that are not favorable to us.**

We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 18 months. However, we may need to raise substantial additional capital for various purposes, including:

- expanding the commercialization of our products;
- funding our operations;
- furthering our research and development; and
- acquiring other businesses or assets and licensing technologies.

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, delay development or commercialization of our products, or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. We also may have to reduce marketing, customer support, or other resources devoted to our products, or cease operations. Any of these factors could harm our operating results.

**Our 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. If we undergo one or more ownership changes, our ability to utilize NOLs could be 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.

**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. 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. 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. 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, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business. Changes in either the patent laws or in interpretations of patent laws in the United States or other countries may diminish the value of our intellectual property. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- We might not have been the first to make the inventions covered by each of our pending patent applications;
- We might not have been the first to file patent applications for these inventions;
- The patents of others may have an adverse effect on our business; and
- Others may independently develop similar or alternative products and technologies or duplicate any of our products and technologies.

To the extent our intellectual property, including licensed intellectual property, offers inadequate protection, or is found to be invalid or unenforceable, our competitive position and our business could be adversely affected.

**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, any of which could be time-intensive and costly and may adversely impact our business or stock price.**

Litigation may be necessary for us to enforce our patent and proprietary rights, determine the scope, coverage, and validity of others' proprietary rights, and/or defend against third party claims of intellectual property infringement against us as well as against our suppliers, distributors, customers, and other entities with whom we do business. Litigation could result in substantial legal fees and could adversely affect the scope of our patent protection. 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 product margins or financial position. Further, we could encounter delays in product introductions, or interruptions in product sales, as we develop alternative methods or products.

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 impeding our entry into such markets or as a means to extract substantial license and royalty payments from us. 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 our existing and targeted markets. For example, some of our products provide for the testing and analysis of genetic material, and patent rights relating to genetic materials remain a developing area of patent law. A recent U.S. Supreme Court decision held, among other things, that claims to isolated genomic DNA occurring in nature are not patent eligible, while claims relating to synthetic DNA may be patent eligible. We expect the ruling will result in additional litigation in our industry. In addition, 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., a wholly-owned subsidiary of Life Technologies Corporation (now part of Thermo Fisher Scientific Inc. and collectively referred to as Life), 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 Europe and Canada. In June 2011, we resolved this dispute by entering into license agreements with Life which, among other matters, granted us a non-exclusive license to the '934 patent and its foreign counterparts.

Our customers have been sued for various claims of intellectual property infringement in the past, and we expect that our customers will be involved in additional litigation in the future. In particular, our customers may become subject to lawsuits claiming that their use of our products infringes third-party patent rights, and we could become subject to claims that we contributed to or induced our customer's infringement. 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 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, which would have an adverse effect on our business.**

We rely on licenses in order to be able to use various proprietary technologies that are material to our business, including our core IFC, multi-layer soft lithography, and mass cytometry technologies. 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.

Our rights to use the technology we license are subject to the negotiation and continuation of those licenses. 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. 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 and the license is terminated, we might be barred from marketing, producing, and selling some or all of our products, which would have an adverse effect on our business. For example, pursuant to the terms of a license agreement entered into with Life in June 2011, we were obligated to make a \$1.0 million payment to Life

upon satisfaction of certain conditions. On October 16, 2013, Life provided notice that the \$1.0 million payment was due and payable under the license agreement. We believe that at least one of the conditions of the milestone payment remains unmet; however, we paid Life the amount due while reserving our rights with respect to such matter to, among other reasons, avoid what would have been, in our view, an improper termination of our license to certain Life patent filings under the agreement, which could have subjected our relevant product lines to risks associated with patent infringement litigation.

**We license certain intellectual property rights covering our mass cytometry products under agreements with several third parties. Termination of or disputes relating to any of these license agreements would have a material adverse effect on our business, operating results, and financial condition and could result in our inability to sell our mass cytometry products.**

The intellectual property rights covering our mass cytometry products depend in substantial part on license agreements with third parties, in particular MDS, Inc., or MDS, and also with other third parties such as Nodality, Inc., or Nodality. The licensed intellectual property rights of MDS as well as MDS's rights and obligations under the license agreement between Fluidigm Canada Inc., or Fluidigm Canada, an Ontario corporation and wholly-owned subsidiary of Fluidigm Sciences, and MDS were subsequently assigned to and are now held by PerkinElmer Health Sciences, Inc., or PerkinElmer. Under the PerkinElmer license agreement, Fluidigm Canada received an exclusive, royalty bearing, worldwide license to certain patents that are now owned by PerkinElmer in the field of ICP-based mass cytometry, including the analysis of elemental tagged materials in connection therewith, and a non-exclusive license for reagents outside the field of ICP-based mass cytometry. Fluidigm Canada was also party to an interim license agreement, now expired, under which Nodality granted Fluidigm Canada a worldwide, non-exclusive, research use only, royalty bearing license to certain cytometric reagents, instruments, and other products. Fluidigm Canada and Nodality are currently in negotiations with respect to reinstating the license agreement and we cannot provide assurances that we will be able to reinstate or secure a new license agreement on acceptable terms, if at all. In addition, we are party to additional in-license agreements with parties such as Stanford University that relate to significant intellectual property rights, and our business and product development plans anticipate and will substantially depend on future in-license agreements with additional third parties, some of which are currently in the early discussion phase.

In-licensed intellectual property rights that are fundamental to the business being operated present numerous risks relating to ownership and enforcement of intellectual property rights. For example, under the PerkinElmer license, Fluidigm Canada is not granted any right, and we do not have any right to bring enforcement actions with respect to the patents licensed from PerkinElmer, which could materially impair our ability to preclude competitors and other third parties from activities that we consider to infringe on our exclusively licensed rights. In other cases such as with Nodality, all or a portion of the license rights granted may be limited for research use only, and in the event we attempt to expand into diagnostic applications, we would be required to negotiate additional rights, which may not be available to us on commercially reasonable terms, if at all.

In addition, Fluidigm Sciences' licensors may generally terminate the applicable license agreement for uncured material breaches or if Fluidigm Sciences becomes insolvent, makes an assignment for the benefit of creditors, or has a petition in bankruptcy filed against it. Termination of material license agreements for any reason, including as a result of failure to obtain a required consent to assignment or as a result of an inability to negotiate a new or extended license where required, would result in a material loss of rights by us and would be expected to have a material adverse effect on our business, operating results, and financial condition. In particular, any such termination could prevent us from manufacturing and selling our products unless we can negotiate new license terms or develop or acquire alternative intellectual property rights that cover or enable similar functionality. While we do not believe that any existing material in-license agreements require the consent of the licensor in order for us to rely on these licenses, the question is not free from doubt, and one or more of our licensors could contend that the failure to obtain their consent constituted a breach or default under the applicable license agreement or require the negotiation of a new license. In particular, in May 2014, we received a written notice of PerkinElmer's position that the license agreement between Fluidigm Canada and PerkinElmer requires, as a result of the acquisition, that PerkinElmer consent to negotiate a commercially reasonable license to Fluidigm. We continue to disagree with PerkinElmer's position concerning the impact of the acquisition on the license agreement and are currently in negotiations with PerkinElmer in an attempt to resolve this matter. In addition, we are evaluating alternative strategies and potential actions relating to our interests in the licensed intellectual property.

In the case of a dispute over these or other terms of the applicable license agreements, including with respect to the license with PerkinElmer, we cannot provide assurances that we will be able to negotiate a new or amended license on commercially reasonable terms, if at all. Our potential dispute with PerkinElmer as well as any other disputes between us and one of Fluidigm Sciences' existing licensors concerning the terms or conditions of the applicable license agreement could result, among other risks, in substantial management distraction; increased expenses associated with litigation or efforts to resolve disputes; substantial customer uncertainty concerning the direction of our proteomics product line; potential infringement claims against us and/or our customers, which could include efforts by a licensor to enjoin sales of our products; customer requests for indemnification by Fluidigm; and, in the event of an adverse determination, our inability to operate our business as currently

operated. Any of these factors would be expected to have a material adverse effect on our business, operating results, and financial condition and could result in a substantial decline in our stock price.

**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 IFCs, which incorporate technology developed with U.S. government grants. All of our instruments, including microfluidic systems, and IFCs for commercial sale 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, the sole licensor subject to the requirement applied for a waiver of the domestic manufacturing requirement with respect to the relevant patents licensed to us by this licensor. 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. In June 2012, the licensor requested a continued waiver of the domestic manufacturing requirement with respect to the relevant patents, but the government agency has not yet taken any action in response to this request. If the government agency does not grant the requested waiver or the government fails to grant additional waivers of such requirement that may be sought in the future, then the U.S. government could exercise its march-in rights with respect to the relevant patents licensed to us. In addition, the license agreement under which the relevant patents are licensed to us contains provisions that obligate us to comply with this domestic manufacturing requirement. We are not currently manufacturing instruments and IFCs in the United States that incorporate the relevant licensed technology. If our lack of compliance with this provision constituted a material breach of the license agreement, the license of the relevant patents could be terminated or we could be compelled to relocate our manufacturing of microfluidic systems and IFCs to the United States to avoid or cure a material breach of the license agreement. Any of the exercise of march-in rights, the termination of our license of the relevant patents or the relocation of our manufacturing of microfluidic systems and IFCs to the United States could materially adversely affect our business, operations and financial condition.

**We are subject to certain obligations and restrictions relating to technologies developed in cooperation with Canadian government agencies.**

Some of our Canadian research and development is funded in part through government grants and by government agencies. The intellectual property developed through these projects is subject to rights and restrictions in favor of government agencies and Canadians generally. In most cases the government agency retains the right to use intellectual property developed through the project for non-commercial purposes and to publish the results of research conducted in connection with the project. This may increase the risk of public disclosure of information relating to our intellectual property, including confidential information, and may reduce its competitive advantage in commercializing intellectual property developed through these projects. In certain projects, we have also agreed to use commercially reasonable efforts to commercialize intellectual property in Canada, or more specifically in the province of Ontario, for the economic benefit of Canada and the province of Ontario. These restrictions will limit our choice of business and manufacturing locations, business partners and corporate structure and may, in certain circumstances, restrict our ability to achieve maximum profitability and cost efficiency from the intellectual property generated by these projects. In one instance, a dispute with the applicable government funded entity may require mediation, which could lead to unanticipated delays in our commercialization efforts to that project. One of our Canadian government funded projects is also subject to certain limited “march-in” rights in favor of the government of the Province of Ontario, under which we may be required to grant a license to our intellectual property, including background intellectual property developed outside the scope of the project, to a responsible applicant on reasonable terms in circumstances where the government determines that such a license is necessary in order to alleviate emergency or extraordinary health or safety needs or for public use. In addition, we must provide reasonable assistance to the government in obtaining similar licenses from third parties required in connection with the use of its intellectual property. Instances in which the government of the Province of Ontario has exercised similar “march-in” rights are rare; however, the exercise of such rights could materially adversely affect our business, operations and financial condition.

**We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our employees' former employers or other institutions or third parties with whom such employees may have been previously affiliated.**

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 have in the past received notices from third parties alleging potential disclosures of confidential information. We may become subject to claims that our employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or other third parties or institutions with whom our employees may have been previously affiliated. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. A loss of key research personnel work product could hamper or prevent our ability to commercialize certain potential products, which could severely harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

### **Risks Related to Our Common Stock**

**Our stock price may fluctuate significantly, particularly if holders of substantial amounts of our stock attempt to sell, and holders may have difficulty selling their shares based on current trading volumes of our stock. In addition, numerous other factors could result in substantial volatility in the trading price of our stock.**

Our stock is currently traded on NASDAQ, but we can provide no assurance that we will be able to maintain an active trading market on NASDAQ or any other exchange in the future. The trading volume of our stock tends to be low relative to our total outstanding shares, and we have several stockholders, including affiliated stockholders, who hold substantial blocks of our stock. As of March 31, 2015, we had 28,715,358 shares of common stock outstanding, and stockholders holding at least 5% of our stock, individually or with affiliated persons or entities, collectively beneficially owned or controlled approximately 62% of such shares. Sales of large numbers of shares by any of our large stockholders could adversely affect our trading price, particularly given our relatively small historic trading volumes. If stockholders holding shares of our common stock sell, indicate an intention to sell, or if it is perceived that they will sell, substantial amounts of their common stock in the public market, the trading price of our common stock could decline. Moreover, if there is no 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 or communications by us or our competitors relating to, among other things, new commercial products, technological advances, significant contracts, commercial relationships, capital commitments, acquisitions or sales of businesses, and/or misperceptions in or speculation by the market regarding such announcements or communications;
- 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 clinical research 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 in connection with raising additional capital or otherwise;
- any major change to the composition of our board of directors 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. 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.

**If securities or industry analysts publish unfavorable research about our business or cease to cover our business, our stock price and/or 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.

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

As of March 31, 2015, our current executive officers, directors, stockholders holding at least 5% of our outstanding stock, and their respective affiliates, collectively beneficially owned or controlled approximately 63% of the outstanding shares of our common stock. Accordingly, these executive officers, directors, large stockholders, and their respective 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;
- 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 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.

#### **Risks Related to Our Outstanding 2.75% Senior Convertible Notes due 2034**

**Our outstanding 2.75% senior convertible notes due 2034 are effectively subordinated to our secured debt and any liabilities of our subsidiaries.**

Our outstanding 2.75% senior convertible notes due 2034, which we refer to as our "notes", rank:

- senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the notes;
- equal in right of payment to all of our liabilities that are not so subordinated;
- effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and
- structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

In February 2014, we completed our offering of notes with an aggregate outstanding principal amount of \$201.3 million. In the event of our bankruptcy, liquidation, reorganization, or other winding up, our assets that secure debt ranking senior in right of payment to the notes will be available to pay obligations on the notes only after the secured debt has been repaid in full from these assets, and the assets of our subsidiaries will be available to pay obligations on the notes only after all claims senior to the notes have been repaid in full. There may not be sufficient assets remaining to pay amounts due on any or all of the notes then outstanding. The indenture governing the notes does not prohibit us from incurring additional senior debt or secured debt, nor does it prohibit our subsidiaries from incurring additional liabilities.

**The notes are our obligations only and some of our operations are conducted through, and a portion of our consolidated assets are held by, our subsidiaries.**

The notes are our obligations exclusively and are not guaranteed by any of our operating subsidiaries. A portion of our consolidated assets is held by our subsidiaries. Accordingly, our ability to service our debt, including the notes, depends in part on the results of operations of our subsidiaries and upon the ability of such subsidiaries to provide us with cash, whether in the form of dividends, loans, or otherwise, to pay amounts due on our obligations, including the notes. Our subsidiaries are separate and distinct legal entities and have no obligation, contingent or otherwise, to make payments on the notes or to make any funds available for that purpose. In addition, dividends, loans, or other distributions to us from such subsidiaries may be subject to contractual and other restrictions and are subject to other business and tax considerations.

**Recent and future regulatory actions and other events may adversely affect the trading price and liquidity of the notes.**

We expect that many investors in, and potential purchasers of, the notes will employ, or seek to employ, a convertible arbitrage strategy with respect to the notes. Investors would typically implement such a strategy by selling short the common stock underlying the notes and dynamically adjusting their short position while continuing to hold the notes. Investors may also implement this type of strategy by entering into swaps on our common stock in lieu of or in addition to short selling the common stock. As a result, any specific rules regulating equity swaps or short selling of securities or other governmental action that interferes with the ability of market participants to effect short sales or equity swaps with respect to our common stock could adversely affect the ability of investors in, or potential purchasers of, the notes to conduct the convertible arbitrage strategy that

we believe they will employ, or seek to employ, with respect to the notes. This could, in turn, adversely affect the trading price and liquidity of the notes.

The SEC and other regulatory and self-regulatory authorities have implemented various rules and taken certain actions, and may in the future adopt additional rules and take other actions, that may impact those engaging in short selling activity involving equity securities (including our common stock). Such rules and actions include Rule 201 of SEC Regulation SHO, the adoption by the Financial Industry Regulatory Authority, Inc. and the national securities exchanges of a “Limit Up-Limit Down” program, the imposition of market-wide circuit breakers that halt trading of securities for certain periods following specific market declines, and the implementation of certain regulatory reforms required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Although the direction and magnitude of the effect that Regulation SHO, FINRA, securities exchange rule changes, and implementation of the Dodd-Frank Act may have on the trading price and the liquidity of the notes will depend on a variety of factors, many of which cannot be determined at the date of this report, past regulatory actions (such as certain emergency orders issued by the SEC in 2008 prohibiting short sales of stock of certain financial services companies) have had a significant impact on the trading prices and liquidity of convertible debt instruments. Any governmental or regulatory action that restricts the ability of investors in, or potential purchasers of, the notes to effect short sales of our common stock, borrow our common stock, or enter into swaps on our common stock or increases the costs of implementing an arbitrage strategy could adversely affect the trading price and the liquidity of the notes.

**Volatility in the market price and trading volume of our common stock could adversely impact the trading price of the notes.**

The stock market in recent years has experienced significant price and volume fluctuations that have often been unrelated to the operating performance of companies. The market price of our common stock could fluctuate significantly for many reasons, including in response to the risks described in this report, or for reasons unrelated to our operations, such as reports by industry analysts, investor perceptions or negative announcements by our customers, competitors or suppliers regarding their own performance, as well as industry conditions and general financial, economic and political instability. The market price of our common stock could also decline as a result of sales of a large number of shares of our common stock in the market, particularly sales by our directors, executive officers, employees, and significant stockholders, and the perception that these sales could occur may also depress the market price of our common stock. A decrease in the market price of our common stock would likely adversely impact the trading price of the notes. The market price of our common stock could also be affected by possible sales of our common stock by investors who view the notes as a more attractive means of equity participation in us and by hedging or arbitrage trading activity that we expect to develop involving our common stock. This trading activity could, in turn, affect the trading price of the notes.

**We may still incur substantially more debt or take other actions which would intensify the risks discussed above.**

We are not restricted under the terms of the indenture governing the notes from incurring additional debt, securing existing or future debt, recapitalizing our debt, or taking a number of other actions that are not limited by the terms of the indenture governing the notes that could have the effect of diminishing our ability to make payments on the notes when due. Any failure by us or any of our significant subsidiaries to make any payment at maturity of indebtedness for borrowed money in excess of \$15 million or the acceleration of any such indebtedness in excess of \$15 million would, subject to the terms of the indenture governing the notes, constitute a default under the indenture. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the notes when required.

**We may not have the ability to raise the funds necessary to repurchase the notes upon specified dates or upon a fundamental change, and our future debt may contain limitations on our ability to repurchase the notes.**

Holders of the notes have the right to require us to repurchase all or a portion of their notes on certain dates or upon the occurrence of a fundamental change at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. We may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of notes surrendered therefor.

In addition, our ability to repurchase the notes may be limited by law, regulatory authority, or agreements governing our future indebtedness. Our failure to repurchase notes at a time when the repurchase is required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the notes when required.

**Holders of notes are not entitled to any rights with respect to our common stock, but they are subject to all changes made with respect to them to the extent our conversion obligation includes shares of our common stock.**

Holders of notes are not entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock) prior to the conversion date with respect to any notes they surrender for conversion, but they are subject to all changes affecting our common stock. For example, if an amendment is proposed to our certificate of incorporation or bylaws requiring stockholder approval and the record date for determining the stockholders of record entitled to vote on the amendment occurs prior to the conversion date with respect to any notes surrendered for conversion, then the holder surrendering such notes will not be entitled to vote on the amendment, although such holder will nevertheless be subject to any changes affecting our common stock.

**We have made only limited covenants in the indenture governing the notes, and these limited covenants may not protect a noteholder's investment.**

The indenture governing the notes does not:

- require us to maintain any financial ratios or specific levels of net worth, revenues, income, cash flows, or liquidity and, accordingly, does not protect holders of the notes in the event that we experience adverse changes in our financial condition or results of operations;
- limit our subsidiaries' ability to guarantee or incur indebtedness that would rank structurally senior to the notes;
- limit our ability to incur additional indebtedness, including secured indebtedness;
- restrict our subsidiaries' ability to issue securities that would be senior to our equity interests in our subsidiaries and therefore would be structurally senior to the notes;
- restrict our ability to repurchase our securities;
- restrict our ability to pledge our assets or those of our subsidiaries; or
- restrict our ability to make investments or pay dividends or make other payments in respect of our common stock or our other indebtedness.

Furthermore, the indenture governing the notes contains only limited protections in the event of a change of control. We could engage in many types of transactions, such as acquisitions, refinancings, or certain recapitalizations, that could substantially affect our capital structure and the value of the notes and our common stock but may not constitute a "fundamental change" that permits holders to require us to repurchase their notes or a "make-whole fundamental change" that permits holders to convert their notes at an increased conversion rate. For these reasons, the limited covenants in the indenture governing the notes may not protect a noteholder's investment in the notes.

**The increase in the conversion rate for notes converted in connection with a make-whole fundamental change or provisional redemption may not adequately compensate noteholders for any lost value of the notes as a result of such transaction or redemption.**

If a make-whole fundamental change occurs prior to February 6, 2021 or upon our issuance of a notice of provisional redemption, under certain circumstances, we will increase the conversion rate by a number of additional shares of our common stock for notes converted in connection with such events. The increase in the conversion rate for notes converted in connection with such events may not adequately compensate noteholders for any lost value of the notes as a result of such transaction or redemption. In addition, if the price of our common stock in the transaction is greater than \$180.00 per share or less than \$39.96 per share (in each case, subject to adjustment), no additional shares will be added to the conversion rate. Moreover, in no event will the conversion rate per \$1,000 principal amount of notes as a result of this adjustment exceed 25.0250 shares of common stock, subject to adjustment.

Our obligation to increase the conversion rate for notes converted in connection with such events could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness and equitable remedies.

**The conversion rate of the notes may not be adjusted for all dilutive events.**

The conversion rate of the notes is subject to adjustment for certain events, including, but not limited to, the issuance of certain stock dividends on our common stock, the issuance of certain rights or warrants, subdivisions, combinations, distributions of capital stock, indebtedness, or assets, cash dividends and certain issuer tender or exchange offers. However, the conversion rate will not be adjusted for other events, such as a third-party tender or exchange offer or an issuance of common stock for cash, that may adversely affect the trading price of the notes or our common stock. An event that adversely affects the value of the notes may occur, and that event may not result in an adjustment to the conversion rate.

**Some significant restructuring transactions may not constitute a fundamental change, in which case we would not be obligated to offer to repurchase the notes.**

Upon the occurrence of a fundamental change, a holder of notes has the right to require us to repurchase the notes. However, the fundamental change provisions will not afford protection to holders of notes in the event of other transactions that could adversely affect the notes. For example, transactions such as leveraged recapitalizations, refinancings, restructurings, or acquisitions initiated by us may not constitute a fundamental change requiring us to repurchase the notes. In the event of any such transaction, the holders would not have the right to require us to repurchase the notes, even though each of these transactions could increase the amount of our indebtedness, or otherwise adversely affect our capital structure or any credit ratings, thereby adversely affecting the holders of notes.

In addition, absent the occurrence of a fundamental change or a make-whole fundamental change as described under changes in the composition of our board of directors will not provide holders with the right to require us to repurchase the notes or to an increase in the conversion rate upon conversion.

**We cannot assure noteholders that an active trading market will develop or be maintained for the notes.**

We do not intend to apply to list our outstanding convertible notes on any securities exchange or to arrange for quotation on any automated dealer quotation system. In addition, the liquidity of the trading market in the notes and the market price quoted for the notes may be adversely affected by changes in the overall market for this type of security and by changes in our financial performance or prospects or in the prospects for companies in our industry generally. As a result, we cannot assure noteholders that an active trading market will develop or be maintained for the notes. If an active trading market does not develop or is not maintained, the market price and liquidity of the notes may be adversely affected. In that case, noteholders may not be able to sell the notes at a particular time or at a favorable price.

**Any adverse rating of the notes may cause their trading price to fall.**

We do not intend to seek a rating on the notes. However, if a rating service were to rate the notes and if such rating service were to lower its rating on the notes below the rating initially assigned to the notes or otherwise announces its intention to put the notes on credit watch, the trading price of the notes could decline.

**Holders of notes may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the notes even though they do not receive a corresponding cash distribution.**

The conversion rate of the notes is subject to adjustment in certain circumstances, including the payment of cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, a noteholder may be deemed to have received a dividend subject to U.S. federal income tax without the receipt of any cash. In addition, a failure to adjust (or to adjust adequately) the conversion rate after an event that increases a noteholder's proportionate interest in us could be treated as a deemed taxable dividend to you. If a make-whole fundamental change occurs prior to February 6, 2021 or we provide notice of a provisional redemption, under some circumstances, we will increase the conversion rate for notes converted in connection with the make-whole fundamental change or provisional redemption. Such increase may also be treated as a distribution subject to U.S. federal income tax as a dividend. For a non-U.S. holder, any deemed dividend would be subject to U.S. federal withholding tax at a 30% rate, or such lower rate as may be specified by an applicable treaty, which may be set off against subsequent payments on the notes.

**Any conversions of the notes will dilute the ownership interest of our existing stockholders, including holders who had previously converted their notes.**

Any conversion of some or all of the notes will dilute the ownership interests of our existing stockholders. Any sales in the public market of our common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the notes may encourage short selling by market participants because the conversion of the notes could depress the price of our common stock.

**Item 5. Other Information.**

After 15 years of service as our general counsel and more recently also as our executive vice president, legal affairs, William M. Smith has agreed with the company to increase his responsibility for operational and business development matters at Fluidigm. As previously disclosed, from February 2014 through October 2014, Mr. Smith led the operational and administrative aspects of integration of DVS Sciences, Inc. following its acquisition, and our chief executive officer has recently assigned him additional business development responsibility for our proteomics business. In connection with these new responsibilities, we anticipate that Mr. Smith will step down as our executive vice president, legal affairs and general counsel. Although no timeline has been established for Mr. Smith to relinquish his responsibility as our general counsel, we anticipate that his job function will increasingly focus on non-legal matters over time.

**Item 6. Exhibits.**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated by Reference From Form</b>	<b>Incorporated by Reference From Exhibit Number</b>	<b>Date Filed</b>
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(1)	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(1)	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		
101.INS	XBRL Instance Document	Filed herewith		
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith		
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Filed herewith		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith		
101.DEF	XBRL Taxonomy Extension Definition Document	Filed herewith		
(1)	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.			

**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.

Dated: May 11, 2015

FLUIDIGM CORPORATION

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

Dated: May 11, 2015

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

**EXHIBIT LIST**

<b>Exhibit Number</b>	<b>Description</b>	<b>Incorporated by Reference From Form</b>	<b>Incorporated by Reference From Exhibit Number</b>	<b>Date Filed</b>
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32.2(1)	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		
101.INS	XBRL Instance Document	Filed herewith		
101.SCH	XBRL Taxonomy Extension Schema Document	Filed herewith		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Filed herewith		
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101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Filed herewith		
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- (1) 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.

**CERTIFICATION OF THE PRESIDENT AND CHIEF EXECUTIVE OFFICER  
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Gajus V. Worthington, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Fluidigm Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 11, 2015

By: /s/ Gajus V. Worthington

Gajus V. Worthington

President and Chief Executive Officer

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER  
PURSUANT TO SECURITIES EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Vikram Jog, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Fluidigm Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: May 11, 2015

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

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER  
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

I, Gajus V. Worthington, the chief executive officer of Fluidigm Corporation (the "Company"), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2015 (the "Report"), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

By: /s/ Gajus V. Worthington

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Gajus V. Worthington  
President and Chief Executive Officer

Date: May 11, 2015

**CERTIFICATION OF CHIEF FINANCIAL OFFICER  
PURSUANT TO 18 U.S.C. § 1350, AS ADOPTED PURSUANT TO SECTION 906  
OF THE SARBANES-OXLEY ACT OF 2002**

I, Vikram Jog, the chief financial officer of Fluidigm Corporation (the “Company”), certify for the purposes of 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge,

(i) the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 2015 (the “Report”), fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

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

By: /s/ Vikram Jog

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Vikram Jog  
Chief Financial Officer

Date: May 11, 2015