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

# FORM 10-Q

**(Mark One)**

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

**For the quarterly period ended September 30, 2016**

**or**

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

**For the transition period from to**

**Commission file number: 001-34180**

# FLUIDIGM CORPORATION
**(Exact name of registrant as specified in its charter)**

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

**7000 Shoreline Court, Suite 100**
**South San Francisco, California 94080**
**(Address of principal executive offices) (Zip Code)**

**(650) 266-6000**
**(Registrant's telephone number, including area code)**

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

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

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

| | | | |
|---|---|---|---|
| Large accelerated filer | ☒ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ (Do not check if a smaller reporting company) | Smaller reporting company | ☐ |

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

As of October 28, 2016, there were 29,118,140 shares of the Registrant's common stock outstanding.

**FLUIDIGM CORPORATION**

**TABLE OF CONTENTS**

Table of Contents

## PART I. FINANCIAL INFORMATION

### Item 1. Financial Statements

**FLUIDIGM CORPORATION**
**CONDENSED CONSOLIDATED BALANCE SHEETS**
*(In thousands, except per share amounts)*
*(Unaudited)*

| | September 30, 2016 | December 31, 2015 |
|---|---|---|
| | | (Note 2) |
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 32,306 | $ 29,117 |
| Short-term investments | 38,941 | 65,855 |
| Accounts receivable (net of allowances of $528 at September 30, 2016 and $103 at December 31, 2015) | 12,835 | 25,457 |
| Inventories | 20,838 | 17,924 |
| Prepaid expenses and other current assets | 3,167 | 5,742 |
| Total current assets | 108,087 | 144,095 |
| Long-term investments | — | 6,493 |
| Property and equipment, net | 17,305 | 15,258 |
| Other non-current assets | 8,278 | 9,048 |
| Developed technology, net | 82,643 | 91,048 |
| Goodwill | 104,108 | 104,108 |
| Total assets | $ 320,421 | $ 370,050 |
| **LIABILITIES AND STOCKHOLDERS' EQUITY** | | |
| Current liabilities: | | |
| Accounts payable | $ 4,871 | $ 6,094 |
| Accrued compensation and related benefits | 2,972 | 3,553 |
| Other accrued liabilities | 10,348 | 11,015 |
| Deferred revenue, current | 9,724 | 9,419 |
| Total current liabilities | 27,915 | 30,081 |
| Convertible notes, net | 194,881 | 194,673 |
| Deferred tax liability, net | 21,035 | 23,595 |
| Deferred revenue, non-current | 4,628 | 4,398 |
| Other non-current liabilities | 3,990 | 2,402 |
| Total liabilities | 252,449 | 255,149 |
| Commitments and contingencies (see Note 7) | | |
| Stockholders' equity: | | |
| Preferred stock, $0.001 par value, 10,000 shares authorized, no shares issued and outstanding at September 30, 2016 and December 31, 2015 | — | — |
| Common stock, $0.001 par value, 200,000 shares authorized at September 30, 2016 and December 31, 2015; 29,118 and 28,844 shares issued and outstanding as of September 30, 2016 and December 31, 2015, respectively | 29 | 29 |
| Additional paid-in capital | 490,635 | 479,508 |
| Accumulated other comprehensive loss | (911) | (1,144) |
| Accumulated deficit | (421,781) | (363,492) |
| Total stockholders' equity | 67,972 | 114,901 |
| Total liabilities and stockholders' equity | $ 320,421 | $ 370,050 |

See accompanying notes.

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Revenue: | | | | |
| Product revenue | $ 17,992 | $ 25,101 | $ 68,095 | $ 74,749 |
| Service revenue | 4,152 | 3,487 | 11,085 | 9,043 |
| License and grant revenue | 47 | 55 | 182 | 198 |
| Total revenue | 22,191 | 28,643 | 79,362 | 83,990 |
| Costs and expenses: | | | | |
| Cost of product revenue | 9,071 | 10,463 | 31,097 | 31,512 |
| Cost of service revenue | 1,228 | 967 | 3,673 | 2,529 |
| Research and development | 9,252 | 9,444 | 29,642 | 29,524 |
| Selling, general and administrative | 21,123 | 19,558 | 70,444 | 60,874 |
| Gain on escrow settlement | — | (3,986) | — | (3,986) |
| Total costs and expenses | 40,674 | 36,446 | 134,856 | 120,453 |
| Loss from operations | (18,483) | (7,803) | (55,494) | (36,463) |
| Interest expense | (1,454) | (1,451) | (4,361) | (4,355) |
| Other expense, net | (161) | (377) | (527) | (889) |
| Loss before income taxes | (20,098) | (9,631) | (60,382) | (41,707) |
| Benefit from income taxes | 309 | 362 | 2,093 | 1,271 |
| Net loss | $ (19,789) | $ (9,269) | $ (58,289) | $ (40,436) |
| Net loss per share, basic and diluted | $ (0.68) | $ (0.32) | $ (2.01) | $ (1.41) |
| Shares used in computing net loss per share, basic and diluted | 29,069 | 28,758 | 28,959 | 28,677 |

See accompanying notes.

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Net loss | $ (19,789) | $ (9,269) | $ (58,289) | $ (40,436) |
| Other comprehensive (loss) income, net of tax | | | | |
| Unrealized (loss) gain on securities | $ (12) | $ 11 | $ 92 | $ 86 |
| Foreign currency translation adjustment | (41) | (108) | 141 | (86) |
| Other comprehensive (loss) income, net of tax | (53) | (97) | 233 | — |
| Total comprehensive loss | $ (19,842) | $ (9,366) | $ (58,056) | $ (40,436) |

See accompanying notes.

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

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| **Operating activities** | | |
| Net loss | $ (58,289) | $ (40,436) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 4,972 | 4,030 |
| Stock-based compensation expense | 11,033 | 12,850 |
| Amortization of developed technology | 8,400 | 8,400 |
| Gain from escrow settlement | — | (3,986) |
| Other non-cash items | 592 | 223 |
| Changes in assets and liabilities: | | |
| Accounts receivable, net | 12,073 | (3,571) |
| Inventories | (4,136) | (4,568) |
| Prepaid expenses and other current assets | 236 | (728) |
| Other non-current assets | (84) | (116) |
| Accounts payable | (1,443) | 702 |
| Deferred revenue | 515 | 2,000 |
| Other current liabilities | (1,274) | (3,441) |
| Other non-current liabilities | (972) | (1,688) |
| Net cash used in operating activities | (28,377) | (30,329) |
| **Investing activities** | | |
| Purchases of investments | (38,564) | (53,704) |
| Proceeds from sales and maturities of investments | 71,922 | 77,319 |
| Proceeds from sale of investment in Verinata | 2,330 | — |
| Purchase of intangible assets | — | (170) |
| Purchases of property and equipment | (4,371) | (2,545) |
| Net cash provided by investing activities | 31,317 | 20,900 |
| **Financing activities** | | |
| Proceeds from exercise of stock options, net of taxes paid | 96 | 5,272 |
| Net cash provided by financing activities | 96 | 5,272 |
| Effect of foreign exchange rate fluctuations on cash and cash equivalents | 153 | (739) |
| Net increase (decrease) in cash and cash equivalents | 3,189 | (4,896) |
| Cash and cash equivalents at beginning of period | 29,117 | 33,713 |
| Cash and cash equivalents at end of period | $ 32,306 | $ 28,817 |

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 and proteomics analysis techniques, based upon our core microfluidics and mass cytometry technologies. We sell instruments and consumables, including integrated fluidic circuits (IFCs), assays, and reagents. Our customers include those both in research and applied markets. Research customers are predominantly academic institutions, while our applied customers include clinical research laboratories, biopharmaceutical, agricultural biotechnology (Ag-Bio) companies, and contract research organizations.

**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, 2015 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 statement of our financial information. The results of operations for the three and nine months ended September 30, 2016 are not necessarily indicative of the results to be expected for the year ending December 31, 2016 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 accompanying notes in Item 8 of Part II, "Financial Statements and Supplementary Data," for the year ended December 31, 2015 included in our Annual Report on Form 10-K.

**Prior Period Reclassifications**

Prior period amounts, which do not affect total revenue, total costs and expenses, loss from operations or net loss, were reclassified to conform to the current period presentation as follows:

- unamortized debt issuance costs of $1.0 million as of December 31, 2015 from other non-current assets to a reduction of Convertible Notes, net on the condensed consolidated balance sheets;
- service revenue and cost of service revenue are excluded from total product revenue and total cost of product revenue, as previously reported;
- revenue by geographic area includes license and grant revenue; and
- revenue by geographic area generated in Japan is included in revenue generated in Asia-Pacific.

**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 they would have been anti-dilutive (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Stock options, restricted stock units and performance awards | 4,947 | 3,839 | 4,947 | 3,839 |
| Convertible notes | 3,598 | 3,598 | 3,598 | 3,598 |
| Total | 8,545 | 7,437 | 8,545 | 7,437 |

**Other Comprehensive Loss**

The components of accumulated other comprehensive loss, net of tax, for the three and nine months ended September 30, 2016 are summarized as follows (in thousands):

| | Net Unrealized Gain (Loss) on Securities | Foreign Currency Translation Adjustment | Other Comprehensive Loss |
|---|---|---|---|
| Balance at December 31, 2015 | $ (72) | $ (1,072) | $ (1,144) |
| Other comprehensive income | 81 | 178 | 259 |
| Balance at March 31, 2016 | $ 9 | $ (894) | $ (885) |
| Other comprehensive income | 23 | 4 | 27 |
| Balance at June 30, 2016 | $ 32 | $ (890) | $ (858) |
| Other comprehensive income (loss) | (12) | (41) | (53) |
| Balance at September 30, 2016 | $ 20 | $ (931) | $ (911) |

**Investment, at cost**

In February 2013, Illumina, Inc. acquired Verinata Health, Inc. (Verinata), a privately-held company, for $350 million in cash and up to an additional $100 million in milestone payments through December 2015. In March 2013, we received cash proceeds of $3.1 million in exchange for our ownership interest in Verinata resulting in a gain of $1.8 million. During the third quarter of 2014, we received cash proceeds of $0.3 million from the escrow account related to the acquisition. We recorded these amounts as "Gain from sale of investment in Verinata" in the consolidated statements of operations for the year ended December 31, 2014. The final milestones related to the sale of Verinata to Illumina were met in December 2015 and, accordingly, we recorded our share of these milestone payment obligations in the amount of $2.3 million in Gain from sale of investment in Verinata in the consolidated statement of operations for the year ended December 31, 2015. In January 2016, we received the payment of $2.3 million and it was recorded in net cash provided by investing activities in the condensed consolidated statement of cash flows.

**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).

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

**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**

With the exception of those discussed below, there have not been any recent changes in accounting pronouncements and Accounting Standards Update (ASU) and Accounting Standards Codifications (ASC) issued by the Financial Accounting Standards Board (FASB) during the nine months ended September 30, 2016 that are of significance or potential significance to us.

In May 2014, the FASB issued ASU 2014-09 Revenue from Contracts with Customers (Topic 606). ASU 2014-09 provides principles for recognizing revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In May 2016, the FASB issued ASU 2016-12, which provides narrow scope improvements and practical expedients related to ASU 2014-09. The improvements address completed contracts and contract modifications at transition, noncash consideration, the presentation of sales taxes and other taxes collected from customers, and assessment of collectibility when determining whether a transaction represents a valid contract. On July 7, 2015, the FASB amended ASU 2014-09 to defer the effective date by one year with early adoption permitted as of the original effective date. ASU 2014-09 and ASU 2016-12 will be effective for our fiscal year beginning January 1, 2018 unless we elect the earlier date of January 1, 2017. We are currently evaluating the accounting, transition, and disclosure requirements of these standards. We cannot currently estimate the financial statement impact of adoption.

In April 2015, the FASB issued ASU-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. We applied ASU 2015-03 in our financial statements commencing in the first quarter of 2016.

In July 2015, the FASB issued ASU 2015-11 Inventory (Topic 330): Simplifying the Measurement of Inventory. This accounting standard update changes the measurement principle for inventory from the lower of cost or market to the lower of cost and net realizable value. ASU 2015-11 defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 will be effective for our fiscal year beginning January 1, 2017. We are currently evaluating the accounting and disclosure requirements of the standard and cannot currently estimate the financial statement impact of adoption.

In November 2015, the FASB issued ASU 2015-17 Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes, effective for annual periods beginning after December 15, 2016. The amendments in this update require that in a classified statement of financial position, an entity shall classify deferred tax liabilities and assets as non-current, and an entity shall not offset deferred tax liabilities and assets attributable to different tax-paying components of the entity or to different tax jurisdictions. We currently are evaluating the adoption of the provisions of ASU 2015-17 and cannot currently estimate the financial statement impact of adoption.

In February 2016, the FASB issued ASU 2016-02 Leases (Topic 842). This accounting standard update requires lessees to recognize a right-of-use asset and a lease liability on the balance sheet for all leases with the exception of short-term leases. For lessees, leases will continue to be classified as either operating or finance leases in the income statement. Lessor accounting is similar to the current model but updated to align with certain changes to the lessee model. Lessors will continue to classify leases as operating, direct financing or sales-type leases. ASU 2016-02 will be effective for our fiscal year beginning January 1, 2019 and early adoption is permitted. We are currently evaluating the accounting, transition, and disclosure requirements of the standard. We have not yet determined whether we will elect early adoption of the standard and cannot currently estimate the financial statement impact of adoption.

In March 2016, the FASB issued ASU 2016-09 Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This accounting standard update simplifies several aspects of the accounting for share-based payments, including changing the threshold to qualify for equity classification up to the employees' maximum statutory tax rates, allowing an entity-wide accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures as they occur, and clarifying the classification on the statement of cash flows employee taxes paid when an employer withholds shares for tax-withholding purposes. ASU 2016-09 will be effective for our fiscal year beginning January 1, 2017. We are currently evaluating the accounting and disclosure requirements of the standard and cannot currently estimate the financial statement impact of adoption.

**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. The underwriting discount of $6.0 million was recorded as an offset to the proceeds. The balance of unamortized debt discount and debt issuance costs of $6.4 million was included in convertible notes, net as of September 30, 2016 on the accompanying condensed consolidated balance sheet.

In February 2014, 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.) (See Note 4). Interest expense related to the Notes was approximately $1.5 million and $4.4 million for both the three and nine months ended September 30, 2016 and September 30, 2015, respectively. Approximately $5.5 million of interest under the Notes became due and was paid during the nine months ended September 30, 2016.

**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.

The contractual price for the acquisition was $207.5 million, subject to certain adjustments as specified in the merger agreement. The measurement period for the acquisition ended on February 12, 2015. The final aggregate purchase price was determined to be $199.9 million, as detailed in the table below (in thousands):

| | Purchase Consideration |
|---|---|
| Cash | $ 126,048 |
| Issued 1,759,007 shares of Fluidigm common stock (2) | 76,805 |
| Acquisition consideration paid at Acquisition Date | 202,853 |
| Accelerated stock compensation (1) | (6,690) |
| Estimated fair value of vested Fluidigm equivalent stock options (2) | 4,039 |
| Working capital adjustment | (269) |
| **Aggregate purchase price** | **$ 199,933** |

(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.
(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 was 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, representing 50.3030% of the shares otherwise payable to the former stockholders of DVS, were deposited into escrow (Escrowed Shares). The Escrowed Shares comprised a portion of the merger consideration and were being held in escrow to secure indemnification obligations under the merger agreement. 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 were eligible for release on August 13, 2015, provided that in each case shares would have continued to be held in escrow in amounts that we reasonably determined in good faith to be necessary to satisfy any claims for which we had delivered a notice of claim which had 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. In July 2015, we entered into a settlement agreement with the Stockholder Representative regarding the claims (Settlement Agreement). Pursuant to the terms of the Settlement Agreement, the parties agreed to release approximately 80% of the Escrowed Shares to the former stockholders of DVS, and the remaining approximately 20% of the Escrowed Shares, or 170,107 shares, to us, which were canceled and returned to the status of authorized and unissued shares. Additionally, the parties agreed to, among other things, release various claims and waive certain rights with respect to the merger agreement. On the settlement date, the 170,107 shares had a value of approximately $4.0 million, which was recorded as gain on escrow settlement during the quarter ended September 30, 2015.

**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):

| | Allocation of purchase price |
|---|---|
| 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 |
| Total assets acquired | 238,472 |
| 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, non-current | (1,629) |
| **Net assets acquired** | **$ 199,933** |

The following table provides details of intangible assets acquired in connection with the DVS acquisition as of September 30, 2016 (in thousands, except years):

| | Gross Fair Value | Accumulated Amortization | Net | Useful Life (years) |
|---|---|---|---|---|
| Developed technology | $ 112,000 | $ (29,400) | $ 82,600 | 10 |

We recognized $2.8 million and $8.4 million in intangible assets amortization expense for both the three and nine period ended September 30, 2016 and September 30, 2015, respectively. Intangible asset amortization expense is recorded in cost of product revenue.

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 deductible for income tax purposes. There were no changes in goodwill between December 31, 2015 and September 30, 2016.

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

**5. Balance Sheet Details**

**Inventories**

Inventories consist of the following (in thousands):

| | September 30, 2016 | December 31, 2015 |
|---|---|---|
| Raw materials | $ 8,765 | $ 6,829 |
| Work-in-process | 1,698 | 2,442 |
| Finished goods | 10,375 | 8,653 |
| Total inventories, net | $ 20,838 | $ 17,924 |

**Property and Equipment, net**

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

| | September 30, 2016 | December 31, 2015 |
|---|---|---|
| Computer equipment and software | $ 5,527 | $ 5,048 |
| Laboratory and manufacturing equipment | 23,718 | 21,783 |
| Leasehold improvements | 8,523 | 5,875 |
| Office furniture and fixtures | 2,122 | 1,584 |
| | 39,890 | 34,290 |
| Less accumulated depreciation and amortization | (23,181) | (19,618) |
| Construction-in-progress | 596 | 586 |
| Property and equipment, net | $ 17,305 | $ 15,258 |

**Intangible Assets, net**

The total intangible assets, which include developed technology, net as a result of the DVS acquisition and other intangible assets included in other non-current assets, was $89.6 million as of September 30, 2016. The estimated future amortization expense of intangible assets as of September 30, 2016 is as follows (in thousands):

| | Amount |
|---|---|
| 2016 (remainder of the year) | $ 3,102 |
| 2017 | 12,390 |
| 2018 | 12,326 |
| 2019 | 12,234 |
| 2020 | 12,316 |
| Thereafter | 37,228 |
| | $ 89,596 |

**6. Fair Value of Financial Instruments**

Valuation techniques for determining fair value measurements are based on observable and unobservable inputs. As a basis for determining fair value for our financial instruments, 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.

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

Our Level I financial instruments include money market funds because they are valued using quoted market prices. Our Level II financial instruments include U.S. government and agency securities 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 tables summarize our cash and available-for-sale securities by significant category within the fair value hierarchy (in thousands):

| | September 30, 2016 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Carrying Amount | Gross Unrealized Gain | Gross Unrealized Loss | Fair Value | Cash and Cash Equivalents | Short-Term Marketable Securities | Long-Term Marketable Securities |
| Assets: | | | | | | | |
| Cash | $ 10,813 | $ — | $ — | $ 10,813 | $ 10,813 | $ — | $ — |
| Available-for-sale: | | | | | | | |
| Level I: | | | | | | | |
| Money market funds | 21,493 | — | — | 21,493 | 21,493 | — | — |
| Level II: | | | | | | | |
| U.S. government and agency securities | 38,921 | 20 | — | 38,941 | — | 38,941 | — |
| Total | $ 71,227 | $ 20 | $ — | $ 71,247 | $ 32,306 | $ 38,941 | $ — |

| | December 31, 2015 | | | | | | |
|---|---|---|---|---|---|---|---|
| | Carrying Amount | Gross Unrealized Gain | Gross Unrealized Loss | Fair Value | Cash and Cash Equivalents | Short-Term Marketable Securities | Long-Term Marketable Securities |
| Assets: | | | | | | | |
| Cash | $ 17,889 | $ — | $ — | $ 17,889 | $ 17,889 | $ — | $ — |
| Available-for-sale: | | | | | | | |
| Level I: | | | | | | | |
| Money market funds | 11,228 | — | — | 11,228 | 11,228 | — | — |
| Level II: | | | | | | | |
| U.S. government and agency securities | 72,420 | — | (72) | 72,348 | — | 65,855 | 6,493 |
| Total | $ 101,537 | $ — | $ (72) | $ 101,465 | $ 29,117 | $ 65,855 | $ 6,493 |

There were no transfers in and out of Level I and Level II fair value measurement categories during the nine months ended September 30, 2016 and 2015, and there were no changes in the valuation techniques used.

The contractual maturity dates of $38.9 million of our marketable debt securities are within one year from September 30, 2016.

None of our available-for-sale securities have been in a continuous loss positions for more than 12 months. We concluded that the declines in market value of our available-for-sale securities investment portfolio were temporary in nature and did not consider any of our investments to be other-than-temporarily impaired.

The estimated fair value of the Convertible Notes is based on a market approach (See Note 3). The estimated fair value was approximately $123.6 million (par value $201.3 million) as of September 30, 2016 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 CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**
**(Unaudited)**

**7. Commitments and Contingencies**

**Operating Leases**

We have entered into various long-term non-cancelable operating leases for equipment and facilities.

On April 9, 2013, we entered into an amendment (the April 2013 Amendment) to the lease agreement dated September 14, 2010 (as amended, the Headquarters Lease) relating to the lease of office and laboratory space at our corporate headquarters located in South San Francisco, California. The April 2013 Amendment provided for an expansion of the premises covered under the Headquarters Lease, effective April 1, 2014; an extension of the term 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 Headquarters Lease. The April 2013 Amendment also provided for an allowance of approximately $0.7 million for tenant improvements, of which we used $0.5 million and the remaining $0.2 million was used to offset base rent obligations in the quarter ended September 30, 2015. 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 Headquarters Lease. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately $5.6 million as of September 30, 2016.

On June 4, 2014, we entered into an additional amendment to the Headquarters Lease (the June 2014 Amendment), which provided for an expansion of the premises covered under the Headquarters 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 Headquarters 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 Headquarters Lease. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately $1.7 million as of September 30, 2016.

On September 15, 2014, we entered into an additional amendment to the Headquarters Lease (the September 2014 Amendment), which provided for an expansion of the premises covered under the Headquarters 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 Headquarters 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 $1.1 million as of September 30, 2016.

On December 8, 2015, we entered into an additional amendment to the Headquarters Lease (the December 2015 Amendment), which provides for an expansion of the premises covered under the Headquarters Lease by approximately 24,039 square feet, with a commencement date of April 1, 2016, payment of base rent with rent escalation, and an increase in our share of certain operating expenses during the term of the Headquarters Lease. The December 2015 Amendment also provided for an allowance of up to approximately $0.4 million for tenant improvements. The total future minimum lease payments for the additional space, which will be paid through April 2020, are approximately $3.5 million as of September 30, 2016.

On October 14, 2013, Fluidigm Singapore Pte. Ltd., our wholly-owned subsidiary (Fluidigm Singapore) accepted an offer of tenancy (the 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 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 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 Amendment). 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. 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 Amendment), and terminated the June 2014 Singapore Amendment as of June 30, 2015. The total future minimum lease payments for the facility, which will be paid through June 2022, are approximately $4.0 million as of September 30, 2016.

On August 18, 2015, we, Fluidigm Canada Inc., our wholly-owned subsidiary (Fluidigm Canada), and Rodick Equities, Inc. entered into a lease dated as of August 17, 2015 (the New Canada Lease), relating to the lease of approximately 41,145 square feet of office, laboratory, and warehouse space at a facility in Markham, Ontario, Canada. Pursuant to the terms of the New

Canada Lease, Fluidigm Canada was in possession of the new space commencing on or about August 27, 2015, and rental obligations thereunder commenced on April 1, 2016 for a term of 10 years. The New Canada Lease provides for an allowance for tenant improvements, an option to renew the Lease for an additional five years, and a right of first offer on certain additional space in the Building. The total future minimum lease payments for the facility, which will be paid through March 2026, are approximately $4.5 million as of September 30, 2016.

In connection with our acquisition of DVS, we acquired the operating leases for facilities in Sunnyvale, California and Markham, Ontario, Canada. (See Note 4). The Sunnyvale lease terminated in July 2016 and the Markham lease terminated in April 2016.

In March 2016, the Company and ARE-NC Region No. 5, LLC, a Delaware limited liability company, entered into a lease (the North Carolina Lease), relating to the lease of approximately 12,824 square feet of office and laboratory space at a facility in Durham, North Carolina. Pursuant to the terms of the North Carolina Lease, we took possession of the facility commencing in March 2016, and rental obligations thereunder will commence in September 2016, for a term of 60 months from October 1, 2016. The North Carolina Lease provides for an allowance for tenant improvements, an option for an additional tenant improvement allowance with additional rent payments above the minimum lease payments, and two options to renew the Lease for an additional three years each. The total future minimum lease payments for the facility, which will be paid through September 30, 2021, are approximately $1.4 million as of September 30, 2016.

We have entered into several license and patent agreements. Under these agreements, we pay annual license maintenance fees, nonrefundable license issuance fees, and royalties as a percentage of net sales for the sale or sublicense of products using the licensed technology. We do not expect the license payments to be material in any particular year.

**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 and nine months ended September 30, 2016 and 2015, which is included in other accrued liabilities, is summarized below (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Beginning balance | $ 1,046 | $ 1,052 | $ 1,076 | $ 1,178 |
| Warranty adjustment, net | (160) | (36) | (190) | (162) |
| Ending balance | $ 886 | $ 1,016 | $ 886 | $ 1,016 |

**Indemnifications**

From time to time, we have entered into indemnification provisions under certain of our agreements in the ordinary course of business, typically with business partners, customers, and suppliers. Pursuant to these agreements, we may indemnify, hold harmless, and agree to reimburse the indemnified parties on a case-by-case basis for losses suffered or incurred by the indemnified parties in connection with any patent or other intellectual property infringement claim by any third party with respect to our products. The term of these indemnification provisions is generally perpetual from the time of the execution of the agreement. The maximum potential amount of future payments we could be required to make under these indemnification provisions is typically not limited to a specific amount. In addition, we have entered into indemnification agreements with our officers, directors, and certain other employees. With certain exceptions, these agreements provide for indemnification for related expenses including, among others, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding.

Since October 2015, we have been incurring legal expenses in the defense of third party claims against a Company employee whom we agreed to indemnify pursuant to our standard indemnification agreement. Such third party claims (by a former employer) include allegations of misappropriation of proprietary information and breach of contract and fiduciary obligations by the employee. In October 2016, the plaintiff filed a motion for leave to amend the complaint to add the Company as a defendant in the litigation and a hearing on such motion is scheduled to occur in mid-November 2016. The case is in its early stages, and we are unable to determine whether the third party will be permitted to amend its complaint to name us, and, if the complaint is amended, the ultimate outcome or estimate the range of potential losses. If the matter is not resolved prior to any amendment of the complaint to name us, we intend to defend the case vigorously.

To date, we have not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As of September 30, 2016, we had no accrued liabilities for these indemnification provisions.

**Contingencies**

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.

**8. Stock-Based Compensation**

During the three and nine months ended September 30, 2016, we granted certain employees options to purchase 214,376 and 630,065 shares of common stock, respectively. The options granted during the three months ended September 30, 2016 had exercise prices ranging from $8.01 to $10.55 and a total grant date fair value of $2.0 million. The options granted during the nine months ended September 30, 2016 had exercise prices ranging from $5.78 to $10.55 and a total grant date fair value of $5.1 million.

During the three and nine months ended September 30, 2016, we granted certain employees 104,566 and 826,260 restricted stock units, respectively. The restricted stock units granted during the three months ended September 30, 2016 had fair market values ranging from $8.01 to $10.55 and a total grant date fair value of $1.0 million. The restricted stock units granted during the nine months ended September 30, 2016 had fair markets values ranging from $5.70 to $10.55 and a total grant date fair value of $6.3 million.

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 $3.6 million and $4.1 million during the three months ended September 30, 2016 and 2015, respectively. We recognized stock-based compensation expense of $11.0 million and $12.9 million during the nine months ended September 30, 2016 and 2015, respectively. As of September 30, 2016, we had $7.6 million and $16.2 million of unrecognized stock-based compensation expense related to stock options and restricted stock units, respectively, which are expected to be recognized over a weighted average period of 2.1 years and 2.5 years, respectively.

In March 2016, we granted 184,050 and 73,620 performance-based stock options and performance-based restricted stock units (each, a "performance award"), respectively, to executive officers and employees, which were accounted for as equity awards. The number of performance awards that ultimately vest depends on the achievement of certain performance criteria set by the Compensation Committee of the Company's Board of Directors. The performance-based stock options have an exercise price per share of $7.10. The performance awards granted during the nine months ended September 30, 2016 had fair market values ranging from $3.02 to $7.10 per share and a total grant date fair value of $1.1 million. The Company recognizes stock-based compensation expense over the vesting period of the performance awards. We did not recognize any expense related to these performance awards for the three and nine months ended September 30, 2016.

**9. 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. We recorded a tax benefit of $0.3 million and $2.1 million for the three and nine months ended September 30, 2016, respectively, which was primarily attributable to the amortization of our acquisition related deferred tax liability, partially offset by tax provision and discrete items from our foreign operations. We recorded a tax benefit of $0.4 million and $1.3 million for the three and nine months ended September 30, 2015, respectively, which was primarily attributable to the amortization of our acquisition-related deferred tax liability, partially offset by tax provision and provision for uncertain tax liabilities related to our foreign operations.

### 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 research laboratories, biopharmaceutical, Ag-Bio companies and contract research organizations in growth markets, such as single-cell biology and production genomics.

The following table is our total revenue by geographic area of our customers for each period presented (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| United States | $ 12,518 | $ 13,627 | $ 39,531 | $ 43,375 |
| Europe | 5,194 | 10,049 | 22,980 | 25,977 |
| Asia-Pacific | 3,625 | 3,534 | 13,616 | 10,750 |
| Other | 854 | 1,433 | 3,235 | 3,888 |
| Total revenue | $ 22,191 | $ 28,643 | $ 79,362 | $ 83,990 |

No individual customer represented more than 10% of our revenues for the three and nine months ended September 30, 2016 and 2015.

Revenue from sales to customers in China represented 10% or $2.3 million and 11% or $8.4 million for the three and nine months ended September 30, 2016, respectively, and did not exceed 10% for the three and nine months ended September 30, 2015, respectively.

**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 and the selling prices of our products, business strategies, financing plans, expansion of our business, competitive position, industry environment, potential growth opportunities, market growth expectations, 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," "Callisto," "CyTOF," "Delta Gene," "EP1," "Helios," "Juno," "Polaris," 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. Our customers include those both in research and applied markets. Research customers are predominantly academic institutions, while our applied customers include clinical research laboratories, biopharmaceutical, agricultural biotechnology (Ag-Bio) companies, and contract research organizations (CRO's).

Single-cell analysis is a rapidly-growing field that we believe has the potential to revolutionize basic discovery in biology and lead to new and better ways to diagnose and treat disease. We pioneered a field that is now known as single-cell genomics and, through our acquisition of DVS Sciences, Inc. (now Fluidigm Sciences Inc.) in February 2014, we expanded into the field of single-cell proteomics. Our single-cell biology platform empowers our customers to analyze a large number of individual cells using simplified workflows with increased speed and accuracy at reduced costs. Our products also enable customers to apply the knowledge of biology in industrial or other applied settings that typically utilize low quantity and/or quality samples in high-throughput repeat testing applications.

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 located in Singapore, Canada and South San Francisco. 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 assays and reagents for research and development at our facilities in South San Francisco, California.

Our total revenue was $114.7 million in 2015, and for the nine months ended September 30, 2016, our total revenue was $79.4 million. We have incurred significant net losses since our inception in 1999 and, as of September 30, 2016, our accumulated deficit was $421.8 million.

In light of negative revenue growth in 2016 compared to 2015, we expect to implement efficiency and cost reduction initiatives to reduce our operating expenses, align resources with our product strategy, and manage our cash flows through the remainder of 2016 and into 2017. These initiatives may include decreasing or deferring capital expenditures and development activities, and optimizing our organization; such measures may impair our ability to invest in developing, marketing and selling new and existing products. If our cost reduction efforts are unsuccessful, our cash position could be negatively impacted and we may, among other things, be required to seek other sources of financing.

**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 and nine months ended September 30, 2016 compared to those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on February 29, 2016.

**Recent Accounting Pronouncements**

See Note 2 — “Summary of Significant Accounting Policies” in the notes to our condensed consolidated financial statements.

**Results of Operations**

The following table presents our historical condensed consolidated statements of operations data for the three and nine months ended September 30, 2016 and 2015, and as a percentage of total revenue for the respective periods ($ in thousands):

| | Three Months Ended September 30, | | | | Nine Months Ended September 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2016 | | 2015 | |
| Revenue: | | | | | | | | |
| Total revenue | $ 22,191 | 100 % | $ 28,643 | 100 % | $ 79,362 | 100 % | $ 83,990 | 100 % |
| Costs and expenses: | | | | | | | | |
| Cost of product revenue | 9,071 | 41 | 10,463 | 37 | 31,097 | 39 | 31,512 | 38 |
| Cost of service revenue | 1,228 | 5 | 967 | 3 | 3,673 | 5 | 2,529 | 3 |
| Research and development | 9,252 | 42 | 9,444 | 33 | 29,642 | 37 | 29,524 | 35 |
| Selling, general and administrative | 21,123 | 95 | 19,558 | 68 | 70,444 | 89 | 60,874 | 72 |
| Gain on escrow settlement | — | — | (3,986) | (14) | — | — | (3,986) | (5) |
| Total costs and expenses | 40,674 | 183 | 36,446 | 127 | 134,856 | 170 | 120,453 | 143 |
| Loss from operations | (18,483) | (83) | (7,803) | (27) | (55,494) | (70) | (36,463) | (43) |
| Interest expense | (1,454) | (6) | (1,451) | (5) | (4,361) | (5) | (4,355) | (5) |
| Other expense, net | (161) | (1) | (377) | (1) | (527) | (1) | (889) | (2) |
| Loss before income taxes | (20,098) | (90) | (9,631) | (33) | (60,382) | (76) | (41,707) | (50) |
| Benefit from income taxes | 309 | 1 | 362 | 1 | 2,093 | 3 | 1,271 | 2 |
| Net loss | $ (19,789) | (89)% | $ (9,269) | (32)% | $ (58,289) | (73)% | $ (40,436) | (48)% |

***Revenue***

We generate revenue primarily from sales of our products and services, license agreements, and government grants. Our product revenue consists of sales of instruments and consumables, including IFCs, assays, and other reagents. Our service revenue consists of post-warranty service contracts, preventive maintenance plans, instrument parts, installation, and training. 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 September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Revenue: | | | | |
| Instruments | $ 9,172 | $ 15,057 | $ 36,181 | $ 42,757 |
| Consumables | 8,820 | 10,044 | 31,914 | 31,992 |
| Product revenue | 17,992 | 25,101 | 68,095 | 74,749 |
| Service revenue | 4,152 | 3,487 | 11,085 | 9,043 |
| License and grant revenue | 47 | 55 | 182 | 198 |
| Total revenue | $ 22,191 | $ 28,643 | $ 79,362 | $ 83,990 |

The following table presents our total revenue by geographic area of our customers and as a percentage of total revenue for each period presented ($ in thousands):

| | Three Months Ended September 30, | | | | Nine Months Ended September 30, | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2016 | | 2015 | |
| United States | $ 12,518 | 56% | $ 13,627 | 48% | $ 39,531 | 50% | $ 43,375 | 52% |
| Europe | 5,194 | 24 | 10,049 | 35 | 22,980 | 29 | 25,977 | 31 |
| Asia-Pacific | 3,625 | 16 | 3,534 | 12 | 13,616 | 17 | 10,750 | 13 |
| Other | 854 | 4 | 1,433 | 5 | 3,235 | 4 | 3,888 | 4 |
| Total | $ 22,191 | 100% | $ 28,643 | 100% | $ 79,362 | 100% | $ 83,990 | 100% |

Total revenue from our five largest customers comprised 20% and 16% of our total revenue for the three and nine months ended September 30, 2016, respectively, and 13% of our total revenue for both the three and nine months ended September 30, 2015.

Revenue from sales to China represented 10% of our total revenue, or $2.3 million, and 11% of our total revenue, or $8.4 million for the three and nine months ended September 30, 2016, respectively, and did not exceed 10% for both the three and nine months ended September 30, 2015.

Total revenue in Europe decreased $4.9 million, or 48%, to $5.2 million for the three months ended September 30, 2016 compared to the three months ended September 20, 2015. Total revenue in Europe decreased $3.0 million, or 12%, to $23.0 million for the nine months ended September 30, 2016 compared to the nine months ended September 20, 2015. The decreases were primarily due to lower genomics instrument sales, largely driven by increased competition.

**Comparison of the Three Months Ended September 30, 2016 and September 30, 2015**

***Total Revenue***

Total revenue decreased by $6.5 million, or 23%, to $22.2 million for the three months ended September 30, 2016 compared to $28.6 million for the three months ended September 30, 2015.

***Product Revenue***

Product revenue decreased by $7.1 million, or 28%, to $18.0 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. Total product revenue from Research customers decreased by $3.6 million, or 23%, to $11.9 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. Total product revenue from Applied customers decreased by $3.5 million, or 36%, to $6.1 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decreases from Research and Applied customers were mainly due to a decline in instrument sales and, to a lesser extent, a decrease in sales of IFCs.

Instrument revenue decreased by $5.9 million, or 39%, to $9.2 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was due to a decline in both unit sales across all instrument systems and lower average selling prices across most instrument systems, particularly for genomics instruments.

Consumables revenue decreased by $1.2 million, or 12%, to $8.8 million, for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was primarily attributable to a decrease in unit sales of genomics IFCs.

Annualized IFC pull-through for our genomics analytical systems was moderately below our historical range of $25,000 to $35,000 per system per year. Annualized IFC pull-through for our genomics preparatory systems was substantially below our historical range of $15,000 to $25,000 per system per year, and consumables pull-through for our proteomics analytical systems was slightly below our historical range of $50,000 to $70,000 per system per year. 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 the average selling prices of our products to fluctuate over time based on market conditions, product mix, and currency fluctuations. In addition, our total revenue declined for both the three and nine months ended September 30, 2016 compared to the three and nine months ended September 30, 2015 and we cannot provide assurance concerning future revenue growth, if any.

***Service Revenue***

Service revenue increased by $0.7 million, or 19%, to $4.2 million for the three months ended September 30, 2016 compared to $3.5 million for the three months ended September 30, 2015, primarily due to increased sales of post-warranty service contracts and replacement instrument parts as our installed base continues to grow.

***License Revenue***

License revenue was $47 thousand and $55 thousand during the three months ended September 30, 2016 and 2015, respectively, and was generated in the United States.

***Cost of Product and Service Revenue***

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

| | Three Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Cost of product revenue | $ 9,071 | $ 10,463 |
| Product margin | 50% | 58% |
| Cost of service revenue | $ 1,228 | $ 967 |
| Service margin | 70% | 72% |

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

Cost of product revenue decreased by $1.4 million, or 13%, to $9.1 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. Overall cost of product revenue as a percentage of related revenue was 50% and 42% for the three months ended September 30, 2016 and 2015, respectively. Product margin declined by eight percentage points compared to the same period in 2015, predominantly due to higher acquisition-related intangible amortization costs as a percentage of product revenue, higher depreciation and amortization expenses, and, to a lesser extent, lower average selling prices for certain genomic preparatory and analytical instruments, coupled with unfavorable instrument product mix and higher product costs for genomics instruments and IFCs. The margin decline was partially offset by a favorable sales mix attributable to increased sales of certain consumables with higher product margin compared to our instruments.

Cost of service revenue increased by $0.3 million, or 27%, to $1.2 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. Overall cost of service revenue as a percentage of related revenue was 30% and 28% for the three months ended September 30, 2016 and 2015, respectively. The service margins decreased two percentage points during the three months ended September 30, 2016 compared to the same period in 2015, mainly due to higher labor and material costs associated with the increase in post-warranty service contracts.

***Operating Expenses***

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

| | Three Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Research and development | $ 9,252 | $ 9,444 |
| Selling, general and administrative | 21,123 | 19,558 |
| Total | $ 30,375 | $ 29,002 |

***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 decreased $0.2 million, or 2%, to $9.3 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. The decrease was primarily due to a decrease in product materials and supplies of $0.8 million, partially offset by an increase in headcount and compensation related costs of $0.4 million.

***Selling, General and Administrative***

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

Selling, general and administrative expense increased $1.6 million, or 8%, to $21.1 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015. This increase was primarily due to an increase in headcount and compensation related costs of $2.2 million. The increase was partially offset by a decrease in infrastructure and facilities related costs of $0.8 million.

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

The following table presents these items for each period presented (in thousands):

| | Three Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Interest expense | $ 1,454 | $ 1,451 |
| Other expense, net | 161 | 377 |
| Total | $ 1,615 | $ 1,828 |

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 was $1.5 million for both the three months ended September 30, 2016 and 2015.

Other expense decreased by $0.2 million, to $0.2 million for the three months ended September 30, 2016 compared to the three months ended September 30, 2015, mainly due to the net effects of foreign exchange rate changes during the three months ended September 30, 2016.

### *Benefit from Income Taxes*

We recorded a tax benefit of $0.3 million and $0.4 million for the three months ended September 30, 2016 and 2015, respectively. The tax benefit for both periods was primarily attributable to the amortization of our acquisition-related deferred tax liability, partially offset by tax provision and discrete items from our foreign operations.

## Comparison of the Nine Months Ended September 30, 2016 and September 30, 2015

### *Total Revenue*

Total revenue decreased by $4.6 million, or 6%, to $79.4 million for the nine months ended September 30, 2016 compared to $84.0 million for the nine months ended September 30, 2015.

### *Product Revenue*

Product revenue decreased by $6.7 million, or 9%, to $68.1 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. Total product revenue from Research customers decreased by $5.6 million, or 11%, to $43.1 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. Total product revenue from Applied customers decreased by $1.1 million, or 4%, to $25.0 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The decreases from Research and Applied customers were largely attributable to an overall decline in instrument sales.

Instrument revenue decreased by $6.6 million, or 15%, to $36.2 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The decrease was primarily driven by a decrease in unit sales of our core genomics instruments, coupled with lower average selling prices for most instrument sales.

Consumables revenue decreased by $0.1 million to $31.9 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. The decrease was mainly driven by a decrease in unit sales of genomics preparatory IFCs, partially offset by an increase in unit sales of genomics analytical IFCs and an increase in sales of proteomics antibodies.

### *Service Revenue*

Service revenue increased by $2.0 million, or 23%, to $11.1 million for the nine months ended September 30, 2016 compared to $9.0 million for the nine months ended September 30, 2015, primarily due to increased sales of post-warranty service contracts and replacement instrument parts as our installed base continues to grow.

### *License Revenue*

License revenue was $0.2 million for both the nine months ended September 30, 2016 and 2015, and was generated in the United States.

***Cost of Product and Service Revenue***

The following table presents our cost of product and service revenue and product and service margins for each period presented (in thousands):

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Cost of product revenue | $ 31,097 | $ 31,512 |
| Product margin | 54% | 58% |
| Cost of service revenue | 3,673 | 2,529 |
| Service margin | 67% | 72% |

Cost of product revenue decreased by $0.4 million, or 1%, to $31.1 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. Overall cost of product revenue as a percentage of related revenue was 46% and 42% for the nine months ended September 30, 2016 and 2015, respectively. Product margin declined by four percentage points during the nine months ended September 30, 2016 compared to the same period in 2015, predominantly due to higher acquisition-related intangible amortization costs as a percentage of product revenue, higher depreciation and amortization expenses, and, to a lesser extent, unfavorable instrument product mix and lower average selling prices across most of our instrument sales.

Cost of service revenue increased by $1.1 million, or 45%, to $3.7 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015. Overall cost of service revenue as a percentage of related revenue was 33% and 28% for the nine months ended September 30, 2016 and 2015, respectively. Service margins decreased five percentage points during the nine months ended September 30, 2016 compared to the same period in 2015, mainly driven by higher labor and material costs associated with the increase in post-warranty service contracts.

***Operating Expenses***

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

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Research and development | $ 29,642 | $ 29,524 |
| Selling, general and administrative | 70,444 | 60,874 |
| Total | $ 100,086 | $ 90,398 |

***Research and Development***

Research and development expense increased $0.1 million to $29.6 million for the nine months ended September 30, 2016, compared to the nine months ended September 30, 2015, mainly driven by an increase in compensation related costs of $1.1 million, offset by a decrease in product materials and supplies of $1.0 million.

***Selling, General and Administrative***

Selling, general and administrative expense for the nine months ended September 30, 2016 increased $9.6 million, or 16%, to $70.4 million compared to the nine months ended September 30, 2015. This increase was primarily attributable to an increase in headcount and compensation related costs of $8.0 million and an increase in legal fees and outside services of $2.0 million. The increases were partially offset by a decrease in facilities related costs of $1.7 million, mainly driven by our facility expansions in 2015.

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

The following table presents these items for each period presented (in thousands):

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Interest expense | $ 4,361 | $ 4,355 |
| Other expense, net | 527 | 889 |
| Total | $ 4,888 | $ 5,244 |

Interest expense was 4.4 million for both the nine months ended September 30, 2016 and 2015.

Other expense, net decreased by $0.4 million for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015, primarily due to the net effects of foreign exchange rate changes.

***Benefit from Income Taxes***

We recorded a tax benefit of $2.1 million and $1.3 million for the nine months ended September 30, 2016 and 2015, respectively. The tax benefit for both periods was primarily attributable to the amortization of our acquisition-related deferred tax liability, partially offset by tax provision from our foreign operations.

**Liquidity and Capital Resources**

***Sources of Liquidity***

As of September 30, 2016, our principal sources of liquidity consisted of $32.3 million of cash and cash equivalents and $38.9 million of short-term investments. As of September 30, 2016, our working capital excluding deferred revenue was $89.9 million.

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

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2016 | 2015 |
| Net cash used in operating activities | $ (28,377) | $ (30,329) |
| Net cash provided by investing activities | 31,317 | 20,900 |
| Net cash provided by financing activities | 96 | 5,272 |
| Net increase (decrease) in cash and cash equivalents | 3,189 | (4,896) |

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

We derive cash flows from operations primarily from cash collected from the sale of our products and services, 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 for the nine months ended September 30, 2016 was $28.4 million, and consisted of net loss of $58.3 million, adjusted for non-cash adjustments of $25.0 million and net change in assets and liabilities of $4.9 million. Non-cash items primarily included stock-based compensation expense of $11.0 million, amortization of developed technology of $8.4 million, depreciation and amortization of $5.0 million, and $0.6 million in other non-cash adjustments. The net change in assets and liabilities was primarily driven by a decrease in accounts receivable of $12 million due to increased cash collections, partially offset by an increase in inventory of $4.1 million, decreases in account payable of $1.4 million and liabilities of $2.2 million.

Net cash used in operating activities for the nine months ended September 30, 2015, was $30.3 million, and consisted of net loss of $40.4 million, less non-cash adjustments of $21.5 million, plus net change in assets and liabilities of $11.4 million. Non-cash items primarily included stock-based compensation expense of $12.9 million, amortization of developed technology of $8.4 million, and depreciation and amortization of $4.0 million. The net change in assets and liabilities was primarily driven by increases in inventory of $4.6 million and accounts receivable of $3.6 million, and a decrease in liabilities of $5.1 million, partially offset by an increase in deferred revenue of $2.0 million.

***Net Cash Provided by Investing Activities***

Our primary investing activities consist of purchases, sales, and maturities of our short-term and long-term investments and to a much lesser extent, 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 and throughput, 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 $31.3 million during the nine months ended September 30, 2016. Net cash provided by investing activities primarily consisted of $71.9 million of proceeds from sales and maturities of investments, proceeds from the gain of investment in Verinata of $2.3 million (described below), partially offset by purchases of investments of $38.6 million and capital expenditures of $4.4 million.

In February 2013, Illumina, Inc. acquired Verinata Health, Inc. (Verinata) for $350 million in cash and up to an additional $100 million in milestone payments through December 2015. The final milestones related to the sale of Verinata to Illumina were met in December 2015 and, accordingly, we recorded our share of these milestone payment obligations in the amount of $2.3 million from the sale of investment in Verinata in the accompanying consolidated statement of operations for the year ended December 31, 2015. The $2.3 million payment was subsequently received in January 2016.

Net cash provided by investing activities was $20.9 million during the nine months ended September 30, 2015. Net cash provided by investing activities primarily consisted of $77.3 million of proceeds from sales and maturities of investments, partially offset by purchases of investments of $53.7 million, capital expenditures of $2.5 million and intangible assets of $0.2 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 consists of proceeds received in connection with the exercise of options for our common stock.

Net cash provided by financing activities was $0.1 million and $5.3 million during the nine months ended September 30, 2016 and September 30, 2015, respectively, and consists of proceeds received in connection with the exercise of options for our common stock.

***Capital Resources***

At September 30, 2016, our working capital excluding deferred revenue was $89.9 million, including cash, cash equivalents, and short-term investments of $71.2 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 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.

In light of negative revenue growth in 2016 compared to 2015, we expect to implement efficiency and cost reduction initiatives to reduce our operating expenses, align resources with our product strategy, and manage our cash flows through the remainder of 2016 and into 2017. These initiatives may include decreasing or deferring capital expenditures and development activities, and optimizing our organization; such measures may impair our ability to invest in developing, marketing and selling new and existing products. If our cost reduction efforts are unsuccessful, our cash position could be negatively impacted and we may, among other things, be required to seek other sources of financing.

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 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.

**Off-Balance Sheet Arrangements**

As of September 30, 2016, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission's Regulation S-K.

**Contractual Obligations and Commitments**

Our operating lease obligations relate to a lease for our current headquarters and leases for manufacturing, laboratory, warehousing and office space for our foreign subsidiaries. Please see Note 7 to the financial statements for a description of our lease obligations.

**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. For the nine months ended September 30, 2016 and 2015, we experienced foreign currency losses of $0.8 million and $1.2 million, respectively. 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. If foreign currency exchange rates had changed by 10% during the periods presented, it would not have had a material impact on our financial position or results of operations.

***Interest Rate Sensitivity***

We had cash and cash equivalents of $32.3 million at September 30, 2016. These amounts were held primarily in cash on deposit with banks and money market funds which are short-term. We had $38.9 million in investments at September 30, 2016, held primarily in U.S. government and agency securities with contractual maturity dates that are within one year from September 30, 2016. 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 September 30, 2016. 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 September 30, 2016, 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 September 30, 2016 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.

In the normal course of business, we are from time to time involved in legal proceedings or potential legal proceedings, including matters involving employment, intellectual property, or others. Although the results of litigation and claims cannot be predicted with certainty, we currently believe that the final outcome of any currently pending matters would not have a material adverse effect on our business, operating results, financial condition, or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

### 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**

**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 seasonal historical trend resumed in 2015 and 2016, and we expect it to continue. Additionally, for the quarters ended March 31, 2016 and June 30, 2015, we experienced year-over-year revenue growth rates that were substantially lower than revenue growth rates experienced in other periods since our initial public offering, and we experienced a year-over-year decline in revenue for the quarters ended September 30, 2016, June 30, 2016, September 30, 2015, and for the year ended December 31, 2015. 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 or other 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. We have experienced significant revenue growth in the past but 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.

**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. For example, companies such as 10X Genomics, Inc., Affymetrix, Inc. (now part of Thermo Fisher Scientific, Inc.), Agena Bioscience, Inc., Agilent Technologies, Inc., Becton, Dickinson and Company, Bio-Rad Laboratories, Inc., Cellular Research, Inc. (now a part of Becton, Dickinson and Company), 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. 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. In addition, we have recently experienced increased competition in the single-cell biology market, including new product releases from Becton, Dickinson and Company, 10X Genomics, Inc. and WaferGen Bio-systems, Inc., as well as an announced exclusive partnership between Illumina, Inc. and Bio-Rad Laboratories, Inc.

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.

**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.

**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.

**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.

**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.

**Our products could have 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. The costs incurred in correcting any defects or errors may be substantial and could adversely affect our operating margins. For example, we have experienced a performance issue with respect to certain IFCs used in our C1 systems due to the presence of more than one cell in an IFC chamber. We have announced the release of one redesigned IFC and are currently working to redesign other impacted IFCs. Although we have announced our current expectation that the additional redesigned IFCs will be available in December 2016, we may experience unexpected delays or product development challenges that could affect the timing or our ability to release redesigned IFCs that adequately address these performance issues.

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 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.

**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 research 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.

**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 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.

**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 nine months ended September 30, 2016 and the years ended 2015 and 2014, approximately 50%, 52% and 49%, respectively, of our total 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 that are or may be applicable to our business in the future, 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, on June 23, 2016, the United Kingdom (U.K.) held a referendum in which voters approved an exit from the European Union, commonly referred to as “Brexit.” As a result of the referendum, it is expected that the British government will begin negotiating the terms of the U.K.’s withdrawal from the European Union and the U.K.’s future relationships with European Union member states. Adverse consequences concerning Brexit or the European Union could include deterioration in global economic conditions, instability in global financial markets, political uncertainty, volatility in currency exchange rates, or adverse changes in the cross-border agreements currently in place, any of which could have an adverse impact on our financial results in the future.

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, for the nine months ended September 30, 2016 and for the years ended December 31, 2015 and 2014, we experienced foreign currency losses of $0.8 million, $1.6 million and $1.1 million, 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 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, Callisto, Juno, and Polaris systems are available from a limited number of sources.

- The electron multiplier detector included in the Helios/CyTOF 2 systems and certain metal isotopes used with the Helios/CyTOF 2 systems are purchased from sole source suppliers.

- The nickel sampler cone used with the Helios/CyTOF 2 systems 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.

**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 research 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.

**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.

**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 $58.3 million, $53.3 million, and $52.8 million during the nine months ended September 30, 2016 and for the years ended December 31, 2015 and 2014, respectively. As of September 30, 2016, we had an accumulated deficit of $421.8 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. To the extent we are unable to invest sufficiently in these activities, our business could be harmed, for example, by reduced ability to develop, market and sell new and existing products. 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.

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 additional debt or equity financing that we raise may contain terms that are not favorable to us or our stockholders. 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.

**Impairment of our goodwill or other intangible assets could materially and adversely affect our business, operating results, and financial condition.**

As of September 30, 2016, we had goodwill and intangible assets, net of amortization, of approximately $104.1 million and $82.6 million, respectively. These assets represent a significant portion of the assets recorded on our consolidated balance sheet and relate primarily to our acquisition of DVS in February 2014. In addition, if in the future we acquire additional businesses, technologies, or other intangible assets, a substantial portion of the value of such assets may be recorded as goodwill or intangible assets.

The carrying amounts of goodwill and intangible assets are affected whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We review goodwill and indefinite lived intangible assets for impairment at least annually and more frequently under certain circumstances. Other intangible assets that are deemed to have finite useful lives will continue to be amortized over their useful lives but must be reviewed for impairment when events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Events or changes in circumstances that could affect the likelihood that we will be required to recognize an impairment charge include declines in our stock price or market capitalization, declines in our market share or revenues, an increase in our losses, rapid changes in technology, failure to achieve the benefits of capacity increases and utilization, significant litigation arising out of an acquisition, or other matters. In particular, these or other adverse events or changes in circumstances may affect the estimated undiscounted future operating cash flows expected to be derived from our goodwill and intangible assets. We have recently experienced substantial declines in our stock price, and continued weakness or further declines in our stock price increase the likelihood that we may be required to recognize impairment charges. Any impairment charges could have a material adverse effect on our operating results and net asset value in the quarter in which we recognize the impairment charge. We cannot provide assurances that we will not in the future be required to recognize impairment charges.

**Our business operations are dependent upon our new senior management team and the ability of our other new employees to learn their new roles. If we are unable to recruit and retain key executives, scientists, and technical support personnel, we may be unable to achieve our goals.**

Our performance is substantially dependent on the performance of our senior management, which has substantially changed over the last year, including, for example, the recent departures of our Chief Executive Officer, Gajus Worthington, and Executive Vice President, Research and Development and Marketing, Marc Unger. We have a new president and chief executive officer who started in August 2016, a new controller and principal accounting officer who started in May 2016, a new general counsel who started with us in June 2016, and other new members of our senior management team. As new employees gain experience in their roles, we could experience inefficiencies or a lack of business continuity due to loss of historical knowledge and a lack of familiarity of new employees with business processes, operating requirements, policies and procedures, and we may experience additional costs as new employees learn their roles and gain necessary experience. It is important to our success that these key employees quickly adapt to and excel in their new roles. If they are unable to do so, our business and financial results could be materially adversely affected. In addition, 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. Our research and product development efforts could also 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, 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

**We may encounter problems in our efforts to increase operational efficiencies.**

We continue to seek to identify ways to reduce our operating expenses, align our resources with our product strategy, and manage our cash flows. These initiatives may include decreasing or deferring capital expenditures and development activities, and optimizing our organization. Such measures may impair our ability to invest in developing, marketing, and selling new and existing products. We cannot assure you that these projects will result in the realization of the expected benefits that we anticipate in a timely manner or at all. We may encounter problems with these projects that will divert the attention of management and/or result in additional costs and unforeseen project delays. If we, or these projects do not achieve expected results, our business, financial position and operating results may be materially and adversely affected.

**To use our products, our Biomark, EP1, and Helios/CyTOF 2 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, EP1, and Helios/CyTOF 2 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.

**Being regulated as a medical device manufacturer by the U.S. Food and Drug Administration, or FDA, and foreign regulatory authorities, and seeking approval and/or clearance for our products, 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 are not designed for, or intended to 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 premarket approval from the FDA, unless an exception applies.

We have 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. We are currently assessing when to make an initial filing. 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) applications for certain of our products, 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 enforcement actions, including warning letters and adverse publicity, 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 Europe, we will need to comply with the Medical Device Directive 93/42 EEC, which is required to market medical devices in the European Union. We received certification under ISO 13485:2003, which includes requirements for the implementation of a quality management system for the design and manufacturing of medical devices and is the European Quality Standard applicable to medical device manufacturers, and under ISO 9001:2008, which specifies requirements for a quality management system to demonstrate the ability to consistently provide products that meet customer and applicable statutory and regulatory requirements. Compliance with these certification standards could take significant time and expense and may increase our costs or divert resources away from other projects. In addition, the FDA regulates exports of medical devices. Failure to comply with these regulatory requirements or obtain and maintain required approvals, clearances and certifications 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 independently 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 implementing the framework for regulating 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, used for clinical diagnostic purposes. 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 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 and/or other enforcement action.

**Compliance or the failure to comply with current and future regulations affecting our products and business operations worldwide, 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 are subject to WEEE requirements may become subject to RoHS. 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 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.

**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. We have continued to experience losses and, if that trend continues, we may need to seek additional sources of financing. In addition, 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 any litigation including intellectual property, employment, contractual or other litigation;
- 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.

**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 recently completed a review of our European corporate structure and tax positions and, based upon our existing business operations, we plan to restructure our European intercompany transactions, which is likely to increase our income tax liability. From time to time, we may review our corporate structure and tax positions in other international jurisdictions and such review may result in additional changes to how we structure our international business operations, which may adversely impact our effective income tax rate. 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.

**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. Political uncertainty and 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.

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

In addition to our acquisition of DVS, 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.

**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. A move of any of our manufacturing facilities may delay or otherwise adversely affect our manufacturing activities and business.

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.

**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.

**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.

**Changes in accounting principles, or interpretations thereof, could have a significant impact on our financial position and results of operations.**

We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, referred to as GAAP. These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. A change in these principles can have a significant effect on our reported results and may even retroactively affect previously reported transactions. Additionally, the adoption of new or revised accounting principles may require that we make significant changes to our systems, processes and controls.

For example, the U.S.-based Financial Accounting Standards Board, referred to as FASB, is currently working together with the International Accounting Standards Board, referred to IASB, on several projects to further align accounting principles and facilitate more comparable financial reporting between companies who are required to follow GAAP under SEC regulations and those who are required to follow International Financial Reporting Standards outside of the United States. These efforts by the FASB and IASB may result in different accounting principles under GAAP that may result in materially different financial results for us in areas including, but not limited to, principles for recognizing revenue and lease accounting. Additionally, significant changes to GAAP resulting from the FASB's and IASB's efforts may require that we change how we process, analyze and report financial information and that we change financial reporting controls.

It is not clear if or when these potential changes in accounting principles may become effective, whether we have the proper systems and controls in place to accommodate such changes and the impact that any such changes may have on our financial position and results of operations.

**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.

From time to time, we engage in discussions regarding possible commercial, licensing and cross-licensing agreements with third parties. There can be no assurance that these discussions will lead to the execution of commercial license or cross-license agreements or that such agreements will be on terms that are favorable to us. If these discussions are successful, we could be obligated to pay license fees and royalties. If these discussions do not lead to the execution of mutually acceptable agreements, one or more of the parties involved in such discussions could resort to litigation to protect or enforce its patents and proprietary rights or determine the scope, coverage and validity of the proprietary rights of others. In addition, if we enter into cross-licensing agreements, there is no assurance that we will be able to effectively compete against others who are licensed under our patents.

Our customers have also 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 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. 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. For example, a third party competitor initiated litigation against a newly hired Fluidigm employee alleging, among other claims, misappropriation of proprietary information and breach of contractual and fiduciary obligations to the third party. Although we are not currently a party to this litigation, the plaintiff filed a motion for leave to amend the complaint to add us as a defendant, and a hearing on such motion is schedule to occur in November 2016. The case is in its early stages, and we are unable to determine whether the competitor will be permitted to amend its complaint to name us, and, if the complaint is amended, the ultimate outcome or estimate of the range of potential losses. If the matter is not resolved prior to any amendment of the complaint to name us, we intend to defend the case vigorously. If we fail in defending such claims, in addition to paying monetary damages we may be subject to injunctive relief against us. A loss of key research personnel work product could hamper or prevent our ability to commercialize certain potential products or a loss or inability to hire key marketing, sales or research and development personnel could adversely affect our future product development, sales and revenues, any of 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.

**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. Additionally, our business and product development plans anticipate and may substantially depend on future in-license agreements with additional third parties, some of which are currently in the early discussion phase. For example, Fluidigm Canada Inc., or Fluidigm Canada, an Ontario corporation and wholly-owned subsidiary of Fluidigm Sciences, was party to an interim license agreement, now expired, with Nodality, Inc., or Nodality, under which Nodality granted Fluidigm Canada a worldwide, non-exclusive, research use only, royalty bearing license to certain cytometric reagents, instruments, and other products. We have had prior discussions with Nodality to reinstate the license agreement. We cannot provide assurances that we will be able to reinstate the license agreement with Nodality or secure a new license agreement with Nodality or other third parties on acceptable terms, if at all.

In-licensed intellectual property rights that are fundamental to the business being operated present numerous risks and limitations. For example, 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.

Our rights to use the technology we license are also 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. Potential disputes between us and one of our 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 product lines; 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 us; and, in the event of an adverse determination, our inability to operate our business as currently operated.

Termination of material license agreements 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. 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.

## 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 who hold substantial blocks of our stock. As of September 30, 2016, we had 29,118,140 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 78.7% 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.

**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.**

None.

**Item 6. Exhibits.**

| Exhibit Number | Description | Incorporated by Reference From Form | Incorporated by Reference From Exhibit Number | Date Filed |
|---|---|---|---|---|
| 10.1†* | Offer Letter to Stephen Christopher Linthwaite, dated July 14, 2016 | Filed herewith | | |
| 10.2* | Employment and Severance Agreement, effective as of August 1, 2016, by and between the Company and Stephen Christopher Linthwaite | Filed herewith | | |
| 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 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 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 Linkbase Document | Filed herewith | | |

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been filed separately with the SEC.

* Indicates a management contract or compensatory plan.

(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.

| | | |
|---|---|---|
| | | FLUIDIGM CORPORATION |
| Dated: November 8, 2016 | By: | /s/ Stephen Christopher Linthwaite |
| | | Stephen Christopher Linthwaite |
| | | President and Chief Executive Officer |
| Dated: November 8, 2016 | By: | /s/ Vikram Jog |
| | | Vikram Jog |
| | | Chief Financial Officer |

**EXHIBIT LIST**

| Exhibit Number | Description | Incorporated by Reference From Form | Incorporated by Reference From Exhibit Number | Date Filed |
|---|---|---|---|---|
| 10.1†* | Offer Letter to Stephen Christopher Linthwaite, dated July 14, 2016 | Filed herewith | | |
| 10.2* | Employment and Severance Agreement, effective as of August 1, 2016, by and between the Company and Stephen Christopher Linthwaite | Filed herewith | | |
| 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 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 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 Linkbase Document | Filed herewith | | |

† Portions of this exhibit (indicated by asterisks) have been omitted pursuant to a request for confidential treatment and this exhibit has been filed separately with the SEC.

* Indicates a management contract or compensatory plan.

(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.

**Exhibit 10.1**

**CONFIDENTIAL TREATMENT REQUESTED**

CONFIDENTIAL PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED AND HAVE BEEN SEPARATELY FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. INFORMATION THAT WAS OMITTED IN THE EDGAR VERSION HAS BEEN NOTED IN THIS DOCUMENT WITH A PLACEHOLDER IDENTIFIED BY THE MARK "[***]."

July 14, 2016

Chris Linthwaite

Dear Chris:

I am pleased to offer you a position with Fluidigm Corporation (the "Company" or "Fluidigm") as President, reporting to the Chief Executive Officer of the Company. Other terms of your employment include:

**Start Date:** August 1, 2016

**Compensation:**
Your annual base salary will be $450,000 payable by direct deposit on a semi-monthly basis less all applicable tax withholdings and statutory and other deductions. Currently salaries are reviewed annually. Note, however, that Fluidigm is under no obligation to increase salary as a result of such review or at any other time.

**Bonus Target:**
You will be eligible to participate in Fluidigm's executive annual bonus program which is based on achievement of targets or performance criteria as may be specified by Fluidigm's Board of Directors (the "Board"). The terms and conditions of the executive annual program may be amended or varied from time to time at the sole discretion of the Board. Your target annual bonus for 2016 is 60% of your annual base salary, subject to all applicable federal and state taxes, payable in Q1 of 2017 and pro-rated on a monthly basis. The primary principle for payout of the annual bonus is "pay for performance."

**Equity Awards:**
Subject to approval by our Board (or a committee authorized by the Board), Fluidigm will grant you (i) a stock option to purchase 140,000 shares of Fluidigm Common Stock (the "Option") at a price per share equal to the fair market value per share of the Common Stock on the date of grant and (ii) 14,000 restricted stock units (the "RSU Award" and, together with the Option, the "Equity Awards"). The Equity Awards will be granted to you only if you remain an employee of the Company through the grant date. Each of the Equity Awards shall be subject to the terms and conditions of Fluidigm's equity plan and an equity award agreement between you and Fluidigm, including vesting requirements.

The Option will be scheduled to vest as to 25% of the shares subject to the Option on the first anniversary of the vesting start date, and as to 1/48th of the shares subject to the Option on each monthly anniversary thereafter, in all cases subject to your continued service with Fluidigm through the applicable vesting date.

Assuming your start date is in August 2016, the RSU Award will vest as to 100% of the shares only if there is at least [***] growth in the Company's revenues during the four Company fiscal quarters beginning with the fiscal quarter in which your start date occurs against the four Company fiscal quarters prior to the fiscal quarter in which your start date occurs (*e.g.*, if you start in Q3 2016, then revenue for Q3 2016 through Q2 2017 versus Q3 2015 through Q2 2016), subject to your continued service through the date the equity plan's administrator certifies achievement of the performance goal (the "Certification Date"). For clarity, no portion of your RSU Award will vest if your service with Fluidigm is terminated before the Certification Date or the performance-based goal is not achieved.

No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment. You are eligible for accelerated vesting as set forth in the Severance Agreement.

**Severance Agreement**:
As an executive of the Company, you will become party to the Company's customary Employment and Severance Agreement (the "Severance Agreement"). The Severance Agreement is incorporated herein by reference.

**Benefits:**
You will be eligible to participate in any of the employee benefit plans or programs Fluidigm generally makes available to its executive employees, pursuant to the terms and conditions of such plans as may be in effect from time to time, except that with respect to life and accidental death and dismemberment insurance, you will be covered up to $2 million. Fluidigm may from time to time alter the terms of the benefit plans or programs in their sole discretion.

**Workers' Compensation Insurance:**
The Company provides a comprehensive workers' compensation insurance program at no cost to employees. This program covers any injury or illness sustained in the course of employment that requires medical, surgical or hospital treatment. Insurance carrier: Preferred Employers Group - PO BOX 85838, San Diego, CA 92186, phone number (866) 472-9602.

**Confidentiality and Company Policies:**
It is important to protect our confidential information and proprietary material. Therefore, as a condition of employment you will be required to sign the Company's standard Confidential Information, Invention Assignment, and Arbitration Agreement (the "Agreement"). Please note that we must receive your signed Agreement before your first day of employment.

As a Fluidigm employee, you will be expected to abide by Fluidigm's rules and standards. Specifically, you will be required to sign an acknowledgment that you have read and that you understand Fluidigm's rules of conduct.

**Background check:** This offer is contingent upon successfully passing your background check.

**Reference checks:** This offer is contingent upon successfully passing your reference checks.

**Employment Authorization:**
You will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship may be terminated.

**At-Will Employment:**
Your employment with Fluidigm is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, Fluidigm is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice. We request that, in the event of resignation, you give Fluidigm at least two (2) weeks' notice.

**Other:**
We also ask that, if you have not already done so, you disclose to Fluidigm any and all agreements relating to your prior employment that may affect your eligibility to be employed by Fluidigm or limit the manner in which you may be employed. It is Fluidigm's understanding that any such agreements will not prevent you from performing the duties of your position and you represent that such is the case. Moreover, you agree that, during the term of your employment with Fluidigm, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which Fluidigm is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to Fluidigm; provided, however, that beginning on the date 18 months following your start date, you will be permitted to serve as a non-employee member of the board of directors of up to two privately-held companies that are non-competitive with the Company, subject to compliance with Fluidigm's code of conduct and approval by the Board. Similarly, you agree not to bring any third party confidential information to Fluidigm, including that of your former employer, and that in performing your duties for Fluidigm you will not in any way utilize any such information.

This letter, and your employment hereunder, shall be governed by and construed in accordance with the laws of the State of California. In addition, Fluidigm may change your compensation, duties, assignments, responsibilities, location of your position, or any other terms and conditions of employment at any time to adjust to the changing needs of our dynamic Company.

In the event of any dispute or claim relating to or arising out of our employment relationship, you and Fluidigm agree that (i) any and all disputes between you and Fluidigm shall be fully and finally resolved by binding arbitration, (ii) you are waiving any and all rights to a jury trial but all court remedies will be available in arbitration, (iii) all disputes shall be resolved by a neutral arbitrator who shall issue a written opinion, (iv) the arbitration shall provide for adequate discovery, and (v) Fluidigm shall pay all the arbitration fees, except an amount equal to the filing fees you would have paid had you filed a complaint in a court of law.

You and the Company agree that all such disputes shall be fully and finally resolved by binding arbitration conducted by the Judicial Arbitration & Mediation Services ("JAMS") in Santa Clara County California. The current JAMS employment arbitration rules & procedures can be found at http://www.jamsadr.com/rules-employment-arbitration/. The JAMS employment arbitration rules & procedures may, however, be amended by JAMS.)

This offer expires on July 21, 2016, unless you accept prior to this date. To indicate your acceptance of this offer, please sign and date this letter in the space provided below and return it in the envelope provided to me, 7000 Shoreline Court, Suite 100, South San Francisco, CA 94080. A copy is provided for your records.

This letter, the Severance Agreement and any agreement relating to proprietary rights between you and the Company (including, the Agreement) set forth the terms of your employment with Fluidigm and supersede any prior representations or agreements, whether written or oral. This letter may not be modified or amended except by a written agreement, signed by the Company and by you.

Our employees are committed to the success and growth of our business. At Fluidigm, we believe that our values are not just words on paper – they are a statement of our character. Fluidigmers should: Win as a team; Work hard and with passion; Be strong; Be aggressive; Do what you say you will do; Sweat the details; and Keep learning. We believe our values define who we are as a company and as employees of Fluidigm. We aspire to live by these values each day and work hard to exhibit these traits because these are the things that are worth believing.

Chris, I have really enjoyed getting to know you, while being consistently impressed with your acumen. I am certain we can build a great company together.

Sincerely,

/s/ Gajus Worthington

Gajus Worthington

President & Chief Executive Officer

Fluidigm Corporation

ACCEPTED AND AGREED TO:

/s/ Chris Linthwaite 14 July 2016

Chris Linthwaite Date

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

**Exhibit 10.2**

# FLUIDIGM CORPORATION

## EMPLOYMENT AND SEVERANCE AGREEMENT

This Employment and Severance Agreement (the "Agreement") is made and entered into by and between Chris Linthwaite ("Executive") and Fluidigm Corporation (the "Company"), effective as of August 1, 2016 (the "Effective Date").

## RECITALS

**WHEREAS**, it is expected that the Company from time to time will consider the possibility of an acquisition by another company or other Change of Control (as defined herein). The Board of Directors of the Company (the "Board") recognizes that such consideration can be a distraction to Executive and can cause Executive to consider alternative employment opportunities.

**WHEREAS**, the Board believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue his employment to motivate Executive to maximize the value of the Company upon a Change of Control for the benefit of its stockholders.

**WHEREAS**, the Board believes that it is in the best interests of the Company and its stockholders to provide Executive with certain severance benefits upon Executive's termination of employment without cause or upon a constructive termination following a Change of Control of the Company and to provide Executive with certain severance benefits upon Executive's termination of employment without cause outside of the change of control context, in order to provide Executive with enhanced financial security and incentive to remain with the Company.

**WHEREAS**, certain capitalized terms used in the Agreement are defined in Section 6 below.

## AGREEMENT

**NOW**, **THEREFORE**, in consideration of the mutual promises and covenants contained herein, the parties hereto agree as follows:

1. Term of Agreement. This Agreement will terminate upon the date that all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and Executive acknowledge that Executive's employment is and will continue to be at-will, as defined under applicable law, except as may otherwise be specifically provided under the terms of a written formal employment agreement, if any, between the Company and Executive (an "Employment Agreement"). As provided in Section 3(f) below, Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Agreement.

3. Severance Benefits.

(a) Termination without Cause Prior to a Change of Control or After Twelve Months Following a Change of Control. If more than ninety (90) days prior to a Change of Control or after twelve (12) months following a Change of Control, (i) Executive terminates his employment with the Company (or any parent or subsidiary or successor of the Company) for Non-Change of Control Good Reason, or (ii) the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment without Cause, then, subject to Section 4, Executive will receive, in addition to Executive's salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination, the following severance from the Company:

(i) Severance Payment. As provided in Section 3(c) below, twelve (12) months' severance pay (less applicable withholding taxes) equal to (x) Executive's annual base salary (as in effect immediately prior to Executive's termination) and (y) Executive's annual bonus at target level of achievement.

(ii) Continued Employee Benefits. Reimbursement for a period of up to twelve (12) months (less applicable withholding taxes, if any) for the costs and expenses incurred by Executive and/or Executive's eligible dependents for coverage under the Company's Benefit Plans.

(b) Constructive Termination or Termination without Cause Following a Change of Control. If within ninety (90) days prior or twelve (12) months following a Change of Control (i) Executive terminates his employment with the Company (or any parent or subsidiary or successor of the Company) for Good Reason, or (ii) the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment without Cause, then, subject to Section 4, Executive will receive, in addition to Executive's salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination, the following severance from the Company:

(i) Severance Payment. As provided in Section 3(c) below, twelve (12) months' severance pay (less applicable withholding taxes) equal to (x) Executive's annual base salary (as in effect immediately prior to (A) the Change of Control, or (B) Executive's termination, whichever is greater) and (y) Executive's annual bonus at target level of achievement (as in effect immediately prior to (A) the Change of Control, or (B) Executive's termination, whichever is greater).

(ii) Accelerated Vesting of Options; Restricted Stock. Then-outstanding and unvested stock options in Company common stock, stock appreciation rights and similar equity awards held by Executive ("Options") will immediately vest and become exercisable as to all shares underlying such Options. The Options will remain exercisable following the termination for the period prescribed in the respective option agreement, which will not extend past the term of each Option. Additionally, any shares of restricted stock, restricted stock units and similar equity awards ("Restricted Stock") then-held by Executive will immediately vest and the applicable Company right of repurchase or reacquisition with respect to such shares of Restricted Stock will lapse as to all such shares.

(iii) Continued Employee Benefits. Reimbursement for a period of up to twelve (12) months (less applicable withholding taxes, if any) for the costs and expenses incurred by Executive and/or Executive's eligible dependents for coverage under the Company's Benefit Plans.

(c) Timing of Severance Payments. The Company will pay the severance payments to which Executive is entitled under Section 3(a)(i) above as salary continuation on the same basis and timing as in effect immediately prior to the termination and the Company will pay the severance payments to which Executive is entitled under Section 3(b)(i) in a lump sum. If Executive should die before all amounts have been paid, such unpaid amounts will be paid in a lump sum payment (less any withholding taxes) to Executive's spouse, designated beneficiary, or otherwise to the personal representative of Executive's estate.

(d) Voluntary Resignation; Termination For Cause. If Executive's employment with the Company terminates (i) voluntarily by Executive (except upon a termination for Good Reason within twelve (12) months following a Change of Control), or (ii) for Cause by the Company (or any parent or subsidiary or successor of the Company), then Executive will not be entitled to receive any severance benefits and the sole obligation of the Company shall be to pay to Executive, an amount equal to Executive's base salary payable through the date of termination of employment and any other employee benefits earned and owed through the date of termination.

(e) Disability; Death. If the Company terminates Executive's employment as a result of Executive's Disability, or Executive's employment terminates due to his death, then Executive will not be entitled to receive severance benefits and the sole obligation of the Company shall be to pay to Executive an amount equal to Executive's base salary payable to the date of termination of employment and any other employee benefits earned and owed through the date of termination to Executive, Executive's spouse, designated beneficiary, or otherwise to the personal representative of Executive's estate, as the case may be.

(f) Exclusive Remedy. In the event of a termination of Executive's employment with the Company (or any parent or subsidiary or successor of the Company), the provisions of this Section 3 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement. Executive will be entitled to no benefits, compensation or other payments or rights upon termination of employment other than those benefits expressly set forth in this Section 3.

4. Release of Claims; Section 409A.

(a) Release of Claims Agreement. The receipt of any severance payments or benefits pursuant to this Agreement is subject to Executive signing and not revoking a separation agreement and release of claims in a standard form acceptable to the Company (the "Release"), which must become effective no later than the sixtieth ($60^{th}$) day following Executive's termination of employment (the "Release Deadline"), and if not, Executive will forfeit any right to severance payments or benefits under this Agreement. To become effective, the Release must be executed by Executive and any revocation periods (as required by statute, regulation, or otherwise) must have expired without Executive having revoked the Release. In addition, in no event will severance payments or benefits be paid or provided until the Release actually becomes effective.

(b) Section 409A.

(i) Notwithstanding anything to the contrary in this Agreement, no severance pay or benefits to be paid or provided to Executive, if any, pursuant to this Agreement, when considered together with any other severance payments or separation benefits that are considered deferred compensation under Code Section 409A, and the final regulations and any guidance promulgated thereunder ("Section 409A") (together, the "Deferred Compensation Separation Benefits") will be paid or otherwise provided until Executive has a "separation from service" within the meaning of Section 409A.

(ii) Any severance payments or benefits under this Agreement that would be considered Deferred Compensation Separation Benefits will be paid on, or, in the case of installments, will not commence until, the sixtieth ($60^{th}$) day following Executive's separation from service, or, if later, such time as required by Section 4(b)(iii). Any installment payments that would have been made to Executive during the sixty (60) day period immediately following Executive's separation from service but for the preceding sentence will be paid to Executive on the sixtieth ($60^{th}$) day following Executive's separation from service and the remaining payments shall be made as provided in this Agreement.

(iii) Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A at the time of Executive's termination, then the Deferred Compensation Separation Benefits that are payable within the first six (6) months following Executive's separation from service, will become payable on the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Executive's separation from service. All subsequent Deferred Compensation Separation Benefits, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Executive dies following Executive's separation from service, but within six (6) months of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Executive's death and all other Deferred Compensation Separation Benefits will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Agreement is intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(iv) Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations shall not constitute Deferred Compensation Separation Benefits for purposes of clause (i) above.

(v) Amount paid under the Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the

Treasury Regulations that do not exceed the Section 409A Limit shall not constitute Deferred Compensation Separation Benefits for purposes of clause (i) above. For this purpose, "Section 409A Limit" means the lesser of: (A) Executive's annualized compensation based upon the annual rate of pay paid to Executive during Executive's taxable year preceding the taxable year of Executive's termination of employment as determined under Treasury Regulation 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto, multiplied by two (2); or (B) the maximum amount that may be taken into account under a qualified plan pursuant to Code Section 401(a)(17) for the year in which Executive's employment is terminated, multiplied by two (2).

(vi) The foregoing provision is intended to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. The Company and Executive agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

5. Limitation on Payments. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 5, would be subject to the excise tax imposed by Section 4999 of the Code, then Executive's severance benefits under Section 3 will be either:

(a) delivered in full, or

(b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to excise tax under Section 4999 of the Code, whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. Unless the Company and Executive otherwise agree in writing, any determination required under this Section 5 will be made in writing by the Company's independent public accountants immediately prior to Change of Control (the "Accountants"), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 5, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this Section 5. The Company will bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this Section 5. If a reduction in severance and other benefits constituting "parachute payments" is necessary so that benefits are delivered to a lesser extent, reduction will occur in the following order: reduction of cash payments; cancellation of equity awards granted "contingent on a change in ownership or control" within the meaning of

Section 280G of the Code; cancellation of vesting acceleration of equity awards; reduction of employee benefits.

6. Definition of Terms. The following terms referred to in this Agreement will have the following meanings:

(a) Benefit Plans. For purposes of this Agreement, "Benefit Plans" means plans, policies or arrangements that the Company sponsors (or participates in) and that immediately prior to Executive's termination of employment provide Executive and/or Executive's eligible dependents with medical, dental, vision and similar benefits. Benefit Plans do not include any other type of benefit (including, but not by way of limitation, disability, life insurance, or retirement benefits). A requirement that the Company provide Executive and Executive's eligible dependents with coverage under the Benefit Plans will not be satisfied unless the coverage is no less favorable than that provided to senior executives of the Company at any applicable time during the period Executive is entitled to receive severance pursuant to Section 3. The Company may, at its option, satisfy any requirement that the Company provide coverage under any Benefit Plan by (i) reimbursing Executive's premiums under COBRA after Executive has properly elected continuation coverage under COBRA (in which case Executive will be solely responsible for electing such coverage for his eligible dependents), or (ii) providing coverage under a separate plan or plans providing coverage that is no less favorable. In addition, and notwithstanding anything to the contrary in this definition, if the Company determines in its sole and reasonable discretion that it cannot provide coverage as described in this definition without potentially violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company will in lieu thereof provide to Executive a taxable monthly payment in an amount equal to the monthly COBRA premium that Executive would be required to pay to continue his group health coverage in effect on the date of such termination, multiplied by 1.5, which payments will be made regardless of whether Executive elects COBRA continuation coverage.

(b) Cause. "Cause" means (i) an act of dishonesty made by Executive in connection with Executive's responsibilities as an employee, (ii) Executive's conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) Executive's gross misconduct, (iv) Executive's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom Executive owes an obligation of nondisclosure as a result of Executive's relationship with the Company; (v) Executive's willful breach of any obligations under any written agreement or covenant with the Company; or (vi) Executive's continued failure to perform his employment duties after Executive has received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that Executive has not substantially performed his duties and has failed to cure such non-performance to the Company's satisfaction within 10 business days after receiving such notice.

(c) Change of Control. "Change of Control" of the Company means:

(i) any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) is or becomes the "beneficial owner" (as defined in

Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or

(ii) a change in the composition of the Board occurring within a two-year period, as a result of which fewer than a majority of the directors are Incumbent Directors. "Incumbent Directors" will mean directors who either (A) are directors of the Company as of the date hereof, or (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Incumbent Directors at the time of such election or nomination (but will not include an individual whose election or nomination is in connection with an actual or threatened proxy contest relating to the election of directors to the Company); or

(iii) the date of the consummation of a merger or consolidation of the Company with any other corporation that has been approved by the stockholders of the Company, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company; or

(iv) the date of the consummation of the sale or disposition by the Company of all or substantially all the Company's assets.

Notwithstanding the foregoing, a Change of Control shall not occur unless such transaction constitutes a change in control event under Treasury Regulation Section 1.409A-3(i)(5).

(d) Disability. "Disability" means that Executive has been unable to perform his Company duties as the result of his incapacity due to physical or mental illness, and such inability, at least twenty-six (26) weeks after its commencement, is determined to be total and permanent by a physician selected by the Company or its insurers and acceptable to Executive or Executive's legal representative (such agreement as to acceptability not to be unreasonably withheld). Termination resulting from Disability may only be effected after at least 30 days' written notice by the Company of its intention to terminate Executive's employment. In the event that Executive resumes the performance of substantially all of his duties hereunder before the termination of his employment becomes effective, the notice of intent to terminate will automatically be deemed to have been revoked.

(e) Good Reason. "Good Reason" means the occurrence of one or more of the following events effected without Executive's prior consent, provided Executive terminates Executive's employment with the Company within one (1) year following the initial existence of the "Good Reason" condition (discussed below): (i) the assignment to Executive of any duties or the reduction of Executive's then current duties, either of which results in a material diminution in Executive's then current position or responsibilities with the Company (for purposes herein, "Good Reason" will be deemed to occur if, following a Change of Control, Executive is not the Chief Operating Officer or President of the acquiring entity); (ii) a material reduction by the Company in the then current base salary of Executive; (iii) a material change in the geographic location at which Executive must perform services (for purposes of this Agreement, the relocation of Executive to a facility or a location less than 25 miles from Executive's then-present location shall not be considered a material change in geographic location); or (iv) any material breach by the Company of any material provision of this Agreement. Executive will not resign for Good Reason without first providing the Company with written notice of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a reasonable cure period of not less than thirty (30) days following the date of such notice.

(f) Non-Change of Control Good Reason. "Non-Change of Control Good Reason" occurs if (x) more than ninety (90) days prior to a Change of Control and (y) during the first 24 months after Executive's start date of employment with the Company, the Company hires a new Chief Executive Officer who is not the Executive. A resignation for Non-Change of Control Good Reason must occur within thirty (30) days of the triggering event described in the previous sentence.

7. Successors.

(a) The Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets will assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term "Company" will include any successor to the Company's business and/or assets which executes and delivers the assumption agreement described in this Section 7(a) or which becomes bound by the terms of this Agreement by operation of law.

(b) Executive's Successors. The terms of this Agreement and all rights of Executive hereunder will inure to the benefit of, and be enforceable by, Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

(c) Assumption. It shall be considered a material breach of the Agreement if the Company fails to obtain the assumption of this Agreement by any successor to the Company.

8. Notice.

(a) General. Notices and all other communications contemplated by this Agreement will be in writing and will be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of Executive, mailed notices will be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices will be addressed to its corporate headquarters, and all notices will be directed to the attention of its CEO.

(b) Notice of Termination. Any termination by the Company for Cause or by Executive for Good Reason or as a result of a voluntary resignation will be communicated by a notice of termination to the other party hereto given in accordance with Section 8(a) of this Agreement. Such notice will indicate the specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the giving of such notice). The failure by Executive to include in the notice any fact or circumstance which contributes to a showing of Good Reason will not waive any right of Executive hereunder or preclude Executive from asserting such fact or circumstance in enforcing his rights hereunder.

9. Miscellaneous Provisions.

(a) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any such payment be reduced by any earnings that Executive may receive from any other source.

(b) Waiver. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement, together with any Employment Agreement, constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter hereof. No waiver, alteration, or modification of any of the provisions of this Agreement will be binding unless in writing and signed by duly authorized representatives of the parties hereto and which specifically mention this Agreement.

(e) Choice of Law; Attorneys' Fees. The validity, interpretation, construction and performance of this Agreement will be governed by the laws of the State of California (with the exception of its conflict of laws provisions). The prevailing party in any action to enforce the terms of this Agreement will be entitled to recover his or its reasonable attorneys' fees and costs.

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect.

(g) Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable income, employment and other taxes.

(h) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Execution and delivery of this Agreement by exchange of facsimile copies bearing the facsimile signature of a party will constitute a valid and binding execution and delivery of the Agreement by such party. Such facsimile copies will constitute enforceable original documents.

(*signature page follows*)

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

COMPANY FLUIDIGM CORPORATION

/s/ Gajus V. Worthington

By: Gajus V. Worthington

Title: President and Chief Executive Officer

EXECUTIVE

/s/ Stephen Christopher Linthwaite

By: Stephen Christopher Linthwaite

**Exhibit 31.1**

**CERTIFICATION OF 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, Stephen Christopher Linthwaite, 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: November 8, 2016

By: /s/ Stephen Christopher Linthwaite
Stephen Christopher Linthwaite

President and Chief Executive Officer
(Principal Executive Officer)

**Exhibit 31.2**

**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: November 8, 2016 | By: | /s/ Vikram Jog |
| | | Vikram Jog |
| | | Chief Financial Officer |
| | | (Principal Financial Officer) |

**Exhibit 32.1**

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

I, Stephen Christopher Linthwaite, the president and 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 September 30, 2016 (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/ Stephen Christopher Linthwaite
Stephen Christopher Linthwaite

President and Chief Executive Officer
(Principal Executive Officer)
Date: November 8, 2016

**Exhibit 32.2**

**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 September 30, 2016 (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

Vikram Jog
Chief Financial Officer

(Principal Financial Officer)
Date: November 8, 2016