

LUMINEX CORP  
Form 10-Q  
November 06, 2018

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

---

FORM 10-Q

Quarterly Report  
Pursuant to Section 13  
or 15(d) of the  
Securities Exchange  
Act of 1934 for the  
quarterly period ended  
September 30, 2018 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 No. 000-30109

---

LUMINEX CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of incorporation or organization)

12212 TECHNOLOGY BLVD., AUSTIN, TEXAS

(Address of principal executive offices)

(512) 219-8020

Registrant's Telephone Number, Including Area Code

72-2747608

(I.R.S. Employer Identification No.)

78727

(Zip Code)

None

Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a

non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  
 Yes

þ  
No

There were 44,580,007 shares of the Company's Common Stock, par value \$0.001 per share, outstanding on November 5, 2018.

---

TABLE OF CONTENTS

Page

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Condensed Consolidated Balance Sheets as of September 30, 2018 and December 31, 2017 1

Condensed Consolidated Statements of Comprehensive Income for the Three and Nine Months Ended September 30, 2018 and 2017 2

Condensed Consolidated Statements of Cash Flows for the Three and Nine Months Ended September 30, 2018 and 2017 3

Condensed Consolidated Statement of Changes in Stockholders' Equity for the Three and Nine Months Ended September 30, 2018 and 2017 4

Notes to Condensed Consolidated Financial Statements 6

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations 22

Item 3. Quantitative and Qualitative Disclosures About Market Risk 35

Item 4. Controls and Procedures 36

PART II. OTHER INFORMATION

Item 1. Legal Proceedings 36

Item 1A. Risk Factors 36

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds 37

Item 6. Exhibits 37

SIGNATURES 38

Table of Contents

## PART I. FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS

## LUMINEX CORPORATION

## CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)

	September 30, 2018	December 31, 2017
	(unaudited)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 146,894	\$ 127,112
Accounts receivable, net	42,205	40,648
Inventories, net	55,046	49,478
Prepays and other	11,907	7,403
Total current assets	256,052	224,641
Property and equipment, net	61,876	58,258
Intangible assets, net	73,815	75,985
Deferred income taxes	27,875	37,552
Goodwill	85,481	85,481
Other	10,729	8,599
Total assets	\$ 515,828	\$ 490,516
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 13,300	\$ 14,537
Accrued liabilities	19,895	25,990
Deferred revenue	5,589	4,721
Total current liabilities	38,784	45,248
Deferred revenue	1,277	1,498
Other	7,556	5,863
Total liabilities	47,617	52,609
Stockholders' equity:		
Common stock, \$.001 par value, 200,000,000 shares authorized; issued and outstanding: 43,838,722 shares at September 30, 2018; 43,404,493 shares at December 31, 2017	44	43
Preferred stock, \$.001 par value, 5,000,000 shares authorized; no shares issued and outstanding	—	—
Additional paid-in capital	360,825	350,834
Accumulated other comprehensive loss	(1,046	) (625 )
Retained earnings	108,388	87,655
Total stockholders' equity	468,211	437,907
Total liabilities and stockholders' equity	\$ 515,828	\$ 490,516

See the accompanying notes which are an integral part of these  
Condensed Consolidated Financial Statements.

Table of Contents

LUMINEX CORPORATION  
 CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME  
 (in thousands, except per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018 (unaudited)	2017	2018 (unaudited)	2017
Revenue	\$72,445	\$74,136	\$234,685	\$228,372
Cost of revenue	28,189	28,317	87,535	79,706
Gross profit	44,256	45,819	147,150	148,666
Operating expenses:				
Research and development	11,996	10,670	33,994	35,350
Selling, general and administrative	26,340	26,454	79,780	78,604
Amortization of acquired intangible assets	2,166	2,166	6,498	6,689
Total operating expenses	40,502	39,290	120,272	120,643
Income from operations	3,754	6,529	26,878	28,023
Other income (expense), net	8	(1)	465	(6)
Income before income taxes	3,762	6,528	27,343	28,017
Income tax (expense) benefit	(2,025)	11,085	(6,540)	4,371
Net income	\$1,737	\$17,613	\$20,803	\$32,388
Net income attributable to common stock holders				
Basic	\$1,708	\$17,299	\$20,447	\$31,789
Diluted	1,708	17,299	20,449	31,789
Net income per share attributable to common stock holders				
Basic	\$0.04	\$0.40	\$0.47	\$0.74
Diluted	\$0.04	\$0.40	\$0.46	\$0.74
Weighted-average shares used in computing net income per share				
Basic	43,836	43,164	43,679	43,110
Diluted	44,707	43,266	44,193	43,216
Dividends declared per share	\$0.06	\$0.06	\$0.18	\$0.18
Other comprehensive income:				
Foreign currency translation adjustments	(102)	273	(421)	875
Other comprehensive income (loss)	(102)	273	(421)	875
Comprehensive income	\$1,635	\$17,886	\$20,382	\$33,263

See the accompanying notes which are an integral part of these  
 Condensed Consolidated Financial Statements.

Table of Contents

LUMINEX CORPORATION  
 CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS  
 (in thousands)

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018	
	2017	2018	2017	2018
	(unaudited)		(unaudited)	
Cash flows from operating activities:				
Net income	\$1,737	\$17,613	\$20,803	\$32,388
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization	5,714	5,609	17,737	16,879
Stock-based compensation	3,652	3,829	8,460	8,577
Deferred income tax expense	4,889	(10,379)	8,650	(3,112)
Loss on sale or disposal of assets	332	417	443	417
Other	(159)	) 357	(1,286)	) 1,279
Changes in operating assets and liabilities:				
Accounts receivable, net	4,570	(3,295)	) 9,623	(4,053)
Inventories, net	(2,982)	) 988	(5,584)	) (5,316)
Other assets	(4,187)	) (1,564)	) (4,743)	) (2,761)
Accounts payable	(47)	) (2,163)	) (1,708)	) (4,532)
Accrued liabilities	1,633	2,273	(6,440)	) (5,138)
Deferred revenue	—	81	653	(269)
Net cash provided by operating activities	15,152	13,766	46,608	34,359
Cash flows from investing activities:				
Purchase of property and equipment	(5,228)	) (3,981)	) (14,264)	) (10,384)
Proceeds from sale of assets	—	1	—	1
Issuance of note receivable	—	(700)	(1,000)	) (700)
Purchase of investment	—	—	(1,782)	) (1,000)
Acquired technology rights	—	(60)	(4,000)	) (60)
Net cash used in investing activities	(5,228)	) (4,740)	) (21,046)	) (12,143)
Cash flows from financing activities:				
Proceeds from issuance of common stock	566	1,005	3,982	3,234
Shares surrendered for tax withholding	(18)	) (28)	) (2,034)	) (2,124)
Dividends paid	(2,676)	) (2,645)	) (7,978)	) (5,281)
Net cash used in financing activities	(2,128)	) (1,668)	) (6,030)	) (4,171)
Effect of foreign currency exchange rate on cash	102	(152)	) 250	(586)
Change in cash and cash equivalents	7,898	7,206	19,782	17,459
Cash and cash equivalents, beginning of period	138,996	103,705	127,112	93,452
Cash and cash equivalents, end of period	\$146,894	\$110,911	\$146,894	\$110,911

See the accompanying notes which are an integral part of these Condensed Consolidated Financial Statements.

Table of Contents

## LUMINEX CORPORATION

## CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY

(in thousands, except share data)

(unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive (Loss)	Retained Earnings	Total Stockholders' Equity
	Number of Shares	Amount				
Balance at December 31, 2017	43,404,493	\$ 43	\$350,834	\$ (625 )	\$87,655	\$ 437,907
Exercise of stock options	40,142	—	697	—	—	697
Issuances of restricted stock, net of shares withheld for taxes	222,534	1	(2,003 )	—	—	(2,002 )
Stock compensation	—	—	1,235	—	—	1,235
Net income	—	—	—	—	13,397	13,397
Foreign currency translation adjustments	—	—	—	392	—	392
Dividends	—	—	47	—	(2,690 )	(2,643 )
Other	—	—	—	—	8,023	8,023
Balance at March 31, 2018	43,667,169	\$ 44	\$350,810	\$ (233 )	\$106,385	\$ 457,006
Exercise of stock options	102,976	—	1,874	—	—	1,874
Issuances of restricted stock, net of shares withheld for taxes	12,670	—	(13 )	—	—	(13 )
Stock compensation	—	—	3,563	—	—	3,563
Issuance of common shares under ESPP	47,300	—	854	—	—	854
Net income	—	—	—	—	5,669	5,669
Foreign currency translation adjustments	—	—	—	(711 )	—	(711 )
Dividends	—	—	(12 )	—	(2,701 )	(2,713 )
Balance at June 30, 2018	43,830,115	\$ 44	\$357,076	\$ (944 )	\$109,353	\$ 465,529
Exercise of stock options	6,935	—	114	—	—	114
Issuances of restricted stock, net of shares withheld for taxes	1,672	—	(18 )	—	—	(18 )
Stock compensation	—	—	3,627	—	—	3,627
Net income	—	—	—	—	1,737	1,737
Foreign currency translation adjustments	—	—	—	(102 )	—	(102 )
Dividends	—	—	26	—	(2,702 )	(2,676 )
Balance at September 30, 2018	43,838,722	\$ 44	\$360,825	\$ (1,046 )	\$108,388	\$ 468,211

See the accompanying notes which are an integral part of these  
Condensed Consolidated Financial Statements.

Table of Contents

## LUMINEX CORPORATION

## CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY (cont.)

(in thousands, except share data)

(unaudited)

	Common Stock			Accumulated Other Comprehensive (Loss)	Retained Earnings	Total Stockholders' Equity
	Number of Shares	Amount Paid-In Capital	Additional Paid-In Capital			
Balance at December 31, 2016	42,802,480	\$ 43	\$336,430	\$ (1,692 )	\$68,898	\$ 403,679
Exercise of stock options	45,396	—	733	—	—	733
Issuances of restricted stock, net of shares withheld for taxes	243,628	—	(2,056 )	—	—	(2,056 )
Stock compensation	—	—	679	—	—	679
Net income	—	—	—	—	9,231	9,231
Foreign currency translation adjustments	—	—	—	263	—	263
Dividends	—	—	—	—	(2,661 )	(2,661 )
Balance at March 31, 2017	43,091,504	\$ 43	\$335,786	\$ (1,429 )	\$75,468	\$ 409,868
Exercise of stock options	41,648	—	684	—	—	684
Issuances of restricted stock, net of shares withheld for taxes	82,983	—	(39 )	—	—	(39 )
Stock compensation	—	—	4,022	—	—	4,022
Issuance of common shares under ESPP	48,374	—	813	—	—	813
Net income	—	—	—	—	5,544	5,544
Foreign currency translation adjustments	—	—	—	339	—	339
Dividends	—	—	24	—	(2,668 )	(2,644 )
Balance at June 30, 2017	43,264,509	\$ 43	\$341,290	\$ (1,090 )	\$78,344	\$ 418,587
Exercise of stock options	35,248	—	583	—	—	583
Issuances of restricted stock, net of shares withheld for taxes	3,840	—	(28 )	—	—	(28 )
Stock compensation	—	—	3,664	—	—	3,664
Issuance of common shares under ESPP	—	—	131	—	—	131
Net income	—	—	—	—	17,613	17,613
Foreign currency translation adjustments	—	—	—	273	—	273
Dividends	—	—	23	—	(2,666 )	(2,643 )
Balance at September 30, 2017	43,303,597	\$ 43	\$345,663	\$ (817 )	\$93,291	\$ 438,180

See the accompanying notes which are an integral part of these  
Condensed Consolidated Financial Statements.

Table of Contents

## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

## NOTE 1 — BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared by Luminex Corporation (the Company or Luminex) in accordance with United States generally accepted accounting principles (U.S. GAAP) for interim financial information and the rules and regulations of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. In the opinion of management, all adjustments (consisting of normal recurring entries) considered necessary for a fair presentation have been included. Operating results for the three and nine months ended September 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. These financial statements should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 (the 2017 10-K).

## Supplemental Cash Flow Information Regarding Non-Cash Investing and Financing Activities

Non-cash activity during the three months ended September 30, 2018 was a result of the Company's exercise of its purchase option of a private company, referenced in Note 2 - Investments and Other Assets. The Company acquired 100% of its capital stock in a non-cash transaction primarily involving the prior investment of \$2.0 million, including the forgiveness of the note receivable and related interest of \$2.4 million, being applied to the purchase option.

## NOTE 2 — INVESTMENTS AND OTHER ASSETS

## Marketable Securities

The Company determines the appropriate classification of its investments in debt and equity securities at the time of purchase and re-evaluates such determinations at each balance sheet date. Marketable securities that are bought and held principally for the purpose of selling them in the near term are classified as trading securities and are reported at fair value, with unrealized gains and losses recognized in earnings. Debt securities are classified as held-to-maturity when the Company has the positive intent and ability to hold the securities to maturity. Held-to-maturity securities are stated at amortized cost, which approximates the fair value of these investments. Debt securities for which the Company does not have the intent or ability to hold to maturity are classified as available-for-sale. Debt and marketable equity securities not classified as held-to-maturity or as trading are classified as available-for-sale, and are carried at fair market value, with the unrealized gains and losses included in the determination of comprehensive income and reported in stockholders' equity. As of September 30, 2018 and December 31, 2017, all of the Company's marketable securities were classified as available-for-sale. Marketable securities are recorded as either short-term or long-term on the balance sheet based on the contractual maturity date. The fair value of all securities is determined by quoted market prices, market interest rate inputs, or other than quoted prices that are observable either directly or indirectly (as of the end of the reporting period). Declines in fair value below the Company's carrying value deemed to be other than temporary are charged against net earnings. As of September 30, 2018, the Company had no short or long-term investments.

Available-for-sale securities consisted of the following as of September 30, 2018 (in thousands):

Amortized Cost	Gains in Accumulated	Losses in Accumulated	Estimated Fair
----------------	----------------------	-----------------------	----------------

Edgar Filing: LUMINEX CORP - Form 10-Q

		Other Comprehensive Income	Other Comprehensive Income	Value
Current:				
Cash equivalents	\$ 702	\$	—\$	—\$ 702
Total current securities	702	—	—	702
Noncurrent:				
Total noncurrent securities	—	—	—	—
Total available-for-sale securities	\$ 702	\$	—\$	—\$ 702

Table of Contents

Available-for-sale securities consisted of the following as of December 31, 2017 (in thousands):

	Amortized Cost	Gains in Accumulated Other Comprehensive Income	Losses in Accumulated Other Comprehensive Income	Estimated Fair Value
Current:				
Cash equivalents	\$ 701	\$ —	\$ —	\$ 701
Total current securities	701	—	—	701
Noncurrent:				
Total noncurrent securities	—	—	—	—
Total available-for-sale securities	\$ 701	\$ —	\$ —	\$ 701

There were no proceeds from the sales of available-for-sale securities during the three and nine months ended September 30, 2018. Realized gains and losses on sales of investments are determined using the specific identification method. Realized gains and losses are included in Other Income, net in the Consolidated Statements of Comprehensive Income. All of the Company's available-for-sale securities with gross unrealized holding losses as of September 30, 2018 and December 31, 2017 have been in a loss position for less than 12 months.

There were no available-for-sale debt securities as of September 30, 2018 and December 31, 2017.

Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

#### Non-Marketable Securities, Investments and Impairment

During the three months ended June 30, 2018, the Company made a \$1.8 million investment in a private company. Based in the U.S., this minority investment is included at cost in other long-term assets of the Company's Consolidated Balance Sheets. The Company does not have significant influence over the investee since the Company owns less than 20% of the voting equity in the investee. Further, the Company does not participate in policy-making processes or interchange managerial personnel.

During each of the years ended December 31, 2017 and December 31, 2016, the Company made a \$1.0 million minority interest investment (an aggregate of \$2.0 million), in a second private company based in the U.S. that is focused on development of next generation technologies. During the year ended December 31, 2017, the Company also entered into a \$1.4 million promissory note with this same private company. The promissory note was payable at the annual interest rate of 1.95% with a maturity date of 5 years from the date of issuance. The Company loaned an additional \$1.0 million to the private company in the six months ended June 30, 2018, resulting in a notes receivable balance of \$2.4 million as of June 30, 2018. In August 2018, the Company exercised its purchase option of the private company and acquired 100% of its capital stock in a non-cash transaction involving (i) the prior investment of \$2.0 million being applied to the purchase option, (ii) the forgiveness of the \$2.4 million note receivable, (iii) interest related to the note receivable and (iv) a tax impact of \$0.1 million. This acquisition has been accounted for as an asset acquisition rather than a business combination, as substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset, a next generation technology. The Company has recorded the \$4.3 million asset acquisition as a defensive, in-process research and development (IP R&D) intangible asset.

The Company owns a minority interest in a third private company based in the U.S. through its investment of \$1.0 million in the third quarter of 2012. This minority interest is included at cost in other long-term assets on the Company's Consolidated Balance Sheets as the Company does not have significant influence over the investee since

the Company owns less than 20% of the voting equity in the investee and the investee is not publicly traded. Further, the Company does not participate in policy-making processes or interchange managerial personnel.

7

---

Table of Contents

These investments do not have readily determinable fair values. Therefore, the Company has elected the measurement alternative for its minority interests and the investments are recorded at cost, less any impairment, including changes resulting from observable price changes. The Company regularly evaluates the carrying value of its investment for impairment and whether any events or circumstances are identified that would significantly harm the fair value of the investment. The primary indicators the Company utilizes to identify these events and circumstances are the investee's ability to remain in business, such as the investee's liquidity and rate of cash use, and the investee's ability to secure additional funding and the value of that additional funding. In the event a decline in fair value is less than the investment's carrying value, the Company will record an impairment charge in Other Income, net in the Consolidated Statements of Comprehensive Income. As of September 30, 2018, the Company has not recorded any impairment charges related to the investments discussed above.

As the inputs utilized for the Company's periodic impairment assessment are not based on observable market data, the determination of fair value of its investments is classified within Level 3 of the fair value hierarchy. See Note 4 - Fair Value Measurement to our Condensed Consolidated Financial Statements for further information on the fair value hierarchy and the three classification levels. To determine the fair value of these investments, the Company uses all available financial information related to the entities, including information based on recent or pending third-party equity investments in these entities. In certain instances, an investment's fair value is not estimated as there are no identified events or changes in the circumstances that may have a significant adverse effect on the fair value of the investments and to do so would be impractical.

Other long-term assets consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Purchased technology rights (net of accumulated amortization of \$7,471 and \$7,012 as of September 30, 2018 and December 31, 2017, respectively)	\$ 6,690	\$ 3,149
Investments	2,782	3,000
Notes receivable <sup>(1)</sup>	—	1,400
Other	1,257	1,050
	\$ 10,729	\$ 8,599

<sup>(1)</sup> In August 2018, the Company exercised its purchase option of the private company for which it held a \$2.0 million minority interest investment, resulting in the prior investment and the related note receivable being applied to the purchase price. As discussed above, this purchased asset has been recorded as an IP R&D intangible asset.

For the nine months ending September 30, 2018 and year ended December 31, 2017, the Company recognized amortization expense related to the amortization of purchased technology rights of approximately \$459,000 and \$559,000, respectively. Future amortization expense is estimated to be \$162,000 in the remaining quarter of 2018, \$647,000 in 2019, \$547,000 in 2020, \$515,000 in 2021, \$497,000 in 2022, \$481,000 in 2023 and \$3,840,000 thereafter.

## NOTE 3 — INVENTORIES, NET

Inventories are stated at the lower of cost or net realizable value, with cost determined according to the standard cost method, which approximates the first-in, first-out method. Net realizable value is defined as the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The Company routinely assesses its on-hand inventory for timely identification and measurement of obsolete, slow-moving or otherwise impaired inventory. Net inventories consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Parts and supplies	\$ 31,811	\$ 29,266

Work-in-progress	10,739	8,712
Finished goods	12,496	11,500
	\$ 55,046	\$ 49,478

8

---

Table of Contents

## NOTE 4 — FAIR VALUE MEASUREMENT

The Fair Value Measurements and Disclosures Topic of the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) defines fair value, establishes a framework for measuring fair value under U.S. GAAP and enhances disclosures about fair value measurements. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The ASC describes a fair value hierarchy based on the following three levels of inputs that may be used to measure fair value, of which the first two are considered observable and the last unobservable:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company determines the fair value of its investment portfolio assets by obtaining non-binding market prices from its third-party portfolio managers on the last day of the quarter, whose sources may use quoted prices in active markets for identical assets (Level 1 inputs) or inputs other than quoted prices that are observable either directly or indirectly (Level 2 inputs) in determining fair value. There were no transfers between Level 1, Level 2, or Level 3 measurements for the nine-month period ended September 30, 2018.

The Company's financial assets and liabilities were all Level 1 money market fund assets and were measured at fair value on a recurring basis. These Level 1 assets were \$0.7 million as of September 30, 2018 and December 31, 2017.

	Fair Value Measurements as of September 30, 2018 Using			
	Level 1	Level 2	Level 3	Total
Assets:				
Money Market funds	\$702	\$	—\$	—\$702

	Fair Value Measurements as of December 31, 2017 Using			
	Level 1	Level 2	Level 3	Total
Assets:				
Money Market funds	\$701	\$	—\$	—\$701

Table of Contents

## NOTE 5 — GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill is reviewed for impairment at least annually at the beginning of the fourth quarter, or more frequently if impairment indicators arise. The Company's goodwill is not expected to be deductible for tax purposes. There were no changes in the carrying amount of the Company's goodwill during the nine months ended September 30, 2018 and twelve months ended December 31, 2017 as follows (in thousands):

	September 30, 2018	December 31, 2017
Balance at beginning of year	\$ 85,481	\$ 85,481
Balance at end of period	\$ 85,481	\$ 85,481

The Company's intangible assets are reflected in the table below (in thousands, except weighted average lives):

	Finite-lived			Indefinite-lived	
	Technology, trade secrets and know-how	Customer lists and contracts	Other identifiable intangible assets	IP R&D	Total
2017					
Balance as of December 31, 2016	\$81,385	\$19,097	\$ 5,664	\$ 12,982	\$119,128
Balance as of December 31, 2017	81,385	19,097	5,664	12,982	119,128
Less: accumulated amortization:					
Accumulated amortization balance as of December 31, 2016	(28,137 )	(5,038 )	(1,112 )	—	(34,287 )
Amortization expense	(6,277 )	(1,999 )	(580 )	—	(8,856 )
Accumulated amortization balance as of December 31, 2017	(34,414 )	(7,037 )	(1,692 )	—	(43,143 )
Net balance as of December 31, 2017	\$46,971	\$12,060	\$ 3,972	\$ 12,982	\$75,985
Weighted average life (in years)	11	10	10		
2018					
Balance as of December 31, 2017	\$81,385	\$19,097	\$ 5,664	\$ 12,982	\$119,128
Asset acquisition	—	—	—	4,328	4,328
Balance as of September 30, 2018	81,385	19,097	5,664	17,310	123,456
Less: accumulated amortization:					
Accumulated amortization balance as of December 31, 2017	(34,414 )	(7,037 )	(1,692 )	—	(43,143 )
Amortization expense	(4,565 )	(1,499 )	(434 )	—	(6,498 )
Accumulated amortization balance as of September 30, 2018	(38,979 )	(8,536 )	(2,126 )	—	(49,641 )
Net balance as of September 30, 2018	\$42,406	\$10,561	\$ 3,538	\$ 17,310	\$73,815
Weighted average life (in years)	11	10	10		

Table of Contents

As discussed in Note 2 above, in August 2018, the Company exercised its purchase option of a previous minority investment in a private company and recorded approximately \$4.3 million of intangible assets through an asset acquisition. The Company currently has two IP R&D projects. The first relates to the development of the next generation VERIGENE® System, VERIGENE II, on which the Company began clinical trials in May 2018. The Company believes the VERIGENE II will launch commercially in 2019. The second is a defensive IP R&D project related to the Company's next generation xMAP System, the SENSIPLEX™, which the Company believes will launch commercially in 2020. The estimated costs to complete these IP R&D projects are approximately \$4.5 million.

The estimated aggregate amortization expense for the next five fiscal years and thereafter is as follows (in thousands):

2018 (three months)	\$2,166
2019	8,666
2020	8,666
2021	8,307
2022	7,060
Thereafter	21,640
	\$56,505
IP R&D	17,310
	\$73,815

## NOTE 6 — OTHER COMPREHENSIVE INCOME (LOSS)

Other comprehensive income (loss) represents a measure of all changes in equity that result from recognized transactions and other economic events other than those resulting from investments by and distributions to shareholders. Other comprehensive income (loss) for the Company includes foreign currency translation adjustments.

The following table presents the changes in each component of accumulated other comprehensive loss, net of tax (in thousands):

	Foreign Currency Items	Available-for-Sale Investments	Accumulated Other Comprehensive Income (Loss) Items
Balance as of December 31, 2017	\$ (625 )	\$ —	\$ (625 )
Other comprehensive income before reclassifications	(421 )	—	(421 )
Net current-period other comprehensive loss	(421 )	—	(421 )
Balance as of September 30, 2018	\$ (1,046 )	\$ —	\$ (1,046 )

The following table presents the tax expense allocated to each component of other comprehensive loss (in thousands):

	Three Months Ended September 30, 2018		Nine Months Ended September 30, 2018	
	Before Tax	Net of Tax Benefit	Before Tax	Net of Tax Benefit
Foreign currency translation adjustments	\$ (102)	\$ —	—	—
Unrealized gains on available-for-sale investments	—	—	—	—
Other comprehensive loss	\$ (102)	\$ —	—	—

Table of Contents

## NOTE 7 — EARNINGS PER SHARE

A reconciliation of the denominators used in computing per share net income (EPS) is as follows (in thousands, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Basic:				
Net income	\$1,737	\$17,613	\$20,803	\$32,388
Less: allocation to participating securities	(29 )	(314 )	(356 )	(599 )
Net income attributable to common stockholders	\$1,708	\$17,299	\$20,447	\$31,789
Weighted average common stock outstanding	43,836	43,164	43,679	43,110
Net income per share attributable to common stockholders	\$0.04	\$0.40	\$0.47	\$0.74
Diluted:				
Net income	\$1,737	\$17,613	\$20,803	\$32,388
Less: allocation to participating securities	(29 )	(314 )	(354 )	(599 )
Net income attributable to common stockholders	\$1,708	\$17,299	\$20,449	\$31,789
Weighted average common stock outstanding	43,836	43,164	43,679	43,110
Effect of dilutive securities: stock options and awards	871	102	514	106
Weighted-average shares used in computing net income per share	44,707	43,266	44,193	43,216
Net income per share attributable to common stockholders	\$0.04	\$0.40	\$0.46	\$0.74

Basic net income per share is computed by dividing the net income for the period by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing the net income for the period by the weighted average number of common and common equivalent shares outstanding during the period. There were no stock options to acquire shares for the three months ended September 30, 2018. Stock options to acquire approximately 2.5 million shares for the three months ended September 30, 2017, and 0.6 million and 2.1 million shares for the nine months ended September 30, 2018 and 2017, respectively, were excluded from the computations of diluted EPS because the effect of including those stock options would have been anti-dilutive.

We apply the two-class method of computing EPS, which requires the calculation of separate EPS amounts for our non-vested, time-based restricted stock awards with non-forfeitable dividends and for our common stock. Our non-vested, time-based restricted stock awards with non-forfeitable dividends are considered securities which participate in undistributed earnings with common stock. Under the two-class computation method, net losses are not allocated to participating securities unless the holder of the security has a contractual obligation to share in the losses. Our non-vested, time-based restricted stock awards with non-forfeitable dividends do not have such an obligation so they are not allocated losses.

## NOTE 8 — STOCKHOLDERS' EQUITY AND STOCK-BASED COMPENSATION

## Dividends

On September 11, 2018, the Board of Directors declared a cash dividend on the Company's common stock of \$0.06 per share. The dividend declared was payable to stockholders of record as of September 21, 2018 and was paid on October 12, 2018. The Company's current intent is to pay a continuing dividend on a quarterly basis.



Table of Contents

## Stock-Based Compensation

The Company's stock option activity for the nine months ended September 30, 2018 was as follows:

Stock Options (shares in thousands)	Shares	Weighted Average Exercise Price
Outstanding as of December 31, 2017	3,086	\$ 18.10
Granted	761	22.06
Exercised	(150 )	17.89
Cancelled or expired	(373 )	18.51
Outstanding as of September 30, 2018	3,324	\$ 19.01

The Company had \$12.3 million of total unrecognized compensation costs related to stock options as of September 30, 2018. These costs are expected to be recognized over a weighted average period of 2.40 years.

The Company's restricted share activity for the nine months ended September 30, 2018 was as follows:

Restricted Stock Awards (shares in thousands)	Shares	Weighted Average Grant Price
Non-vested as of December 31, 2017	715	\$ 18.46
Granted	383	22.14
Vested	(286 )	18.48
Cancelled or expired	(53 )	19.47
Non-vested as of September 30, 2018	759	\$ 20.24

Restricted Stock Units (in thousands)	Shares
Non-vested as of December 31, 2017	423
Granted	91
Vested	(49 )
Cancelled or expired	(3 )
Non-vested as of September 30, 2018	462

As of September 30, 2018, there were \$13.8 million and \$2.7 million of total unrecognized compensation costs related to Restricted Stock Awards (RSAs) and Restricted Stock Units (RSUs), respectively. These costs are expected to be recognized over a weighted average period of 2.57 years for the RSAs and 2.19 years for the RSUs. The Company issues a small number of cash settled RSUs pursuant to the Company's equity incentive plan in certain foreign countries. These grants do not result in the issuance of common stock and are considered immaterial by the Company.

The following are the stock-based compensation costs recognized in the Company's condensed consolidated statements of comprehensive income (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Cost of revenue	\$437	\$409	\$1,253	\$1,146
Research and development	571	702	771	1,299

Edgar Filing: LUMINEX CORP - Form 10-Q

Selling, general and administrative	2,644	2,718	6,436	6,132
Stock-based compensation costs reflected in net income	\$3,652	\$3,829	\$8,460	\$8,577

13

---

Table of Contents

## NOTE 9 — ACCRUED LIABILITIES

Accrued liabilities consisted of the following (in thousands):

	September 30, December 31,	
	2018	2017
Compensation and employee benefits	\$ 12,080	\$ 18,218
Dividends payable	2,702	2,671
Income and other taxes	704	1,070
Warranty costs	1,314	1,308
Other	3,095	2,723
	\$ 19,895	\$ 25,990

The following table summarizes the changes in the warranty accrual (in thousands):

Accrued warranty costs as of December 31, 2017	\$1,308
Warranty adjustments/settlements	(1,613 )
Accrual for warranty costs	1,619
Accrued warranty costs as of September 30, 2018	\$1,314

## NOTE 10 — REVENUE RECOGNITION

On January 1, 2018, the Company adopted a new standard on revenue recognition, Accounting Standards Codification 606 (the Standard), using the modified retrospective transition method consistent with the guidance issued by the FASB in May 2014. Under this method, the Company applied the guidance retrospectively, only to those contracts which were not completed as of the date of initial application, and recognized the cumulative effect of initially applying the Standard as an adjustment to the opening balance of retained earnings as of January 1, 2018. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

The Standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under the Standard, the Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that the Company determines are within the scope of the Standard, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when the Company satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the Company will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of the Standard, the Company assesses the goods or services promised within each contract, identifies the performance obligations and assesses whether each promised good or service is distinct. The Company allocates the total transaction price to each performance obligation in an amount based on the estimated relative standalone selling prices of the promised goods or service underlying each performance obligation and recognizes as revenue when such performance obligation is satisfied.

Revenue is generated primarily from the sale of the Company's products and related services, which are primarily support and maintenance services on the Company's systems. The Company recognizes product revenue when the Customer obtains control of the Company's product, which typically occurs upon shipment or delivery to the Customer depending upon the shipping terms. We treat shipping and handling costs performed after a customer obtains control of the good as a fulfillment cost. Our customers do not typically have any contractual rights of return outside of our

warranty provisions. The Company has allowed few returns to date and believes that returns of its products will be minimal.

**Royalties:** For arrangements that include sales-based royalties, including minimum payments, the Company recognizes revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation, to which some or all of the royalty has been allocated, has been satisfied. This is a change from how the Company has historically treated royalty payments, by recognizing royalty revenue when our strategic partners reported the end-user sales to the Company, and is primarily the basis for our cumulative adjustment to retained earnings of \$10.6 million before related tax impacts or \$8.1 million net of related tax impacts. Royalty payments are typically received when our strategic partners report the end-user sales to the Company.

Table of Contents

**Reagent Rentals:** The Company provides systems and certain other hardware to customers through reagent rental agreements, under which the customers commit to purchasing minimum quantities of disposable products at a stated price over a defined contract term, which is normally two to three years. Instead of rental payments, the Company recovers the cost of providing the system and other hardware in the amount charged for assays. Revenue is recognized over the defined contract term as assays are shipped. The depreciation costs associated with the system and other hardware are charged to cost of sales on a straight-line basis over the estimated life of the system. The costs to maintain these instruments in the field are charged to cost of sales as incurred. Under the Standard, the Company has reclassified the portion of reagent rental revenue associated with the recovery of the cost of providing the system and other hardware in reagent rental agreements from assay revenue to system revenue effective January 1, 2018. This change will not have any impact on top line revenue and the Company does not anticipate any material effects to its revenue categorization.

**Warranties:** The Company provides a limited, assurance-type warranty, typically for twelve months from installation for the systems sold to end customers and fifteen months for the systems sold to partners. The Company accrues for the estimated cost of initial product warranties at the time revenue is recognized. The actual warranty expense could differ from the estimates made by the Company based on product performance. Warranty expenses are evaluated and adjusted periodically.

**License Revenues:** The Company enters into out-licensing agreements which are within the scope of the Standard, under which it licenses certain rights to its technology to third parties. These licenses are typically not distinct, as the customer cannot benefit from the license on its own, and do not have significant standalone functionality, but represent single performance obligations together with the sales of our consumables, systems and assays. The terms of these arrangements typically include payment to the Company of non-refundable, up-front license fees and can extend up to twenty years, although some of our current agreements extend through 2027. Each of these payments results in license revenues which are recognized ratably over time and are included in other revenues, except for revenues from royalties on net sales of licensed products, which are classified as royalty revenues. Deferred revenues related to these out-licensing agreements are shown in contract liabilities in the table below.

**Performance Obligations:** Revenue from extended service agreements is deferred when payment is received in advance of the performance obligation being satisfied or completed. Luminex provides an integrated service of maintenance and related activities for equipment sold to customers, where the nature of the overall promise is to provide a stand-ready service. As such, the performance obligation is recognized as a series of distinct service periods and the service revenue is recognized ratably over the term of the agreement. The extended service agreements typically range from one to four years and payment is typically received up-front.

**Reserves for Variable Consideration:** Revenues from product sales are recorded at the net sales price (transaction price), which includes estimates of variable consideration for which reserves are established and which result from discounts and any other allowances that are offered within contracts between the Company and its customers relating to the Company's sales of its products. These reserves are based on the amounts earned or to be claimed on the related sales and are classified as reductions of accounts receivable. Where appropriate, these estimates take into consideration a range of possible outcomes which are probability-weighted for relevant factors such as the Company's historical experience, current contractual requirements, industry data and forecasted customer buying and payment patterns. Overall, these reserves reflect the Company's best estimates of the amount of consideration to which it is entitled based on the terms of each contract. The amount of variable consideration which is included in the transaction price may be constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur in a future period. Actual amounts of consideration ultimately received may differ from the Company's estimates. If actual results in the future vary from the Company's estimates, the Company will adjust these estimates, which would affect net product revenue

and earnings in the period when such variances become known.

15

---

Table of Contents

Contract assets are included within Accounts receivables, net and contract liabilities are included in Deferred revenue on the Company's Balance Sheet. The following table presents the opening and closing balances of the Company's contract assets and liabilities for the nine months ended September 30, 2018 (in thousands):

	Balance at Beginning of Period	Balance at End of Period
Contract assets:		
Unbilled receivables - Royalties	\$ 10,643	\$ 10,719
Contract liabilities - short-term:		
Deferred revenue - Service	\$ 4,438	\$ 5,136
Deferred revenue - Licenses	246	234
Deferred revenue - Other	37	219
Total Contract liabilities - short-term	\$ 4,721	\$ 5,589
Contract liabilities - long-term:		
Deferred revenue - Service	\$ 315	\$ 253
Deferred revenue - Licenses	1,099	927
Deferred revenue - Other	83	97
Total Contract liabilities - long-term	\$ 1,497	\$ 1,277

During the nine months ended September 30, 2018, the Company recognized the following revenues as a result of changes in the contract asset and contract liability balances in the period (in thousands):

	Nine Months Ended September 30, 2018
Revenue recognized in the period from:	
Amounts included as contract liabilities at the beginning of the period	\$ 4,354
Performance obligations satisfied in previous periods	-

In accordance with the Standard, the disclosure of the impact of adoption on our consolidated income statement and balance sheet was as follows (in thousands):

	Three Months Ended September 30, 2018			Nine Months Ended September 30, 2018		
	As Reported in this Quarterly Report	Amounts Before Adoption of the Standard	Net Effect of Adoption of the Standard	As Reported in this Quarterly Report	Amounts Before Adoption of the Standard	Net Effect of Adoption of the Standard
Income Statement						
System sales	\$ 10,026	\$ 9,349	\$ 677	\$ 29,777	\$ 28,072	\$ 1,705
Consumable sales	11,627	11,627	—	34,466	34,466	—
Royalty revenue	12,081	12,316	(235 )	35,887	35,706	181
Assay revenue	33,747	34,432	(685 )	119,762	121,570	(1,808 )
Other revenue	4,964	4,964	—	14,793	14,793	—
Revenue	72,445	72,688	(243 )	234,685	234,607	78
Gross profit	44,256	44,499	(243 )	147,150	147,072	78

Edgar Filing: LUMINEX CORP - Form 10-Q

Income from operations	3,754	3,997	(243	)	26,878	26,800	78				
Income tax benefit (expense)	(2,025	)	(2,083	)	58	(6,540	)	(6,521	)	(19	)
Net Income	1,737	1,922	(185	)	20,803	20,744	59				

Table of Contents

Balance Sheet	As of September 30, 2018		
	As Reported in this Quarterly Report	Balances Before Adoption of ASC 606	Effect of Adoption of the Standard
<b>ASSETS</b>			
Accounts receivable, net	42,205	31,484	10,721
Deferred income taxes	27,875	30,448	(2,573 )
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>			
Retained earnings	108,388	100,240	8,148

## NOTE 11 — INCOME TAXES

At the end of each interim reporting period, an estimate is made of the effective tax rate expected to be applicable for the full year. The estimated full year's effective tax rate is used to determine the income tax rate for each applicable interim reporting period. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period of the enactment date. The effective tax rate for the nine months ended September 30, 2018 was 23.9%, including amounts recorded for discrete events. This differs from the statutory rate of 21% primarily as a result of the worldwide mix of consolidated earnings and losses before taxes and changes to provisional amounts recorded for certain aspects of the Tax Cuts and Jobs Act (the Tax Act). The Company currently expects a 2018 full year effective tax rate of 25% to 30%, excluding amounts recorded for discrete events. The Company's tax expense reflects the full federal, various state, and foreign blended statutory rates. The Company will be subject to the Tax Act provisions regarding U.S. federal taxation of foreign intangible income and has included in its estimate of income tax the effects of this tax. The effect of this estimate is still under evaluation as the Company gains a more thorough understanding of these provisions and changes may materially impact income tax expenses. The Company is utilizing its net operating losses (NOLs) and tax credits in the U.S., Canada and the Netherlands and, therefore, cash taxes to be paid are expected to be less than 10% of book tax expense.

The Tax Act was enacted on December 22, 2017. The Tax Act includes, among other things, a U.S. federal corporate income tax rate decrease from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, and creates new taxes on certain foreign sourced earnings. On December 22, 2017, Staff Accounting Bulletin No. 118 (SAB 118) was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Act. The Company is applying the guidance in SAB 118 when accounting for the enactment-date effect of the Tax Act. As of September 30, 2018, the Company has not completed its accounting for all of the tax effects of the Tax Act; however, the Company has made a reasonable estimate of the effects. During the three and nine months ended September 30, 2018, the Company recognized adjustments of \$0.2 million and \$1.9 million, respectively, to the provisional amounts recorded at December 31, 2017 and included these adjustments as a component of income tax expense from continuing operations. The Company will continue to make and refine its calculations as additional analysis is completed. These changes could be material to income tax expense.

Deferred tax assets and liabilities. The Company remeasured certain deferred tax assets and liabilities based on the tax rates at which they are expected to reverse to in the future, which is generally 21%. The Company recorded a provisional amount of \$2.7 million at December 31, 2017 related to the remeasurement of certain deferred tax balances. Upon further analyses of certain aspects of the Tax Act and refinement of its calculations, the Company increased the provisional amounts of income tax expense by \$0.2 million and \$0.4 million, respectively, during the three and nine months ended September 30, 2018. Due to the continued refinement of its calculations for the transition tax, certain aspects of deferred compensation, and the affect these calculations may have on the measurement of NOLs

and other carryforwards, the Company will continue to analyze and refine its calculations related to the measurement of these balances. As of September 30, 2018, the Company's deferred tax assets and liabilities continue to have provisional amounts recorded for remeasurement.

Table of Contents

## Foreign tax effects

One-time transition tax. The one-time transition tax is based on the Company's total post-1986 earnings and profits (E&P), which the Company had deferred from U.S. income taxes under previous U.S. law. The Company originally recorded a provisional amount for its one-time transition tax liability of \$6.7 million at December 31, 2017. Upon further analysis of certain aspects of the E&P of its Canadian subsidiary and refinement of its calculations for its foreign subsidiaries during the nine months ended September 30, 2018, the Company decreased this provisional amount by \$1.3 million, which was recorded during the three month period ended March 31, 2018 and is included as a component of income tax expense from continuing operations. As of September 30, 2018, the Company continues to have provisional amounts recorded for the one-time tax liability. As the Company continues to refine its E&P analysis, the Company will refine its calculations of the one-time transitions tax, which could affect the measurement of this liability.

Deferred tax liabilities for withholding tax. The excess of financial reporting basis over tax basis of the Company's foreign subsidiaries is considered permanently reinvested with the exception of certain earnings of the Canadian subsidiary. The Company originally recorded a provisional amount of deferred tax liability for withholding and state income taxes associated with the ultimate repatriation from Canada to the U.S. of these certain earnings of \$3.2 million at December 31, 2017. Upon further analysis of its calculations of the Canadian withholding tax during the nine months ended September 30, 2018, the Company decreased its provisional amount by \$2.5 million, which was recorded during the three month period ended March 31, 2018 and is included as a component of income tax expense from continuing operations. The deferred tax liabilities for withholding tax are still provisional as of September 30, 2018 as the Company's permanent reinvestment assertions for foreign earnings associated with certain aspects of the Tax Act are not yet finalized.

In the second quarter of 2018, the Company recorded an income tax expense totaling \$1.3 million based primarily on the results of a Canadian income tax audit. The expense recorded is the net result of reductions to the scientific research and experimental development expenditure pool and investment tax credit carryforward balances and an increase to non-capital carryforward losses.

The Company or one of its subsidiaries files income tax returns in the U.S. federal jurisdiction, Australia, Canada, China, Hong Kong, Japan, the Netherlands, and various U.S. states. Due to net operating losses, the U.S., Canadian and Australian tax returns dating back to 2011 can still be reviewed by the taxing authorities. The Netherlands tax returns dating back to 2013 can still be reviewed by the taxing authorities. For the nine months ended September 30, 2018, unrecognized tax benefits related to the U.S. transition tax on earnings of certain foreign subsidiaries and deferred tax liabilities for withholding tax of \$1.3 million and \$140,000, respectively, were recorded. The Company does not expect any material changes to the unrecognized tax benefit liability within the next 12 months. The Company recognizes interest and penalties related to uncertain tax positions in the provision for income taxes.

## NOTE 12 - COMMITMENTS AND CONTINGENCIES

In the normal course of business, the Company is subject to claims, lawsuits and legal proceedings. When and if it appears probable in management's judgment, and based upon consultation with outside counsel, that we will incur monetary damages or other costs in connection with any claims or proceedings, and such costs can be reasonably estimated, we record the estimated liability in the financial statements. If only a range of estimated losses can be estimated, we record an amount within the range that, in management's judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, we record the liability at the low end of the range of estimates. Any such accrual would be charged to expense in the appropriate period. We disclose significant contingencies when the loss is not probable and/or the amount of the loss is not estimable, when we believe there is at least a reasonable possibility that a loss has been incurred. We recognize costs associated with legal proceedings in the period in which the services were provided.



Table of Contents

## NOTE 13 — RECENT ACCOUNTING PRONOUNCEMENTS

## Recently adopted accounting guidance

In May 2014, the FASB issued the Standard which outlines a single comprehensive model to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity should recognize 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. The Company adopted the Standard effective January 1, 2018, using the modified retrospective approach. Under this method, the Company recorded a cumulative adjustment increasing retained earnings of \$10.6 million before related tax impacts or \$8.1 million net of related tax impacts. See Note 10, “Revenue Recognition” for additional discussion related to the Company’s adoption of the Standard. Under the Standard, estimated royalty revenue will be recorded each quarter on an accrual basis to more closely coincide with the timing of the end user sale by the strategic partner; with reconciliation made upon submission of the royalty report by the partner indicating actual royalties owed in the following quarter. In addition, the Company began recording the portion of reagent rental revenue associated with the recovery of the cost of providing the system and other hardware in reagent rental agreements as system revenue rather than assay revenue effective January 1, 2018. This change has not and is not expected to have any impact on top line revenue and the Company does not anticipate any material effects to its revenue categorization.

In January 2016, the FASB issued guidance that amends various aspects of the recognition, measurement, presentation, and disclosure for financial instruments. This guidance was effective for annual reporting periods, and interim periods within those years beginning after December 15, 2017. The Company adopted this standard during the quarter ended March 31, 2018. The adoption of this new standard resulted in a change to the Company’s accounting policy; however, adoption did not have a material impact on its consolidated financial position or results of operations.

In August 2016, the FASB issued specific guidance on eight cash flow classification issues that are not currently addressed by current U.S. GAAP and thereby reduce the current diversity in practice. This guidance is effective for annual periods beginning after December 15, 2017. The Company adopted this standard during the quarter ended March 31, 2018, and its adoption did not have a material impact on its consolidated financial statements.

In October 2016, the FASB issued guidance on income taxes which requires companies to recognize the income tax effects of intercompany sales and transfers of assets, other than inventory, in the income statement as income tax expense (or benefit) in the period in which the transfers occur. The new standard became effective for the Company on January 1, 2018. The Company has adopted this new standard using the modified retrospective method through a cumulative-effect adjustment, based on currently enacted tax rates, directly to retained earnings as of the beginning of that date. The adoption of this new standard resulted in a change to the Company’s accounting policy; however, adoption did not have a material impact on the Company’s consolidated financial position or results of operations.

On January 10, 2018, the FASB issued guidance on the accounting for tax on the global intangible low-taxed income (GILTI) provisions of the Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. Effective January 1, 2018, the Company recognizes the tax on GILTI as a period expense in the period the tax is incurred. Under this policy, the Company has not provided deferred taxes related to temporary differences that upon their reversal will affect the amount of income subject to GILTI in the period.

In January 2018, the FASB issued guidance related to reporting comprehensive income, which gives entities the option to reclassify to retained earnings the tax effects resulting from the Tax Act related to items in Additional Other

Comprehensive Income (AOI) that the FASB refers to as having been “stranded” in AOI. The guidance is effective for annual and interim periods beginning after December 15, 2018, and is applicable to the Company in fiscal year 2019; however, early adoption is permitted. The Company does not have any tax effects resulting from the Tax Act that are stranded in AOI and therefore this guidance has no impact on its consolidated financial statements. The Company has early adopted this guidance and established the accounting policy for reclassifying to retained earnings any tax effects resulting from the Tax Act that are stranded in AOI.

## Table of Contents

In June 2018, the FASB issued guidance which simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. For public business entities, the guidance is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods; however, early adoption is permitted. Although nonemployee directors do not satisfy the definition of employee, under FASB guidance, the Company's nonemployee directors acting in their role as members of a board of directors are treated as employees as those directors were elected by the Company's shareholders. Therefore, awards granted to these nonemployee directors for their services as directors already were accounted for as employee awards. The Company early adopted this guidance, which did not have a material impact on its consolidated financial statements.

In August 2018, the FASB issued guidance that eliminates, adds and modifies certain disclosure requirements for fair value measurements. Entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, but public companies will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurements. The guidance is effective for annual and interim periods beginning after December 15, 2019, but entities are permitted to early adopt either the entire standard or only the provisions that eliminate or modify the requirements. The Company has early adopted this guidance, which did not have a material impact on its consolidated financial statements.

In September 2018, the Securities and Exchange Commission (SEC) issued interpretive guidance relating to previously adopted amendments to certain disclosure requirements, including those related to interim disclosures about changes in stockholders' equity and non-controlling interests. The guidance extends the annual requirement to disclose (1) changes in stockholders' equity and (2) the amount of dividends per share for each class of shares (as opposed to common stock only, as previously required) to interim periods. The amendments are effective for all filings made on or after November 5, 2018. However, the interpretive guidelines indicate that the SEC would not object if a filer's first presentation of the change in stockholders' equity is included in its 10-Q for the quarter that begins after the effective date of the amendments. The Company has adopted this guidance during the quarter ended September 30, 2018 by including prior year, comparative periods in its Consolidated Statement of Changes in Stockholders' Equity.

### Recent accounting guidance not yet adopted

In January 2017, the FASB issued guidance on intangibles, including goodwill, which simplifies how companies calculate goodwill impairments by eliminating Step 2 of the impairment test. The guidance requires companies to compare the fair value of a reporting unit to its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. The guidance is effective for annual periods beginning after December 15, 2019, and is applicable to the Company in fiscal year 2020; however, early adoption is permitted. The Company does not anticipate that this guidance will have a material impact on its consolidated financial statements.

In June 2016, the FASB issued guidance on financial instruments and related credit losses. The guidance requires that financial assets measured at amortized cost be presented at the net amount expected to be collected. The allowance for credit losses is a valuation account that is deducted from the amortized cost basis. The income statement reflects the measurement of credit losses for newly recognized financial assets, as well as the expected credit losses during the period. The measurement of expected credit losses is based upon historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. Credit losses relating to available-for-sale debt securities will be recorded through an allowance for credit losses rather than as a direct write-down to the security. The updated guidance is effective for annual periods beginning after December 15, 2019, and is applicable to the Company in fiscal 2020. Early adoption is permitted. The Company does not anticipate that this guidance will have a material impact on its consolidated financial statements.

In February 2016, the FASB issued guidance requiring 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. The effective date of the new guidance is for the Company's first quarter of fiscal year 2019; however, early adoption is permitted. The FASB has approved an optional, alternative method to adopt the lease standard by recognizing a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company plans on using this alternative transition method. The Company continues to evaluate the impact of the adoption of this requirement on its consolidated financial statements, has completed a review of the Company's leases, and does not anticipate that adoption of this guidance will have a material impact on its consolidated financial statements except for the addition of the right-of-use asset and a lease liability to the consolidated balance sheet.

Table of Contents

NOTE 14 — SUBSEQUENT EVENTS

On October 18, 2018, the Company announced that it had signed a definitive agreement to acquire EMD Millipore Corporation's flow cytometry portfolio for \$75 million, consisting of approximately \$69.9 million to be paid under a Share and Asset Purchase Agreement and approximately \$5.1 million in committed inventory purchases, both of which are subject to adjustment. The acquisition expands Luminex's existing offering of flow-based detection systems. The Company intends to finance the acquisition with cash on hand. The acquisition is expected to close by the end of 2018. For additional information regarding the transaction, see Luminex's Current Report on Form 8-K filed on October 18, 2018, which includes the press release announcing the transaction and the Share and Asset Purchase agreement for the transaction.

Table of Contents

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following information should be read in conjunction with the condensed consolidated financial statements and the accompanying notes included in Part I, Item 1 of this Report, and the "Risk Factors" included in Part I, Item 1A of the 2017 10-K.

SAFE HARBOR CAUTIONARY STATEMENT

This quarterly report on Form 10-Q contains statements that are forward-looking statements under the Private Securities Litigation Reform Act of 1995. Forward-looking statements provide our current expectations of forecasts of future events. All statements other than statements of current or historical fact contained in this quarterly report, including statements regarding our future financial position, business strategy, impact of the reimbursement landscape, products including ARIES®, VERIGENE®, VERIGENE II, SENSIPLEX and NxTAG®, assay sales, consumables sales patterns and bulk purchases, budgets, system sales, anticipated gross margins, liquidity, cash flows, projected costs and expenses, taxes, deferred tax assets, regulatory approvals or the impact of laws or regulations applicable to us, plans and objectives of management for future operations, and future acquisition impacts and integration and the expected benefit of our future acquisitions are forward-looking statements. The words "anticipate," "believe," "continue," "should," "estimate," "expect," "intend," "may," "plan," "projects," "will" and similar expressions as used by us, are intended to identify forward-looking statements. These statements are based on our current plans and actual future activities, and our financial condition and results of operations may be materially different from those set forth in the forward-looking statements as a result of known or unknown risks and uncertainties, including, among other things:

- concentration of our revenue in a limited number of direct customers and strategic partners, some of which may experience decreased demand for their products utilizing or incorporating our technology, budget or finance constraints in the current economic environment, or periodic variability in their purchasing patterns or practices as a result of material resource planning challenges;

- risks and uncertainties relating to market demand and acceptance of our products and technology, including ARIES®, MultiCode®, NxTAG®, xMAP® and VERIGENE®;

- the impact on our growth and future results of operations as a result of the loss of the LabCorp women's health business in June 2018 and the potential future loss of other products traditionally sold to LabCorp;

- the occurrence of any event, change or circumstance that could give rise to the termination of the acquisition agreement entered into by the parties in connection with the Company's proposed acquisition of EMD Millipore Corporation's flow cytometry portfolio;

- our ability to consummate and complete the acquisition of EMD Millipore Corporation's flow cytometry portfolio and that the expected benefits of the transaction will be realized;

- risks and uncertainties associated with implementing our acquisition strategy, our ability to identify suitable acquisition targets including our ability to obtain financing on acceptable terms, our ability to integrate acquired companies or selected assets into our consolidated business operations, and the ability to fully realize the benefits of our acquisitions;

- our ability to scale manufacturing operations and manage operating expenses, gross margins and inventory levels;

- our ability to obtain and enforce intellectual property protections on our products and technologies;
  - our ability to successfully launch new products in a timely manner;
  - our dependence on strategic partners for development, commercialization and distribution of products;
  - the timing of and process for regulatory approvals;
  - competition and competitive technologies utilized by our competitors;
- fluctuations in quarterly results due to a lengthy and unpredictable sales cycle, fluctuations in bulk purchases of consumables, fluctuations in product mix, the seasonal nature of some of our assays, and the variability of operating expense timing;

Table of Contents

our ability to comply with applicable laws, regulations, policies and procedures;

the impact of the ongoing uncertainty in global finance markets and changes in government and government agency funding, including effects on the capital spending policies of our partners and end users and their ability to finance purchases of our products;

changes in interpretation, assumptions and expectations regarding the Tax Act, including additional guidance that may be issued by federal and state taxing authorities;

changes in principal members of our management staff;

potential shortages, or increases in costs, of components or other disruptions to our manufacturing operations;

our increasing dependency on information technology to enable us to improve the effectiveness of our operations and to monitor financial accuracy and efficiency;

the implementation, including any modifications, of our strategic operating plans;

the uncertainty regarding the outcome or expense of any litigation brought against or initiated by us; and

risks relating to our foreign operations, including fluctuations in exchange rates, tariffs, customs and other barriers to importing/exporting materials and products in a cost-effective and timely manner; difficulties in accounts receivable collections; our ability to monitor and comply with foreign and international laws and treaties; and our ability to comply with changes in international taxation policies.

Many of these risks, uncertainties and other factors are beyond our control and are difficult to predict. Any or all of our forward-looking statements in this quarterly report may turn out to be inaccurate. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. New factors could also emerge from time to time that could adversely affect our business. The forward-looking statements herein can be affected by inaccurate assumptions we might make or by known or unknown risks, uncertainties and assumptions, including the risks, uncertainties and assumptions outlined above and described in the 2017 10-K. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this quarterly report may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements. When you consider these forward-looking statements, you should keep in mind these risk factors and other cautionary statements in this quarterly report, including in this “Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in our other annual and periodic reports.

Our forward-looking statements speak only as of the date made. We undertake no obligation to publicly update or revise forward-looking statements whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained in this quarterly report.

Unless the context requires otherwise, references in this Quarterly Report on Form 10-Q to “Luminex,” the “Company,” “we,” “us” and “our” refer to Luminex Corporation and its subsidiaries.

OVERVIEW

We develop, manufacture and sell proprietary biological testing technologies and products with applications throughout the life sciences industries, including diagnostics, pharmaceutical and research. These industries depend on a broad range of tests, called assays, to perform diagnostic testing and conduct life science research. We have established a position in several segments of the life sciences industries by developing and delivering products that satisfy a variety of customer needs in specific market segments, including multiplexing, accuracy, precision, sensitivity, specificity, reduction of labor and ability to test for proteins and nucleic acids. These needs are addressed by our proprietary technologies.

## Table of Contents

Multiplexing, the foundation of our Company, allows the end user in a laboratory to generate multiple laboratory results from a single sample with a single assay. This is important because our end user customers, which include laboratory professionals performing discovery, and research and clinical laboratories performing tests on patients as ordered by physicians and other laboratories, have a fundamental need to perform high quality testing as efficiently as possible. Until the availability of multiplexing technology, laboratory professionals had to perform one assay at a time in a sequential manner, and if additional testing was required on a sample, a second assay would be performed to generate the second result, and so on until all the necessary tests were performed.

### Our xMAP Technology

Our xMAP technology is an open architecture, multiplexing technology that combines existing biological testing techniques with illumination, advanced digital signal processing, detection and proprietary software. With our technology, discrete assays are performed on the surface of color-coded microspheres. These microspheres are read in a compact analyzer that utilizes lasers or light emitting diodes (LEDs), detectors, charge-coupled device imaging and high-speed digital signal processing to simultaneously identify the assay and measure the individual assay results.

Our xMAP technology is currently being used within various segments of the life sciences industries, including the fields of drug discovery and development, and for clinical diagnostics, bio-defense, food safety and biomedical research.

We have a full range of instruments using our xMAP technology: our LUMINEX® 100/200™ Systems offer 100-plex testing; our FLEXMAP 3D® System is our high-throughput, 500-plex testing system; and our MAGPIX® System provides 50-plex testing at a lower cost using imaging rather than flow cytometry. By using our xMAP technology, end users are able to be more efficient by generating multiple simultaneous results per sample. We believe that this technology may also offer advantages in other industries, such as in food safety, animal health and bio-threat markets. Using the xMAP products Luminex has available today, up to 500 simultaneous analyte results can be determined from a single sample.

### Our Non-Automated Technologies

Our xTAG technology consists of several components, including multiplexed polymerase chain reaction (PCR) or target identification primers, DNA Tags, xMAP microspheres and data analysis software. xTAG technology permits the development of molecular diagnostic assays for clinical use by hospital and reference laboratories. xTAG technology has also been applied to human genetic assays, pharmacogenetic assays and infectious disease assays.

Our MultiCode technology is based upon a unique assay chemistry that is a flexible platform for both real-time PCR and multiplex PCR-based applications. MultiCode-based PCR assays are primarily used for the detection of infectious diseases and genetic-based conditions. We have multiple molecular diagnostic (MDx) assays based on MultiCode chemistry. MultiCode products are based upon the unique MultiCode bases, isoC and isoG. The synthetic isoC:isoG DNA base pair differs from the naturally occurring base pairs in its hydrogen bonding pattern. As a result, the MultiCode bases, isoC and isoG, can only pair with each other, but can co-exist with naturally occurring nucleotide pairs. This property enables site-specific incorporation of the isobases during amplification. The MultiCode base pair is recognized by naturally occurring enzymes and can be used for the specific placement of reporter molecules and to increase the molecular recognition capabilities of hybridization-based assays. The MultiCode base pair enables solutions to complex molecular challenges that were previously not possible with natural nucleic acid alone.

We have multiple assay development activities ongoing and these activities are focused on the areas of infectious disease, human genetics, and pharmacogenomics.

Our ARIES® Technology

The ARIES® System is our sample-to-answer platform for our MultiCode®-RTx technology, including In Vitro Diagnostic (IVD) assays. The ARIES® System is a clinical test system which automates and integrates extraction of nucleic acid from a clinical sample, performs real-time PCR, and detects multiple signals generated by target-specific probes. The ARIES® System is used with specific assays to measure multiple analytes indicative of infectious disease. The ARIES® System uses internal barcode scanning and other advanced features to minimize operator errors. Each independent module supports from one to six cassettes, allowing both STAT and batch testing. The ARIES® System can run both IVD and MultiCode® Analyte Specific Reagents (ASRs) simultaneously with a common Universal Assay Protocol.

## Table of Contents

### Our VERIGENE Technology

Our offering in the molecular diagnostic market segment includes proprietary diagnostic tools that enable rapid and accurate detection of respiratory, gastrointestinal and bloodstream infections. Our U.S. Food and Drug Administration (FDA) cleared VERIGENE® Gram-Positive Blood Culture (BC-GP) and Gram-Negative Blood Culture (BC-GN) test panels for the early detection of pathogens associated with bloodstream infections are leading products in the high-growth bloodstream infection testing segment. In addition to detecting bacteria, these panels also detect yeast and identify antibiotic resistance markers. In contrast to traditional methodologies, which can take several days, these assays enable physicians to identify pathogens, including any associated resistance markers, and prescribe the most appropriate antibiotic regimen, all within 2.5 hours after identification of a positive blood culture. The ability for clinicians to make earlier, better informed therapeutic decisions results in improved patient outcomes and lower healthcare costs. Our VERIGENE product offering also includes FDA-cleared products for the detection of gastrointestinal and respiratory infections. These consist of a targeted product for the detection of *C. difficile*, as well as highly multiplexed molecular enteric, blood and respiratory pathogen panels which test for a wide spectrum of microorganisms often associated with these types of infections. With the combination of the ARIES® and VERIGENE platforms, Luminex offers customers automated molecular platforms for both syndromic and targeted molecular diagnostic testing.

The VERIGENE System is an automated multiplex-capable system that rapidly and accurately detects infectious pathogens and drug resistance markers. The VERIGENE System consists of: (i) VERIGENE Test Cartridges, which are single-use, self-contained test units, and (ii) VERIGENE instrumentation, including the VERIGENE Processor SP, which is a modular bench-top analyzer, that combines automated nucleic acid extraction, purification, amplification (if needed), and hybridization in each module, as well as the VERIGENE Reader, which manages sample information and reads results from processed cartridges. Tests that run on the VERIGENE System are primarily designed to identify infections in the bloodstream, respiratory tract, and gastrointestinal tract.

The VERIGENE System utilizes advanced automation and proprietary chemistry to enable rapid sample to result detection of nucleic acid and protein targets. NanoGrid Technology, a unique gold nanoparticle probe chemistry, is the driving force behind all VERIGENE tests, providing a foundation for the VERIGENE System's menu of clinically meaningful diagnostics.

In addition to our menu of infectious disease tests, we are currently developing a next generation VERIGENE System, VERIGENE II, that we expect will deliver an improved user experience. This next generation system is designed to provide a reduced time to result, an improved user interface and a room temperature cartridge, all in a fully automated sample to result system with an optimized footprint. In addition, customers using this system will have the ability to select both individual and groups of targets on assays using Flex pricing. This approach to target selection allows customers to save money by only paying for the targets they wish to see, which will often align with healthcare standard of care guidelines, when available. If these results don't provide a conclusive diagnosis, additional targets that were tested for but not released can immediately be viewed for an incremental charge.

### Our Market Approach

We primarily serve the life sciences industries by marketing products, including our specific testing equipment and assays, to various types of testing laboratories. We have a large base of installed systems that has grown primarily from the following:

• Placements made by customers within our Licensed Technologies Group (LTG) in which customers either:  
• license our xMAP technology and develop products that incorporate our xMAP technology into products that they then sell to end users, or

purchase our proprietary xMAP laboratory instrumentation and our proprietary xMAP microspheres and sell xMAP-based assay products and/or xMAP-based testing services, which run on the xMAP instrumentation, and pay a royalty to us; and

• A direct sales force that focuses on the sale of molecular diagnostic assays that run on our systems.

As of September 30, 2018, Luminex had 73 strategic partners, of which 50 have released commercialized reagent-based products utilizing our technology. Our remaining partners are in various stages of development and commercialization of products that incorporate our technology.

Table of Contents

A primary focus for our growth is the development and sale of molecular diagnostic assays utilizing our proprietary MultiCode® and VERIGENE technologies for use on our installed base of systems. We utilize a direct sales model for sales of these products, which is intended to take advantage of our increasing installed base of instruments. Our assays are primarily focused on multiplexed applications for the human molecular clinical diagnostics market. Our assay products are currently focused on three segments of the molecular diagnostic testing market: human genetics, personalized medicine and infectious diseases.

The following systems and assays are available on the market as of September 30, 2018:

	FDA		CE-IVD MARK	
	Clearance	Commercial Launch	Declaration	Commercial Launch
ARIES® HSV 1&2 Assay	þ	2015 - Q4	þ	2016 - Q1
ARIES® Flu A/B & RSV Assay	þ	2016 - Q2	þ	2016 - Q2
ARIES® Group B Streptococcus (GBS) Assay	þ	2017 - Q1	þ	2016 - Q4
ARIES® Bordetella Assay	þ	2017 - Q2	þ	2017 - Q3
ARIES® Norovirus Assay			þ	2017 - Q2
ARIES® C. Difficile Assay	þ	2017 - Q3	þ	2017 - Q3
ARIES® Group A Strep Assay	þ	2017 - Q4	þ	2017 - Q4
NxTAG® Respiratory Pathogen Panel (RPP)	þ	2016 - Q1	þ	2015 - Q4
VERIGENE® Clostridium Difficile Test (CDF)	þ	2012 - Q4	þ	2013 - Q2
VERIGENE® Enteric Pathogens Test (EP)	þ	2014 - Q4	þ	2015 - Q4
VERIGENE® Respiratory Pathogens Flex Test (RP Flex)	þ	2015 - Q4	þ	2015 - Q2
VERIGENE® Gram-Negative Blood Culture Test (BC-GN)	þ	2014 - Q2	þ	2013 - Q1
VERIGENE® Gram-Positive Blood Culture Test (BC-GP)	þ	2012 - Q4	þ	2012 - Q1
xTAG® CYP2C19 Kit v3	þ	2013 - Q4	þ	2013 - Q4
xTAG® CYP2D6 Kit v3	þ	2011 - Q2	þ	2013 - Q2
xTAG® Cystic Fibrosis (CFTR) 39 Kit v2	þ	2009 - Q4	þ	2012 - Q1
xTAG® Cystic Fibrosis (CFTR) 60 Kit v2	þ	2010 - Q1		
xTAG® Cystic Fibrosis (CFTR) 71 Kit v2			þ	2009 - Q3
xTAG® Gastrointestinal Pathogen Panel (GPP)	þ	2013 - Q1	þ	2011 - Q2
xTAG® Respiratory Viral Panel (RVP)	þ	2008 - Q1	þ	2007 - Q4
xTAG® Respiratory Viral Panel (RVP)			þ	2011 - Q4
FAST v2				

## Third Quarter 2018 Highlights

- Post quarter end, announced the signing of a definitive agreement to acquire the Amnis and Guava Flow cytometry businesses from EMD Millipore Corporation for approximately \$69.9 million in cash at closing and approximately \$5.1 million in obligations to make certain other inventory purchases under ancillary agreements for a period of up to twelve months following closing (both of which are subject to a purchase price reconciliation shortly after closing) for total consideration of approximately \$75 million.

Consolidated revenue was \$72.4 million for the quarter ended September 30, 2018, representing a 2% decrease over revenue for the third quarter of 2017. Revenue growth, excluding LabCorp sales, was up 7% over the prior year quarter.



## Table of Contents

Assay revenue was \$33.7 million for the quarter ended September 30, 2018, representing an 11% decrease over assay revenue for the third quarter of 2017. Excluding the reduction of LabCorp sales, assay revenue increased 6% for the quarter ended September 30, 2018 over the prior year quarter.

• Sample-to-answer assay revenue growth increased by 20% for the quarter ended September 30, 2018 over the third quarter of 2017.

• Royalty revenue was \$12.1 million for the quarter ended September 30, 2018, representing a 10% increase over royalty revenue for the third quarter of 2017.

## Material Customer Activity

As previously stated in our Annual Report on Form 10-K for the year ended December 31, 2017, LabCorp has elected to develop the next iteration of one of its women's health products with another party. We previously negotiated significant minimum women's health purchases from LabCorp, pursuant to which LabCorp committed to acquire no less than \$63.1 million of our women's health products from January 1, 2017 through June 30, 2018. During the quarter ended June 30, 2018, LabCorp met its purchase requirements under that agreement and indicated it will not make further purchases of the women's health products covered by such agreement. However, based on an extension agreement entered into in the third quarter of 2017, the Company will continue to sell its Cystic Fibrosis (CF) products to LabCorp through at least the end of 2019. The loss of the women's health LabCorp business, and the anticipated future loss of other products traditionally sold to LabCorp (which we expect to occur with products other than CF, as discussed above), could have a material adverse effect on our growth and future results of operations.

During 2017, LabCorp represented total revenue of \$61.1 million. That revenue was categorized as follows: women's health - \$36.1 million; CF - \$13.3 million; and all other ancillary products - \$11.7 million. As noted above, LabCorp has met its purchase commitment for women's health products and will no longer be placing material orders for the women's health portfolio. By year-end, the remainder of the women's health products purchased by LabCorp will likely be transitioned to another party. Orders by LabCorp for other ancillary products are expected to continue through at least the end of 2018, with a potential material reduction in 2019. LabCorp orders for our CF products are expected to continue through at least the end of 2019.

## Consumables Sales and Royalty Revenue Trends

We have experienced significant fluctuations in consumable revenue over the past several years. Overall, the fluctuations were partially due to periodic changes in volume from our largest purchasing customers. On a quarterly basis, our largest customers account for approximately 70% of our total consumable sales volume. We expect these fluctuations to continue as the ordering patterns and inventory levels of our largest bulk purchasing partners remain variable. Additionally, even though we experience variability in consumable revenue, the key indicator of the success of our partners' commercialization efforts is the rising level of royalties and reported royalty bearing sales.

## Future Operations

We expect our areas of focus over the next twelve months to be:

- delivering on our revenue growth goals;
- accelerating development and commercialization of the assays on our sample-to-answer diagnostic systems;

• consummating the acquisition of the Amnis and Guava Flow cytometry businesses from EMD Millipore Corporation and effectively integrating such businesses;

• increasing the growth of our LTG revenue through enrichment of our existing partner relationships and the addition of new partners;

• completing development of and commercializing the next generation sample-to-answer system, VERIGENE II and our next generation xMAP System SENSIPLEX;

• improvement of ARIES® and VERIGENE gross margins;

• placements of our VERIGENE and ARIES® Systems, our sample-to-answer platforms and assays;

Table of Contents

• maintenance and improvement of our existing products and the timely development, completion and successful commercial launch of our pipeline products;

• adoption and use of our platforms and consumables by our customers for their testing services;

• expansion and enhancement of our installed base of systems and our market position within our identified target market segments; and

• monitoring and mitigating the effect of the ongoing uncertainty in global finance markets and changes in government funding on planned purchases by end users.

We anticipate continued revenue concentration in our higher margin items (assays, consumables and royalties) contributing to favorable, but variable, gross margin percentages. Additionally, we believe that sustained investment by the Company in research and development is necessary in order to meet the needs of our marketplace and provide a sustainable new product pipeline. We may experience volatility in research and development expenses as a percentage of revenue on a quarterly basis as a result of the timing of development expenses, clinical validation and clinical trials in advance of the commercial launch of our new products.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The discussion and analysis of our financial condition and results of operations are based upon our condensed consolidated financial statements, which have been prepared in accordance with U.S. GAAP for interim financial statements. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that are believed 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. Estimates and assumptions are reviewed periodically. Actual results may differ from these estimates under different assumptions or conditions.

Management believes there have been no significant changes during the quarter ended September 30, 2018 to the items that we disclosed as our critical accounting policies and estimates in Management's Discussion and Analysis of Financial Condition and Results of Operations in the 2017 10-K, with the exception of the adoption of ASU 2014-09 in the first quarter of 2018, which is described in Note 10 - Revenue Recognition.

**RESULTS OF OPERATIONS****THREE MONTHS ENDED SEPTEMBER 30, 2018 COMPARED TO THREE MONTHS ENDED SEPTEMBER 30, 2017**

Selected consolidated financial data for the three months ended September 30, 2018 and 2017 is as follows (dollars in thousands):

	Three Months Ended September 30,		Variance	Variance (%)
	2018	2017		
Revenue	\$72,445	\$74,136	\$(1,691)	(2)%
Gross profit	\$44,256	\$45,819	(1,563)	(3)%
Gross margin percentage	61%	62%	(1)%	N/A
Operating expenses	\$40,502	\$39,290	1,212	3%

Income from operations \$3,754    \$6,529    (2,775 )    (43 )%

Total revenue decreased 2% to \$72.4 million for the three months ended September 30, 2018 from \$74.1 million for the comparable period in 2017. This decrease was primarily driven by a reduction in our non-automated assay revenue, mainly attributable to the decrease in LabCorp sales, and comprised 64% of total assay revenue for the three months ended September 30, 2018 compared to 73% for the comparable period in 2017. This decrease was partially offset by higher royalty revenue and consumable sales in the third quarter 2018, which grew \$1.1 million and \$1.0 million, respectively, as compared to the prior year quarter. Excluding LabCorp sales, total revenue increased 7% for the three months ended September 30, 2018 as compared to the prior year quarter.

Table of Contents

The following table presents our revenues disaggregated by revenue source for the three months ended September 30, 2018 and 2017 (dollars in thousands):

	Three Months Ended September 30,			
	2018	2017	Variance	Variance (%)
System sales	\$10,026	\$9,903	\$123	1 %
Consumable sales	11,627	10,619	1,008	9 %
Royalty revenue	12,081	11,001	1,080	10 %
Assay revenue	33,747	37,917	(4,170 )	(11 )%
Service revenue	3,015	2,894	121	4 %
Other revenue	1,949	1,802	147	8 %
	\$72,445	\$74,136	\$(1,691)	(2 )%

We continue to experience revenue concentration in a limited number of customers. Five customers accounted for 43% (two of whom were 15% and 14%, respectively, and no other customer exceeded 7%) of consolidated total revenue in the third quarter of 2018. For comparative purposes, these top five customers accounted for 48% (two of whom were 14% and 21%, respectively, and no other customer exceeded 6%) of total consolidated revenue in the third quarter of 2017.

Under the new revenue recognition guidance effective January 2018, the system portion of reagent rental revenue is recognized in system revenue. Revenue from the sale of systems and peripheral components increased 1% to \$10.0 million for the three months ended September 30, 2018 from \$9.9 million for the three months ended September 30, 2017. This increase is primarily the result of higher sample-to-answer reagent rental system placements for the quarter ended September 30, 2018, which grew 80% over the comparable period in 2017, and resulted in a \$0.7 million reclassification of revenue from assay to system revenue in the current quarter. This was partially offset by a change in mix of capital sales, with higher placements of LUMINEX 100/200 systems and lower placements of FLEXMAP 3D and sample-to-answer systems, (whose average sales price is higher than the LUMINEX 100/200 systems), for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. We sold 284 multiplexing analyzers in the third quarter of 2018, as compared to 266 multiplexing analyzers for the corresponding prior year period. For the three months ended September 30, 2018, five of our partners accounted for 216 multiplexing analyzers, or 76%, of total multiplexing analyzers sold, as compared to five of our partners accounting for 200 multiplexing analyzers, or 75% of total multiplexing analyzers sold, for the three months ended September 30, 2017.

Consumable sales, comprised of microspheres and sheath fluid, increased 9% to \$11.6 million for the three months ended September 30, 2018 from \$10.6 million for the three months ended September 30, 2017. During the three months ended September 30, 2018, we had 16 bulk purchases of consumables totaling approximately \$8.9 million (77% of total consumable revenue), ranging from \$0.1 million to \$3.1 million, as compared with 15 bulk purchases totaling approximately \$7.7 million (72% of total consumable revenue), ranging from \$0.1 million to \$2.8 million, for the three months ended September 30, 2017. The increase in revenue from bulk purchases in the three months ended September 30, 2018 is the primary reason for the increase in consumable revenue in the third quarter of 2018 from the prior year period. We expect fluctuations in consumable sales on an ongoing basis. Partners who reported royalty bearing sales accounted for \$7.3 million, or 63%, of consumable sales for the three months ended September 30, 2018 compared to \$7.5 million, or 70%, of the total consumable sales for the three months ended September 30, 2017.

Royalty revenue, which results when our partners sell products or testing services incorporating our technology, increased 10% to \$12.1 million for the three months ended September 30, 2018 from \$11.0 million for the three

months ended September 30, 2017. This increase is primarily attributable to an increase in royalty minimums, audit findings and other adjustments of approximately \$1.1 million in the current period. We expect modest fluctuations in the royalties submitted quarter to quarter based upon the varying contractual terms, differing reporting and payment requirements, and the addition of new partners. Our partners' end user sales may reflect volatility from quarter to quarter and, therefore, that same volatility is reflected in our reported royalty revenues on a quarterly basis.

Table of Contents

Assay revenue decreased 11% to \$33.7 million for the three months ended September 30, 2018 from \$37.9 million for the three months ended September 30, 2017, primarily driven by the reduction in LabCorp sales of \$5.6 million from the prior year period. Excluding LabCorp sales, assay revenue increased 6% for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. Our non-automated infectious disease testing assays decreased \$6.2 million in the current period, primarily stemming from the reduction in LabCorp sales. This was partially offset by growth in our sample-to-answer assay revenue, which consists of VERIGENE and ARIES® assay sales. Revenue for our sample-to-answer assays increased by 20%, to \$12.3 million, for the three months ended September 30, 2018 from the third quarter of 2017. Revenue for our non-automated infectious disease testing products decreased by 25%, to \$15.8 million, while our genetic testing assay products decreased by 14%, to \$5.7 million, from the comparable period in 2017. This decrease in genetic testing assay products was attributable to continued pricing and reimbursement challenges within the pharmacogenetic market segment, in addition to declining sales of Cystic Fibrosis assays to LabCorp in the current quarter as compared to the prior year quarter. Our largest customer, by revenue, accounted for 28% of total assay revenue for the three months ended September 30, 2018 compared to 40% for the three months ended September 30, 2017. No other customer accounted for more than 10% of total assay revenue during these periods. As discussed under “Material Customer Activity” and previously disclosed in our prior quarterly reports, our largest assay customer, LabCorp, has developed the next iteration of their women’s health portfolio with another party, which negatively impacted our assay revenue in the third quarter of 2018.

Service revenue, comprised of extended warranty contracts earned ratably over the term of a contract and time and materials for billable service work not under an extended warranty contract, increased 4% to \$3.0 million for the third quarter of 2018 from \$2.9 million for the third quarter of 2017. As of September 30, 2018, we had 2,281 Luminex systems covered under extended service agreements and \$5.4 million in deferred revenue related to these contracts. As of September 30, 2017, we had 1,838 Luminex systems covered under extended service agreements and \$5.0 million in deferred revenue related to these contracts.

Other revenue, which includes training revenue, shipping revenue, miscellaneous part sales and amortized license fees, increased 8% to \$1.9 million for the three months ended September 30, 2018 compared to \$1.8 million for the three months ended September 30, 2017.

Gross Profit. Gross profit decreased to \$44.3 million, or 3%, for the three months ended September 30, 2018, as compared to \$45.8 million for the three months ended September 30, 2017. Gross margin (gross profit as a percentage of total revenue) was 61% for the three months ended September 30, 2018, a decrease from the prior year quarter’s gross margin of 62%. The decrease in gross margin is primarily attributable to the decline in LabCorp’s assay purchases of non-automated infectious disease testing assays, which typically carry a higher gross margin. As discussed above, LabCorp purchases accounted for 28% of total assay revenue for the three months ended September 30, 2018 compared to 40% for the three months ended September 30, 2017. This was partially offset by lower expenses recorded in the current quarter resulting from a revaluation of inventory related to material standard costs, as well as lower warranty expenses, in the three months ended September 30, 2018. We anticipate continued fluctuation in gross margin and related gross profit primarily as a result of variability in revenue mix and seasonality effects inherent in our assay revenue.

Research and Development Expense. Research and development expense increased to \$12.0 million, or 17% of total revenue, for the three months ended September 30, 2018 from \$10.7 million, or 14% of total revenue, for the three months ended September 30, 2017. The increase in research and development expense was primarily driven by higher direct material expenses related to VERIGENE II and ARIES® assay development. Research and development headcount was 195 as of September 30, 2018 as compared to 179 as of September 30, 2017. The focus of our research and development activities is the development and commercialization of a pipeline of assays for the ARIES® Systems and the development and commercialization of the next generation xMAP System, SENSIPLEX, and the next

generation VERIGENE System, VERIGENE II, and related assays.

**Selling, General and Administrative Expense.** Selling, general and administrative expenses, excluding the amortization of acquired intangible assets, was \$26.3 million for the three months ended September 30, 2018, a decrease of \$0.1 million from the three months ended September 30, 2017. Selling, general and administrative headcount as of September 30, 2018 was 368 as compared to 366 as of September 30, 2017. As a percentage of revenue, selling, general and administrative expense, excluding the amortization of acquired intangible assets, was 36% in the third quarters of 2018 and 2017.

**Amortization of Acquired Intangible Assets.** Amortization of acquired intangible assets remained constant at \$2.2 million for the three months ended September 30, 2018 and 2017.

30

---

Table of Contents

Income taxes. Our effective tax rate for the three months ended September 30, 2018 was 54%, or \$2.0 million, compared to a benefit of 170%, or \$11.1 million, for the three months ended September 30, 2017. The 54% rate is impacted primarily by the Tax Act provisions regarding U.S. federal taxation of foreign intangible income and our mix of earnings in the U.S. and Canadian jurisdictions. The prior year benefit was primarily driven by the release of a \$12.4 million valuation allowance against a portion of our Canadian subsidiary's deferred tax assets in the third quarter of 2017. We expect our consolidated full year effective tax rate to be 25% to 30%, absent any other significant discrete items. We continue to assess our business model and its impact in various tax jurisdictions.

#### NINE MONTHS ENDED SEPTEMBER 30, 2018 COMPARED TO NINE MONTHS ENDED SEPTEMBER 30, 2017

Selected consolidated financial data for the nine months ended September 30, 2018 and 2017 is as follows (dollars in thousands):

	Nine Months Ended September 30,		Variance	Variance (%)	
	2018	2017			
Revenue	\$234,685	\$228,372	\$6,313	3	%
Gross profit	\$147,150	\$148,666	(1,516)	(1)	%
Gross margin percentage	63	% 65	(2)	%	N/A
Operating expenses	\$120,272	\$120,643	(371)	—	%
Income from operations	\$26,878	\$28,023	(1,145)	(4)	%

Total revenue increased by 3% to \$234.7 million for the nine months ended September 30, 2018 from \$228.4 million for the comparable period in 2017. The increase was primarily attributable to higher assay, system, and royalty revenue, which was partially offset by a decrease in consumable sales revenue. Excluding LabCorp sales, total revenue increased 5% for the nine months ended September 30, 2018 as compared to the same period in the prior year.

The following table presents our revenues disaggregated by revenue source for the nine months ended September 30, 2018 and 2017 (dollars in thousands):

	Nine Months Ended September 30,		Variance	Variance (%)	
	2018	2017			
System sales	\$29,777	\$28,309	\$1,468	5	%
Consumable sales	34,466	39,314	(4,848)	(12)	%
Royalty revenue	35,887	33,375	2,512	8	%
Assay revenue	119,762	113,077	6,685	6	%
Service revenue	8,934	8,594	340	4	%
Other revenue	5,859	5,703	156	3	%
	\$234,685	\$228,372	\$6,313	3	%

We continue to experience revenue concentration in a limited number of customers. Five customers accounted for 44% (two of whom were 18% and 13%, respectively, and no other customer exceeded 6%) of consolidated total revenue in the nine months ended September 30, 2018. For comparative purposes, these top five customers accounted for 47% (two of whom were 20% and 16%, respectively, and no other customer exceeded 6%) of total consolidated revenue in the nine months ended September 30, 2017.



Table of Contents

Under the new revenue recognition guidance adopted January 2018, the system portion of our reagent rental revenue is recognized in system revenue. Revenue from the sale of systems and peripheral components increased 5% to \$29.8 million for the nine months ended September 30, 2018 from \$28.3 million for the nine months ended September 30, 2017. This increase is primarily the result of higher sample-to-answer reagent rental system placements for the nine months ended September 30, 2018, which nearly tripled in the number of placements as compared to the prior year, and resulted in a \$1.7 million reclassification of revenue from assay to system revenue in the current year under the new revenue recognition guidance. This was partially offset by a change in mix of capital sales, with greater placements of LUMINEX 100/200 systems and fewer placements of FLEXMAP 3D and MAGPIX systems, whose average sales price is higher than the LUMINEX 100/200 systems. We sold 863 multiplexing analyzers in the nine months ended September 30, 2018, as compared to 778 multiplexing analyzers sold for the corresponding prior year period. For the nine months ended September 30, 2018, five of our partners accounted for 669, or 78%, of total multiplexing analyzers sold. Five of our partners accounted for 588, or 76%, of total multiplexing analyzers sold for the nine months ended September 30, 2017.

Consumable sales decreased 12% to \$34.5 million for the nine months ended September 30, 2018 compared to \$39.3 million for the nine months ended September 30, 2017. We had 50 bulk purchases of consumables totaling approximately \$25.8 million (75% of total consumable revenue), ranging from \$0.1 million to \$3.8 million, during the nine months ended September 30, 2018, as compared with 50 bulk purchases totaling approximately \$30.4 million (79% of total consumable revenue), ranging from \$0.1 million to \$6.4 million, for the nine months ended September 30, 2017. The decrease in revenue from bulk purchases in the nine months ended September 30, 2018 is the primary reason for the decrease in consumable revenue from the prior year period. We expect fluctuations in consumable sales on an ongoing basis. Partners who reported royalty bearing sales accounted for \$23.0 million, or 67%, of consumable sales for the nine months ended September 30, 2018 compared to \$28.2 million, or 72%, of total consumable sales for the nine months ended September 30, 2017.

Royalty revenue increased 8% to \$35.9 million for the nine months ended September 30, 2018 from \$33.4 million for the nine months ended September 30, 2017, primarily attributable to an increase in royalty minimums, audit findings and other adjustments of \$1.5 million and higher base royalties of approximately \$1.0 million. We expect modest fluctuations in the royalties submitted quarter to quarter based upon the varying contractual terms, differing reporting and payment requirements, and the addition of new partners. Our partners' end user sales may reflect volatility from quarter to quarter and, therefore, that same volatility is reflected in our reported royalty revenues on a quarterly basis.

Assay revenue increased 6% to \$119.8 million for the nine months ended September 30, 2018 from \$113.1 million for the nine months ended September 30, 2017, driven primarily by an increase in our sample-to-answer assay revenue, which consists of VERIGENE and ARIES<sup>®</sup> assay sales, partially offset by decreases in our non-automated genetic testing assays. Revenue for our sample-to-answer products increased by 35% for the nine months ended September 30, 2018 from the comparable period in 2017. Revenue for our non-automated infectious disease testing products increased by 1%, while absorbing a \$1.8 million reduction in LabCorp sales of infectious disease testing assays, for the nine months ended September 30, 2018 from the comparable period in 2017. Our genetic testing assay products decreased by 20% for the nine months ended September 30, 2018 from the nine months ended September 30, 2017. The decrease in genetic testing assay products was attributable to continued pricing and reimbursement challenges within the pharmacogenetic market segment, in addition to declining sales of Cystic Fibrosis assays from LabCorp for the nine months ended September 30, 2018 from the comparable period in 2017. Our largest customer, by revenue, accounted for 34% of total assay revenue for the nine months ended September 30, 2018 compared to 38% for the comparable period in 2017. No other customer accounted for more than 10% of total assay revenue during those periods. As discussed under "Material Customer Activity" and previously disclosed in our prior quarterly reports, our largest assay customer, LabCorp, has developed the next iteration of their women's health portfolio with another party, which negatively impacted our assay revenue in the third quarter of 2018. Excluding

LabCorp sales, assay revenue increased 13% for the nine months ended September 30, 2018 as compared to the same period in the prior year.

Service revenue, comprised of extended warranty contracts earned ratably over the term of a contract and time and materials for billable service work not under an extended warranty contract, increased 4% to \$8.9 million, primarily driven by the increase in the numbers of systems covered under extended service agreements, for the nine months ended September 30, 2018 compared to \$8.6 million for the nine months ended September 30, 2017.

Other revenue, which includes training revenue, shipping revenue, miscellaneous part sales and amortized license fees, increased 3% to \$5.9 million for the nine months ended September 30, 2018 compared to \$5.7 million for the nine months ended September 30, 2017.

Table of Contents

**Gross Profit.** Gross profit decreased to \$147.2 million for the nine months ended September 30, 2018, as compared to \$148.7 million for the nine months ended September 30, 2017. Gross margin (gross profit as a percentage of total revenue) was 63% for the nine months ended September 30, 2018, a decrease of two percentage points from the nine months ended September 30, 2017. This decrease in gross margin was attributable to: (i) lower expenses recorded in the prior year resulting from inventory adjustments related to a change in manufacturing standards which did not repeat in the current year, (ii) a change in product sales mix between higher versus lower margin items, with lower sales of consumables and higher sales of systems and sample-to-answer assays, which carry lower margins, and (iii) absorption of higher manufacturing overhead expenses for the nine months ended September 30, 2018. We anticipate continued fluctuation in gross margin and related gross profit primarily as a result of variability in consumable and system purchases and seasonality effects inherent in our assay revenue.

**Research and Development Expense.** Research and development expense decreased to \$34.0 million, or 14% of total revenue, for the nine months ended September 30, 2018 from \$35.4 million, or 15% of total revenue, for the nine months ended September 30, 2017. The decrease in research and development expense was mainly attributable to lower outside service expenses related to VERIGENE II and ARIES<sup>®</sup> assay development, in addition to lower personnel costs, primarily related to variable compensation and stock compensation expense. Research and development headcount was 195 as of September 30, 2018 as compared to 179 as of September 30, 2017. The focus of our research and development activities is the development and commercialization of a pipeline of assays for the ARIES<sup>®</sup> System, the development and commercialization of the next generation xMAP System, SENSIPLEX and the next generation VERIGENE System, VERIGENE II, and related assays.

**Selling, General and Administrative Expense.** Selling, general and administrative expenses, excluding the amortization of acquired intangible assets, increased to \$79.8 million for the nine months ended September 30, 2018 from \$78.6 million for the nine months ended September 30, 2017. The increase was primarily driven by higher marketing and material expenses related to customer evaluations, in addition to higher outside service and legal expenses. Selling, general and administrative headcount as of September 30, 2018 was 368 as compared to 366 as of September 30, 2017. As a percentage of revenue, selling, general and administrative expense, excluding the amortization of acquired intangible assets, was 34% in the first nine months of 2018 and 2017.

**Amortization of Acquired Intangible Assets.** Amortization of acquired intangible assets decreased to \$6.5 million for the nine months ended September 30, 2018 from \$6.7 million for the nine months ended September 30, 2017.

**Income taxes.** Our effective tax rate for the nine months ended September 30, 2018 was 24%, reflecting a \$6.5 million expense, as compared to a benefit of 16%, or a \$4.4 million benefit, for the nine months ended September 30, 2017. The 24% rate includes a \$2.5 million discrete benefit item from the first quarter of 2018, related to a change in our provisional estimate of deferred tax liability for withholding tax on certain amounts of undistributed earnings of our Canadian subsidiary. The 24% rate also includes a \$1.3 million discrete tax expense item from the second quarter of 2018, primarily related to the results of a Canadian income tax audit. We expect our consolidated full year effective tax rate to be 25% to 30%, absent any other significant discrete items. We continue to assess our business model and its impact in various tax jurisdictions.

Table of Contents

## LIQUIDITY AND CAPITAL RESOURCES

	September 30,	December 31,
	2018	2017
	(in thousands)	
Cash and cash equivalents	\$ 146,894	\$ 127,112

As of September 30, 2018, we held cash and cash equivalents of \$146.9 million and had working capital of \$217.3 million. At December 31, 2017, we held cash and cash equivalents of \$127.1 million and had working capital of \$179.4 million. The \$19.8 million increase in cash and cash equivalents is primarily attributable to an increase in operating cash flows of the Company of \$46.6 million for the nine months ended September 30, 2018 driven primarily by net income of \$20.8 million. These operating cash flows were partially offset by capital expenditures of \$14.3 million, purchases of content licenses of \$4.0 million and dividends paid of \$8.0 million.

Cash provided by operations was \$46.6 million for the nine months ended September 30, 2018. Cash used in investing and financing activities was \$21.0 million and \$6.0 million, respectively, for the nine months ended September 30, 2018.

We have funded our operations to date primarily through cash generated from operations and the issuance of equity securities (in conjunction with an initial public offering in 2000, subsequent option exercises, and our secondary public offering in 2008). Our cash reserves are typically held directly or indirectly in a variety of short-term, interest-bearing instruments, including non-government sponsored debt securities. We do not have any investments in asset-backed commercial paper, auction rate securities, or mortgage backed or sub-prime style investments.

Our future capital requirements will depend on a number of factors, including our success in developing and expanding markets for our products, payments under possible future strategic arrangements, continued progress of our research and development of potential products, the timing and outcome of regulatory approvals, the need to acquire licenses to new technology, costs associated with strategic acquisitions including integration costs and assumed liabilities, the status of competitive products and potential costs associated with both protecting and defending our intellectual property. Additionally, actions taken as a result of ongoing internal evaluations of our business could result in expenditures not currently contemplated in our estimates for 2018. We anticipate that approximately \$70 million of our cash on hand will be utilized by the end of 2018 related to the anticipated completion of the acquisition of the Amnis and Guava Flow cytometry businesses from EMD Millipore Corporation. Additional cash will be required for approximately \$5.1 million in obligations to make certain other inventory purchases under ancillary agreements with EMD Millipore Corporation in 2019. This, coupled with the loss of LabCorp women's health revenue stream, will result in a significant reduction in cash flow generation compared to previous quarters.

Our short-term projects that are expected to require significant capital to complete are development of the next generation xMAP System, SENSIPLEX, and our current in-process research and development of the next generation VERIGENE System, VERIGENE II, on which we began clinical trials in May 2018. We believe SENSIPLEX and VERIGENE II will launch commercially in 2020 and 2019, respectively. The estimated aggregate cost to complete these projects, including completion of development of the systems, cartridge, software and the initial assay, validation, verification, clinical trials and regulatory submission, is approximately \$4.5 million and is included in our research and development budget for 2018, 2019 and 2020. We believe that our existing cash and cash equivalents are sufficient to fund our operating expenses, capital equipment requirements and other expected liquidity requirements for the coming twelve months. Factors that could affect our capital requirements, in addition to those listed above, include, without limitation: (i) continued collections of accounts receivable consistent with our historical experience; (ii) our ability to manage our inventory levels consistent with past practices; (iii) volatility in our key partners' consumable purchasing patterns; (iv) execution of partnership agreements that include significant up-front license fees; (v) execution of our stock repurchase and dividend programs from time to time and

(vi) executing strategic investment or acquisition agreements requiring significant cash consideration. See also the "Safe Harbor Cautionary Statement" of this report and the risk factors in the 2017 10-K and our other filings with the SEC.

In February 2017, the Board of Directors initiated a cash dividend program under which the Company currently intends to pay a regular quarterly cash dividend. The timing and amount of future dividends and stock repurchases will vary based on a number of factors, including future capital requirements for strategic transactions, the availability of financing on acceptable terms, debt service requirements, changes to applicable tax laws or corporate laws, changes to our business model and periodic determination by our Board of Directors that cash dividends are in the best interests of stockholders and are in compliance with applicable laws and agreements of the Company. In each of the first three quarters of 2018, our Board declared a quarterly cash dividend of \$0.06 per share of common stock. These dividends were paid on April 13, 2018, July 13, 2018 and October 12, 2018.

## Table of Contents

As previously disclosed, the Company's largest customer, LabCorp, informed us that they have elected to develop the next iteration of one of their women's health products with another party. We previously negotiated significant minimum women's health purchases through June 2018, pursuant to which LabCorp committed to acquire no less than \$63.1 million of our women's health products from January 1, 2017 through June 30, 2018. LabCorp has met such purchase requirements and has indicated it will not make further purchases of the women's health products covered by such agreement, the primary effect of which was reflected in the third quarter of 2018 as LabCorp's total purchases declined following the end of the contracted commitments on June 30, 2018. However, based upon an extension agreement entered into in the third quarter of 2017, the Company will continue to sell its CF products to LabCorp through the end of 2019. CF product sales to LabCorp will represent approximately \$10 million in annual revenue.

During 2017, LabCorp represented total revenue of \$61.1 million. That revenue was categorized as follows: women's health - \$36.1 million; CF - \$13.3 million; and all other ancillary products - \$11.7 million. By year-end, the remainder of the women's health products will likely be transitioned to another party. Orders by LabCorp for other ancillary products are expected to continue through at least the end of 2018, with a potential material reduction in 2019. LabCorp orders for our CF products are expected to continue through at least the end of 2019.

We hold cash and cash equivalents at various foreign subsidiaries. As a result of reductions to the U.S. taxation of dividends from foreign subsidiaries under the Tax Act and increased profitability of our Canadian subsidiary, beginning this year we anticipate repatriating earnings of our Canadian subsidiary. The cash and cash equivalents held by this subsidiary are more readily available to meet domestic cash requirements beginning this year, but will continue to be subject to foreign withholding tax that would be incurred upon repatriation. We anticipate that cash and cash equivalents held by all other foreign subsidiaries will continue to be permanently reinvested and may not be readily available to meet domestic cash requirements.

To the extent our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds to continue the development and deployment of our technologies, or to supplement our position through strategic acquisitions. There can be no assurance that debt or equity funds will be available on favorable terms, if at all. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of those securities could result in dilution to our stockholders. Moreover, incurring debt financing could result in a substantial portion of our operating cash flow being dedicated to the payment of principal and interest on such indebtedness, could render us more vulnerable to competitive pressures and economic downturns and could impose restrictions on our operations. If adequate funds are not available, we may be required to curtail operations significantly or to obtain funds through entering into agreements on unattractive terms.

### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

**Interest Rate Risk.** Our interest income is sensitive to changes in the general level of domestic interest rates, particularly since our investments are in short-term instruments available-for-sale. A 50 basis point fluctuation from average investment returns as of September 30, 2018 would yield a less than 0.5% variance in overall investment return, which would not have a material effect on our financial condition.

**Foreign Currency Risk.** Our international business is subject to risks, including, but not limited to: foreign exchange rate volatility, differing tax structures, unique economic conditions, other regulations and restrictions, and changes in political climate. Accordingly, our future results could be materially adversely impacted by changes in these and other factors.

As of September 30, 2018, as a result of our foreign operations, we have costs, assets and liabilities that are denominated in foreign currencies, primarily Canadian dollars and to a lesser extent the Euro, Renminbi, Hong Kong dollar and Yen. For example, some fixed asset purchases and certain expenses in our Canadian subsidiary are

denominated in Canadian dollars while sales of products are primarily denominated in U.S. dollars. Transactions in our Netherlands, Japanese and Hong Kong subsidiaries are primarily denominated in Euros, Yen and Hong Kong dollars, respectively. The majority of transactions, with the exception of our initial capital investment, in our Chinese subsidiary are denominated in Renminbi. As a consequence, movements in exchange rates could cause our foreign currency denominated expenses to fluctuate as a percentage of net revenue, affecting our profitability and cash flows. A significant majority of our revenues are denominated in U.S. dollars. The impact of foreign exchange rates on foreign denominated balances will vary in relation to changes between the U.S. dollar, Canadian dollar, Euro, Yen, Renminbi and Hong Kong dollar exchange rates. A 10% change in these exchange rates in relation to the U.S. dollar would result in an income statement impact of approximately \$1.3 million on foreign currency denominated asset and liability balances as of September 30, 2018. As a result of our efforts to expand globally, in the future we will be exposed to additional foreign currency risk in multiple currencies; however, at this time, our exposure to foreign currency fluctuations is not material. We regularly assess the market to determine if additional strategies are appropriate to mitigate future risks.

## Table of Contents

In addition, the indirect effect of fluctuations in interest rates and foreign currency exchange rates could have a material adverse effect on our business, financial condition and results of operations. For example, currency exchange rate fluctuations could affect international demand for our products. In addition, interest rate fluctuations could affect our customers' buying patterns. Furthermore, interest rate and currency exchange rate fluctuations may broadly influence the United States and foreign economies, resulting in a material adverse effect on our business, financial condition and results of operations. As a result, we cannot give any assurance as to the effect that future changes in foreign currency rates will have on our consolidated financial position, results of operations or cash flows. Our aggregate foreign currency transaction loss of approximately \$92,000 was included in determining our consolidated results for the quarter ended September 30, 2018.

### ITEM 4. CONTROLS AND PROCEDURES

#### Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (Exchange Act), which are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. We carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of the end of the period covered by this quarterly report. Based on the evaluation and criteria of these disclosure controls and procedures, our Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective at a reasonable assurance level and designed to ensure that material information relating to the Company and its subsidiaries would be made known to such officers on a timely basis.

#### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Exchange Act Rule 13a-15(d) during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## PART II. OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

In the normal course of business, the Company is subject to claims, lawsuits and legal proceedings. When and if it appears probable in management's judgment, and based upon consultation with outside counsel, that we will incur monetary damages or other costs in connection with any claims or proceedings, and such costs can be reasonably estimated, we record the estimated liability in the financial statements. If only a range of estimated losses can be estimated, we record an amount within the range that, in management's judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, we record the liability at the low end of the range of estimates. Any such accrual would be charged to expense in the appropriate period. We disclose significant contingencies when the loss is not probable and/or the amount of the loss is not estimable, when we believe there is at least a reasonable possibility that a loss has been incurred. We recognize costs associated with legal proceedings in the period in which the services were provided.

ITEM 1A. RISK FACTORS

Reference is made to the factors set forth under the caption “Safe Harbor Cautionary Statement” in Part I, Item 2 of this report and other risk factors described in Part I, Item 1A of the 2017 10-K, which are incorporated herein by reference. There have been no material changes from the risk factors previously disclosed in the 2017 10-K.

36

---

Table of Contents

## ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The stock repurchase activity for the third quarter of 2018 was as follows:

## ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
7/1/18 - 7/31/18	88	\$ 29.47	—	\$ —
8/1/18 - 8/31/18	142	34.57	—	—
9/1/18 - 9/30/18	260	29.05	—	—
Total Third Quarter	490	\$ 30.72	—	\$ —

(1) Total shares purchased are attributable to the withholding of shares by Luminex to satisfy the payment of tax obligations related to the vesting of restricted shares.

## ITEM 6. EXHIBITS

The following exhibits are filed herewith:

Exhibit

Number Description of Documents

- 10.1 First Amendment to Lease Agreement between PS Business Parks, L.P., as Landlord, and Luminex Corporation, as Tenant, dated March 10, 2017.
- 10.2 Second Amendment to Lease Agreement between PS Business Parks, L.P., as Landlord, and Luminex Corporation, as Tenant, dated July 23, 2018.
- 31.1 Certification by CEO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 31.2 Certification by CFO pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
- 32.1 Certification by CEO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 32.2 Certification by CFO pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

- 101 The following materials from Luminex Corporation's Quarterly Report on Form 10-Q for the three and nine months ended September 30, 2018, formatted in XBRL: (i) Condensed Consolidated Balance Sheets; (ii) Condensed Consolidated Statements of Comprehensive Income; (iii) Condensed Consolidated Statement of Cash Flows; and (iv) Notes to Condensed Consolidated Financial Statements.



Table of Contents

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.

Date: November 6, 2018  
LUMINEX CORPORATION

By: /s/ Harriss T. Currie  
Harriss T. Currie  
Chief Financial Officer, Senior Vice President of Finance  
(Principal Financial Officer)