LUNA INNOVATIONS INC
Form 10-Q
August 14, 2014
Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

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

For the quarterly period ended June 30, 2014

OR

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

For the transition period from to

COMMISSION FILE NUMBER 000-52008

LUNA INNOVATIONS INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware	54-1560050
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)

One Riverside Circle, Suite 400
Roanoke, VA 24016
(Address of Principal Executive Offices)
(540) 769-8400
(Registrant's Telephone Number, Including Area Code)
(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. ý Yes ¨ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ý Yes ¨ No

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

Large accelerated filer o	Accelerated filer o
Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company ý

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

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. ý Yes ¨ No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date: As of July 31, 2014, there were 15,003,181 shares of the registrant's common stock outstanding.

Table of Contents

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, including the sections entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Quantitative and Qualitative Disclosures About Market Risk” under Items 2 and 3, respectively, of Part I of this report, and the section entitled “Risk Factors” under Item 1A of Part II of this report, may contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended. All statements other than statements of historical fact are “forward-looking statements” for purposes of these statutes, including those relating to future events or our future financial performance. In some cases, you can identify these forward looking statements by words such as “intends,” “will,” “plans,” “anticipates,” “expects,” “may,” “might,” “estimates,” “believes,” “should,” “projects “potential” or “continue,” or the negative of those words and other comparable words, and other words or terms of similar meaning in connection with any discussion of future operating or financial performance. Similarly, statements that describe our , business strategy, goals, prospects, opportunities, outlook, objectives, plans or intentions are also forward-looking statements. These statements are only predictions and may relate to, but are not limited to, expectations of future operating results or financial performance, capital expenditures, introduction of new products, regulatory compliance and plans for growth and future operations, as well as assumptions relating to the foregoing. These statements are based on current expectations and assumptions regarding future events and business performance and involve known and unknown risks, uncertainties and other factors that may cause actual events or results to be materially different from any future events or results expressed or implied by these statements. These factors include those set forth in the following discussion and within Item 1A “Risk Factors” of this Quarterly Report on Form 10-Q and elsewhere within this report.

You should not place undue reliance on these forward-looking statements, which apply only as of the date of this Quarterly Report on Form 10-Q. You should carefully review the risk factors described in other documents that we file from time to time with the U.S. Securities and Exchange Commission, or the SEC. Except as required by applicable law, including the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements, whether as a result of any new information, future events or otherwise, other than through the filing of periodic reports in accordance with the Securities Exchange Act of 1934, as amended.

Table of Contents

LUNA INNOVATIONS INCORPORATED
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED JUNE 30, 2014
TABLE OF CONTENTS

Table of Contents

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Luna Innovations Incorporated
Consolidated Balance Sheets

	June 30, 2014 (unaudited)	December 31, 2013
Assets		
Current assets:		
Cash and cash equivalents	$14,674,973	$7,778,541
Accounts receivable, net	5,481,642	5,408,281
Inventory, net	3,314,608	3,346,177
Prepaid expenses	582,934	708,974
Other current assets	70,207	70,208
Total current assets	24,124,364	17,312,181
Property and equipment, net	1,939,607	2,060,709
Intangible assets, net	188,816	288,475
Other assets	5,126	42,710
Total assets	$26,257,913	$19,704,075
Liabilities and stockholders' equity		
Liabilities:		
Current Liabilities:		
Current portion of long-term debt obligation	$1,375,000	$1,500,000
Current portion of capital lease obligation	68,640	66,617
Accounts payable	1,520,093	1,401,764
Accrued liabilities	2,781,931	3,546,585
Deferred credits	391,712	691,424
Total current liabilities	6,137,376	7,206,390
Long-term debt obligation	—	625,000
Long-term lease obligation	75,474	110,307
Total liabilities	6,212,850	7,941,697
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, par value $ 0.001, 1,321,514 shares authorized, issued and outstanding at June 30, 2014 and December 31, 2013	1,322	1,322
Common stock, par value $ 0.001, 100,000,000 shares authorized, 15,003,901 and 14,527,335 shares issued at June 30, 2014 and December 31, 2013, respectively	15,299	14,842
Less treasury stock at cost, 22,725 shares at June 30, 2014 and zero at December 31, 2013	(32,221)	—
Additional paid-in capital	63,503,505	62,756,571
Accumulated deficit	(43,442,842)	(51,010,357)
Total stockholders' equity	20,045,063	11,762,378
Total liabilities and stockholders' equity	$26,257,913	$19,704,075

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

Luna Innovations Incorporated
Consolidated Statements of Operations

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014 (unaudited)	2013	2014 (unaudited)	2013
Revenues:				
Technology development revenues	$3,219,435	$2,807,296	$5,894,887	$5,434,537
Products and licensing revenues	2,008,862	2,023,668	3,805,291	3,501,795
Total revenues	5,228,297	4,830,964	9,700,178	8,936,332
Cost of revenues:				
Technology development costs	2,388,801	2,209,158	4,413,956	4,394,072
Products and licensing costs	851,490	844,441	1,746,130	1,583,130
Total cost of revenues	3,240,291	3,053,599	6,160,086	5,977,202
Gross Profit	1,988,006	1,777,365	3,540,092	2,959,130
Operating expense:				
Selling, general and administrative	2,466,626	2,875,461	5,221,704	5,538,569
Research, development and engineering	484,509	641,790	1,233,663	1,401,781
Total operating expense	2,951,135	3,517,251	6,455,367	6,940,350
Operating loss	(963,129)	(1,739,886)	(2,915,275)	(3,981,220)
Other income/(expense):				
Other income, net	29,325	94,990	111,431	193,144
Interest expense	(27,302)	(49,781)	(59,667)	(107,960)
Total other income	2,023	45,209	51,764	85,184
Loss from continuing operations before income taxes	(961,106)	(1,694,677)	(2,863,511)	(3,896,036)
Income tax benefit	(375,983)	(659,341)	(1,145,173)	(1,541,768)
Net loss from continuing operations	(585,123)	(1,035,336)	(1,718,338)	(2,354,268)
Operating income/(loss) from discontinued operations, net of $0.0, $0.3 million, $0.0 million and $0.3 million related income tax, respectively	—	447,592	(28,076)	505,624
(Loss)/gain on sale, net of $0.4 million, $0.3 million, $1.3 million and $1.3 million of related income taxes, respectively	(330,716)	(364,338)	9,370,799	3,682,159
(Loss)/income from discontinued operations, net of income taxes	(330,716)	83,254	9,342,723	4,187,783
Net (loss)/income	(915,839)	(952,082)	7,624,385	1,833,515
Preferred stock dividend	27,334	26,366	56,870	49,995
Net (loss)/income attributable to common stockholders	$(943,173)	$(978,448)	$7,567,515	$1,783,520
Net loss per share from continuing operations:				
Basic	$(0.04)	$(0.07)	$(0.12)	$(0.17)
Diluted	$(0.04)	$(0.07)	$(0.12)	$(0.17)
Net (loss)/income per share from discontinued operations:				
Basic	$(0.02)	$0.01	$0.63	$0.29
Diluted	$(0.02)	$—	$0.54	$0.25
Net (loss)/income per share attributable to common stockholders:				
Basic	$(0.06)	$(0.07)	$0.51	$0.13
Diluted	$(0.06)	$(0.07)	$0.44	$0.11
Weighted average common shares and common equivalent shares outstanding:				

Basic	14,817,084	14,362,494	14,722,474	14,206,598
Diluted	14,817,084	16,723,796	17,201,639	16,558,246

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

Luna Innovations Incorporated
Consolidated Statements of Cash Flows

	Six Months Ended June 30,	
	2014	2013
	(unaudited)	
Cash flows used in operating activities		
Net income	$7,624,385	$1,833,515
Adjustments to reconcile net income to net cash used in operating activities		
Depreciation and amortization	336,564	489,244
Share-based compensation	488,593	618,084
Gain on sale of discontinued operations, net of income taxes	(9,370,799)	(3,682,159)
Bad debt expense	—	124,810
Tax benefit from utilization of loss from current year operations	(1,163,301)	(1,207,493)
Change in assets and liabilities:		
Accounts receivable	(73,857)	834,122
Inventory	(6,796)	(309,217)
Other current assets	72,141	(40,647)
Other assets	37,584	72,584
Accounts payable and accrued expenses	(761,149)	174,916
Deferred credits	(299,712)	(221,553)
Net cash used in operating activities	(3,116,347)	(1,313,794)
Cash flows provided by investing activities		
Acquisition of property and equipment	(135,136)	(69,108)
Intangible property costs	(138,118)	(145,858)
Proceeds from sale of discontinued operations, net of fees	10,927,268	4,522,460
Net cash provided by investing activities	10,654,014	4,307,494
Cash flows used in financing activities		
Payments on capital lease obligations	(32,810)	(26,641)
Payment of debt obligations	(750,000)	(625,000)
Purchase of treasury stock	(32,221)	—
Proceeds from the exercise of options and warrants	173,796	60,349
Net cash used in financing activities	(641,235)	(591,292)
Net increase in cash and cash equivalents	6,896,432	2,402,408
Cash and cash equivalents—beginning of period	7,778,541	6,340,461
Cash and cash equivalents—end of period	$14,674,973	$8,742,869
Supplemental disclosure of cash flow information		
Cash paid for interest	$54,688	$84,917
Dividend on preferred stock, 39,646 shares of common stock issuable for the quarter ended June 30, 2014 and 2013	$56,870	$49,995
Cash paid for income taxes	$—	$14,010

The accompanying notes are an integral part of these consolidated financial statements.

Table of Contents

Luna Innovations Incorporated
Notes to Unaudited Consolidated Financial Statements

1. Basis of Presentation and Significant Accounting Policies

Nature of Operations

Luna Innovations Incorporated ("we," "Luna Innovations" or the "Company") is incorporated in the State of Delaware and headquartered in Roanoke, Virginia. We develop, manufacture and market fiber optic sensing, test and measurement products and are focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications and defense industries. We are organized into two main groups, which work closely together to turn ideas into products: our Technology Development segment and our Products and Licensing segment. Our business model is designed to accelerate the process of bringing new and innovative technologies to market. We have a history of net losses from continuing operations from 2005 through the six months ended June 30, 2014. We have historically managed our liquidity through cost reduction initiatives, debt financings and capital market transactions.

Since the second half of 2008, the increased turmoil in the U.S. and global capital markets and a global slowdown of economic growth created a substantially more difficult business environment. Our ability to access the capital markets may be limited. Economic and market conditions may not improve significantly during the remainder of 2014 and could get worse.

Although there can be no guarantees, we believe that our current cash balance will provide adequate liquidity for us to meet our working capital needs over the next twelve months.

Unaudited Interim Financial Information

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United Stated of America ("U.S. GAAP") and with the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities Exchange Act of 1934. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for annual financial statements. The unaudited consolidated financial statements have been prepared on the same basis as the annual financial statements and in the opinion of management reflect all adjustments, consisting of only normal recurring accruals considered necessary to present fairly our financial position at June 30, 2014, results of operations for the three and six months ended June 30, 2014 and 2013, and cash flows for the six months ended June 30, 2014 and 2013. The results of operations for the three and six months ended June 30, 2014 are not necessarily indicative of the results that may be expected for the year ending December 31, 2014.

The consolidated interim financial statements, including our significant accounting policies, should be read in conjunction with the audited Consolidated Financial Statements and the notes thereto for the year ended December 31, 2013, included in the Company's Annual Report on Form 10-K as filed with the Securities and Exchange Commission on April 10, 2014 and amended on April 15, 2014.

Consolidation Policy

Our consolidated financial statements are prepared in accordance with U.S. GAAP and include the accounts of the Company and our wholly owned subsidiaries. We eliminate from our financial results all significant intercompany transactions. We do not have any investments in entities we believe are variable interest entities for which we are the primary beneficiary.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market in an orderly transaction between marketplace participants. Various valuation approaches can be used to determine fair value, each requiring different valuation inputs. The following hierarchy classifies the inputs used to determine fair value into three levels:

- Level 1—Quoted prices for identical instruments in active markets
- Level 2—Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs and significant value drivers

are observable in active markets

- Level 3—Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable

Table of Contents

The carrying values of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short-term nature of these instruments. The carrying value of our debt approximates fair value, as we consider the floating interest rate on our credit facilities with Silicon Valley Bank to be at market. Certain nonfinancial assets and liabilities are measured at fair value on a nonrecurring basis in accordance with U.S. GAAP. This includes items such as nonfinancial assets and liabilities initially measured at fair value in a business combination and nonfinancial long-lived asset groups measured at fair value for an impairment assessment. In general, nonfinancial assets including intangible assets and property and equipment are measured at fair value when there is an indication of impairment and are recorded at fair value only when any impairment is recognized.

Use of Estimates

The preparation of our consolidated financial statements in accordance with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements and accompanying notes. Although these estimates are based on our knowledge of current events and actions we may undertake in the future, actual results may differ from such estimates and assumptions.

Earnings Per Share

	Net loss per share from continuing operations				Net income attributable to common stockholders per share			
	For the three months ended June 30,		For the six months ended June 30,		For the three months ended June 30,		For the six months ended June 30,	
	2014	2013	2014	2013	2014	2013	2014	2013
Numerator:								
Net loss from continuing operations	$(585,123)	$(1,035,336)	$(1,718,338)	$(2,354,268)				
Net (loss)/income attributable to stockholders					$(943,173)	$(978,448)	$7,567,515	$1,783,520
Denominator:								
Basic weighted average common shares outstanding	14,817,084	14,362,494	14,722,474	14,206,598	14,817,084	14,362,494	14,724,955	14,206,598
Weighted average common stock equivalents from assumed exercise of stock options and restricted stock awards	—	—	—	—	—	—	813,391	831,124
Convertible preferred stock	—	—	—	—	—	—	1,321,514	1,321,514
Preferred stock dividends	—	—	—	—	—	—	344,260	264,968
Diluted weighted average common shares outstanding	14,817,084	14,362,494	14,722,474	14,206,598	14,817,084	14,362,494	17,204,120	16,624,204

Basic net loss per share from continuing operations	$(0.04)	$(0.07)	$(0.12)	$(0.17)				
Diluted net loss per share from continuing operations	$(0.04)	$(0.07)	$(0.12)	$(0.17)				
Basic net income per share attributable to common stockholders					$(0.06)	$(0.07)	$0.51	$0.13
Diluted net income per share attributable to common stockholders					$(0.06)	$(0.07)	$0.44	$0.11
Weighted-average anti-dilutive shares related to:								
Outstanding stock options	5,558,936	4,277,948	5,558,936	4,277,948	5,558,936	4,277,948	3,673,729	4,277,948
Convertible preferred stock	1,321,514	1,321,514	1,321,514	1,321,514	1,321,514	1,321,514	—	—
Preferred stock dividends	354,171	274,879	344,260	264,968	354,171	274,879	—	—
Restricted stock	272,631	201,106	270,737	199,010	272,631	201,106	—	—
Carilion warrants	366,000	366,000	366,000	366,000	366,000	366,000	366,000	366,000

Table of Contents

The weighted-average anti-dilutive shares shown in the foregoing table were not included in the computation of diluted net loss from continuing operations and net income per share attributable to common stockholders. For reporting periods in which we have reported net income attributable to common stockholders, weighted-average anti-dilutive shares comprise stock options that have exercise prices above the average stock price for the period. For reporting periods in which we have a net loss from continuing operations, the weighted-average anti-dilutive shares comprise shares that would have been dilutive had we had net income from continuing operations (e.g., convertible preferred stock, preferred stock dividends, restricted stock, warrants and stock options that have exercise prices below the average stock price for the period), plus the number of stock options that would be anti-dilutive had we had a net income from continuing operations.

Share-Based Compensation

We recognize share-based compensation expense based upon the fair value of the underlying equity award on the date of the grant. For restricted stock awards and restricted stock units, we recognize expense based upon the price of our underlying stock at the date of the grant. We have elected to use the Black-Scholes option pricing model to value any option or warrant awards granted. We amortize share-based compensation for such awards on a straight-line basis over the related service period of the awards taking into account the effects of the employees' expected exercise and post-vesting employment termination behavior. To compute the volatility used in this model we use the historical volatility of our common stock over the expected life of options granted. The risk-free interest rate is based on U.S. Treasury interest rates, the terms of which are consistent with the expected life of the stock options. The expected life and estimated post-employment termination behavior is based upon historical experience of homogeneous groups within our company. We also assume an expected dividend yield of zero for all periods, as we have never paid a dividend on our common stock and do not have any plans to do so in the future.

The fair value of each option granted during the six months ended June 30, 2014 and 2013 was estimated as of the grant date using the Black-Scholes option pricing model with the following assumptions:

	Six months ended June 30, 2014	Six months ended June 30, 2013
Risk-free interest rate	2.14%	1.27 - 1.33%
Expected life of options (in years)	7.5	7.5
Expected stock price volatility	106%	108%

A summary of the activity for our 2003 Stock Plan and 2006 Equity Incentive Plan is presented below for the six months ended June 30, 2014:

	Options Outstanding				Options Exercisable		
	Number of Shares	Price per Share Range	Weighted Average Exercise Price	Aggregate Intrinsic Value (1)	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value (1)
Balance, January 1, 2014	5,279,229	$0.35 - $6.55	$2.11	$784,154	4,012,378	$2.28	$697,826
Granted	735,750	$1.37 - $1.53	$1.40				
Exercised	(208,066)	$0.35 - $1.27	$0.84				
Canceled	(247,977)	$0.82 - $2.46	$1.40				
Balance, June 30, 2014	5,558,936	$0.35 - $6.55	$2.09	$602,590	4,131,858	$2.30	$572,714

(1) The intrinsic value of an option represents the amount by which the market value of the stock exceeds the exercise price of the option of in-the-money options only. The aggregate intrinsic value is based on the closing price of our common stock on the NASDAQ Capital Market, as applicable, on the respective dates.

At June 30, 2014, the outstanding stock options to purchase an aggregate of 5.6 million shares had a weighted average remaining contractual term of 5.9 years, and the exercisable stock options to purchase an aggregate of 4.1 million shares had a weighted average remaining contractual term of 4.9 years.

For the three months ended June 30, 2014 and 2013, we recognized $0.3 million and $0.3 million, respectively, and for the six months ended June 30, 2014, and 2013, we recognized $0.5 million and $0.6 million, respectively, in share-based compensation expense, which is included in our selling, general and administrative expenses in the accompanying consolidated financial statements.

Table of Contents

We expect to recognize $1.7 million in share-based compensation expense over the weighted average remaining service period of 1.5 years for stock options outstanding as of June 30, 2014.
During the three months ended June 30, 2014, we repurchased 27,725 shares of common stock, at an average share price of $1.42 per share, pursuant to the election of the holders in order to satisfy tax withholding requirements with respect to the vesting of their respective restricted stock awards.

Intangible Assets and Other Long Lived Assets
Long-lived assets and certain identifiable intangibles are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset might not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds the fair market value of the asset. Assets to be disposed of are reported at the lower of the carrying amount or fair market value, less cost to sell.
Reclassifications
Certain prior year amounts have been reclassified to conform to the current year presentation.

2. Discontinued Operations

On March 1, 2013, we completed the sale of our Secure Computing and Communications group, ("SCC"), which was part of our Technology Development segment, to an unaffiliated third party for a gross sales price of $6.1 million of cash. Prior to the sale, SCC provided innovative solutions designed to secure critical technologies within the U.S. government. SCC conducted applied research and provided services to the government in this area, with its revenues primarily derived from U.S. government contracts and purchase orders. Of the purchase price, we received approximately $5.4 million at closing and $110,000 on December 31, 2013. During December 2013, an additional $475,000 in purchase price was released to us from escrow and another $125,000 is in escrow and may be released 18 months after the closing of the transaction, subject to any indemnification claims of the acquirer. The acquirer has not informed us of any such indemnification claims. In connection with the sale, we incurred approximately $0.9 million in transaction costs that included various charges related to investment banker and legal fees. In addition, the acquirer entered into a sublease with us for the facilities historically occupied by SCC through April 30, 2014 for a total of $27,000 during the three months ended June 30 and $106,000 for the six months ended June 30, 2014. In the transaction, we sold the equipment, contracts and intellectual property associated with SCC. Approximately 20 employees of SCC transferred to the acquirer. Included in the transaction were current assets of approximately $0.2 million and long term assets with a net book value of approximately $0.1 million, at February 28, 2013.We recorded an aggregate after-tax gain on the sale of SCC of $3.3 million or $0.20 per diluted share in our results of operations for the year ended December 31, 2013.
We have reported the results of operations of SCC as discontinued operations in our consolidated financial statements. We allocated a portion of the consolidated tax expense to discontinued operations based on the ratio of the discontinued group’s income or loss before allocations. Through December 31, 2013, we continued to act on behalf of the purchaser and bill the government for certain contracts that have not yet been transferred by the government to the purchaser. We recorded these amounts as revenues, with an offsetting amount as cost of revenues, within (loss)/income from discontinued operations.
On January 21, 2014, we completed the sale of our medical shape sensing business, which was part of our Products and Licensing segment, to an unaffiliated third party for a gross sales price of up to $30.0 million, of which $12.0 million in cash was received in two installments, and up to $8.0 million is payable to us in the future upon the accomplishment by the buyer of certain technical specifications and we may receive up to $10.0 million in potential future royalties. We had been engaged since 2007 in various development projects developing a fiber optic-based shape sensing and position tracking system to be integrated in the buyer's products. Also as part of the transaction, the buyer has hired certain employees of Luna, many of whom were historically engaged in this development project. In connection with this sale, we incurred approximately $1.3 million in transaction costs that included various charges

related to investment banker and legal fees, along with discretionary bonus to a former employee who was hired by the buyer. Included in the transaction were current and long term assets with a net book value of approximately $0.3 million on January 20, 2014. Our medical shape sensing business accounted for12% of our revenues and 10% of our costs of revenues for the year ended December 31, 2013. We recorded an aggregate after-tax loss on the sale of medical shape sensing business of $0.3 million or $0.02 per diluted share for the three months ended June 30,

Table of Contents

2014, due to intraperiod allocation of income taxes in the second quarter of 2014 and a gain of $9.4 million or $0.54 per diluted share for the six months ended June 30, 2014.

We have reported the results of operations of SCC and our medical shape sensing business as discontinued operations in our consolidated financial statements. We allocated a portion of the consolidated tax expense to discontinued operations based on the ratio of the discontinued groups' income before allocations.

The key components of income from discontinued operations were as follows:

	Three Months Ended		Six months ended	
	June 30, 2014	June 30, 2013	June 30, 2014	June 30, 2013
Net revenues	$—	$1,731,959	$—	$2,765,083
Cost of revenues	—	988,734	46,204	1,695,439
Operating expenses	—	—	—	229,745
Income/(loss) before income taxes	—	743,225	(46,204)	839,899
Allocated tax expense/(benefit)	—	295,633	(18,128)	334,275
Operating (loss)/ income from discontinued operations	—	447,592	(28,076)	505,624
(Loss)/gain on sale, net of $0.4 million, $0.3 million, $1.3 million and $1.3 million of related income taxes, respectively	(330,716)	(364,338)	9,370,799	3,682,159
(Loss)/income from discontinued operations, net of income taxes	$(330,716)	$83,254	$9,342,723	$4,187,783

3. Inventory

Inventory consists of finished goods, work-in-process and parts valued at the lower of cost (determined on the first-in, first-out basis) or market. We provide reserves for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based upon assumptions about future demand and market conditions.

Components of inventory are as follows:

	June 30, 2014	December 31, 2013
Finished goods	$714,622	$719,574
Work-in-process	401,441	361,754
Parts	2,405,808	2,339,595
	3,521,871	3,420,923
Less: Inventory reserves	207,263	74,746
Total inventory, net	$3,314,608	$3,346,177

4. Accrued Liabilities

Table of Contents

	June 30, 2014	December 31, 2013
Accrued compensation	$1,754,014	$2,205,612
Accrued sub-contracts	265,628	297,510
Accrued professional fees	19,264	279,991
Accrued income tax	184,792	13,143
Deferred rent	84,569	102,569
Royalties	222,080	291,442
Warranty reserve	56,700	56,700
Claims reserve	—	92,167
Accrued liabilities - other	194,884	207,451
Total Accrued Liabilities	$2,781,931	$3,546,585

5. Debt

Silicon Valley Bank Credit Facilities

We currently have a Loan and Security Agreement with Silicon Valley Bank (“SVB”) in which we have a term loan with an original borrowing amount of $6.0 million (the “Term Loan”). The Term Loan is to be repaid by us in 48 monthly installments, plus accrued interest payable monthly in arrears, and unless earlier terminated, matures on the earlier of either May 1, 2015 or an event of a default under the loan agreement. The Term Loan carries a floating annual interest rate equal to SVB’s prime rate then in effect plus 2%, currently 6%. We may repay amounts due under the Term Loan at any time with no penalties.

In addition to the terms and conditions of the Term Loan, the loan and security agreement also previously included a revolving credit facility (the "Line of Credit") with a maximum borrowing capacity of $1.0 million. The interest rate on the Line of Credit was SVB’s prime rate plus 1.25%, payable monthly in arrears, and we were required to pay an unused Line of Credit fee of one-quarter of one percent (0.25%), payable monthly. The Line of Credit had a maturity date of May 17, 2014, and we did not renew the Line of Credit upon its maturity.

Amounts due under the Term Loan are secured by substantially all of our assets, including intellectual property, personal property and bank accounts.

On March 21, 2013, we entered into a Fourth Loan Modification Agreement with SVB that replaced the existing financial covenants with a single covenant that we maintain a minimum cash balance of $5.0 million with SVB. Effective on January 21, 2014, in connection with our sale of assets to Intuitive, this covenant was modified to reduce the required minimum cash balance to $3.5 million. The Term Loan also requires us to observe a number of operational covenants, including protection and registration of intellectual property rights, and certain customary negative covenants. As of June 30, 2014, we were in compliance with all covenants under the Term Loan.

In addition, the Term Loan contains customary events of default, including nonpayment of principal, interest or other amounts, violation of covenants, material adverse change, an event of default under any subordinated debt documents, incorrectness of representations and warranties in any material respect, bankruptcy, judgments in excess of a threshold amount, and violations of other agreements in excess of a threshold amount. If any event of default occurs SVB may declare due immediately all borrowings under the Term Loan and foreclose on the collateral. Furthermore, an event of default under the Term Loan would result in an increase in the interest rate on any amounts outstanding. As of June 30, 2014, there were no events of default on our Term Loan.

The balance under the Term Loan at June 30, 2014 was $1.4 million, all of which was classified as short-term.

6. Capital Stock and Additional Paid-in Capital

The following details our equity transactions during the six months ended June 30, 2014:

Table of Contents

	Preferred Stock		Common Stock		Treasury Stock		Additional Paid-in Capital
	Shares	$	Shares	$	Shares	$	$
Balances, December 31, 2013	1,321,514	1,322	14,527,335	14,842	—	—	62,756,571
Exercise of stock options	—	—	208,066	208	—	—	173,588
Share-based compensation	—	—	268,500	209	—	—	516,494
Stock dividends to Carilion Clinic(1)	—	—	—	40	—	—	56,852
Purchase of treasury stock					(22,725)	(32,221)	
Balances, June 30, 2014	1,321,514	1,322	15,003,901	15,299	(22,725)	(32,221)	63,503,505

(1) The stock dividends payable in connection with Carilion Clinic's Series A Preferred Stock will be issued subsequent to June 30, 2014. For the period from January 12, 2010, the original issue date of the Series A Preferred Stock, through June 30, 2014, the Series A Preferred Stock issued to Carilion has accrued $767,046 in dividends. The accrued and unpaid dividends as of June 30, 2014 will be paid by the issuance of 354,171 shares of our common stock upon Carilion's written request.

7. Operating Segments

Our operations are divided into two operating segments—"Technology Development" and "Products and Licensing". The Technology Development segment provides applied research to customers in our areas of focus. Our engineers and scientists collaborate with our network of government, academic and industry experts to identify technologies and ideas with promising market potential. We then compete to win fee-for-service contracts from government agencies and industrial customers who seek innovative solutions to practical problems that require new technology. The Technology Development segment derives its revenue primarily from services.

The Products and Licensing segment derives its revenue from product sales, funded product development and technology licenses. This segment previously included our medical shape sensing business, which was sold on January 21, 2014, and the amounts below do not include the revenue, expenses and assets of our medical shape sensing business.

Through June 30, 2014, our Chief Executive Officer and his direct reports collectively represented our chief operating decision makers, and they evaluated segment performance based primarily on revenue and operating income or loss. The accounting policies of our segments are the same as those described in the summary of significant accounting policies (see Note 1 to our Financial Statements, "Organization and Summary of Significant Accounting Policies," presented in our Annual Report on Form 10-K as filed with the Securities and Exchange Commission on April 10, 2014 and amended on April 15, 2014).

The table below presents revenues and operating loss for reportable segments not including discontinued operations:

Table of Contents

	Three Months Ended June 30,		Six Months Ended June 30,	
	2014	2013	2014	2013
	(unaudited)		(unaudited)	
Revenues:				
Technology development revenues	$3,219,435	$2,807,296	$5,894,887	$5,434,537
Products and licensing revenues	2,008,862	2,023,668	3,805,291	3,501,795
Total revenues	$5,228,297	$4,830,964	$9,700,178	$8,936,332
Technology development operating (loss)/income	$(1,007,494)	$611,946	$(2,535,140)	$(339,817)
Products and licensing operating income/(loss)	44,365	(2,351,832)	(380,135)	(3,641,403)
Total operating loss	$(963,129)	$(1,739,886)	$(2,915,275)	$(3,981,220)
Depreciation, technology development	$53,992	$84,593	$110,735	$186,157
Depreciation, products and licensing	$33,690	$60,980	$71,790	$118,122
Amortization, technology development	$28,681	$67,063	$92,974	$111,577
Amortization, products and licensing	$17,896	$48,343	$61,065	$73,388

The table below presents assets for reportable segments:

	June 30, 2014	December 31, 2013
Total segment assets:		
Technology development	$16,168,868	$10,208,433
Products and licensing	10,089,045	9,495,642
Total	$26,257,913	$19,704,075
Property plant and equipment, and intangible assets, technology development	$1,194,354	$1,217,083
Property plant and equipment, and intangible assets, products and licensing	$745,253	$1,132,101

There are no material inter-segment revenues for any period presented.

The United States Government accounted for approximately 63% and 60% of total consolidated revenues for the three months ended June 30, 2014 and 2013, respectively, and 61% and 63% of total consolidated revenues for the six months ended June 30, 2014 and 2013, respectively.

International revenues (customers outside the United States) accounted for approximately 16% and 18% of total consolidated revenues for the three months ended June 30, 2014 and 2013, respectively and 17% and 23% of total consolidated revenues for the six months ended June 30, 2014 and 2013, respectively.

8. Contingencies and Guarantees

We are from time to time involved in certain legal proceedings in the ordinary course of conducting our business. While the ultimate liability pursuant to these actions cannot currently be determined, we believe these legal proceedings will not have a material adverse effect on our financial position or results of operations.

In the fourth quarter of 2013 we executed two non-cancelable purchase orders totaling $1.4 million for multiple shipments of tunable lasers to be delivered over an 18-month period beginning in 2013. At June 30, 2014, approximately $0.9 million of this commitment remained.

We have entered into indemnification agreements with our officers and directors, to the extent permitted by law, pursuant to which we have agreed to reimburse the officers and directors for legal expenses in the event of litigation and regulatory matters. The terms of these indemnification agreements provide for no limitation to the maximum potential future payments. We have a directors and officers insurance policy that may, in certain instances, mitigate the potential liability and payments.

Table of Contents

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes to those statements included elsewhere in this report. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under "Risk Factors" and elsewhere in this report.

Overview

We develop, manufacture and market fiber optic sensing and test & measurement products and are focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications and defense industries. In addition, we provide applied research services, typically under research programs funded by the U.S. government, in areas of advance materials, sensing and healthcare applications. Our business model is designed to accelerate the process of bringing new and innovative products to market. We use our in-house technical expertise across a range of technologies to perform applied research services for companies and government-funded projects. We continue to invest in product development and commercialization, which we anticipate will lead to increased product sales growth.

Our corporate growth strategy is focused on becoming the leading provider of fiber optic strain & temperature sensing solutions and standard test methods for composite, as well as non-composite materials, structures and systems.

We are organized into two main business segments, our Products and Licensing segment and our Technology Development segment. Our Products and Licensing segment develops, manufactures and markets our fiber optic sensing products, as well as test and measurement products, and also conducts applied research in the fiber optic sensing area for both corporate and government customers. We are continuing to develop and commercialize our fiber optic technology for strain and temperature sensing applications for the aerospace, automotive, and energy industries. Our Products and Licensing segment revenues represented approximately 38% and 42% of our total revenues for the three months ended June 30, 2014 and 2013, respectively and 39% for each of the six months ended June 30, 2014 and 2013.

Our Technology Development segment performs applied research principally in the areas of sensing and instrumentation, advanced materials and health sciences. Our Technology Development segment comprised approximately 62% and 58% of our total revenues for the three months ended June 30, 2014 and 2013, respectively, and 61% for each of the six months ended June 30, 2014 and 2013, respectively. Our Technology Development segment predominantly performs applied research in the areas of sensing and materials. Most of the government funding for our Technology Development segment is derived from the Small Business Innovation Research, or SBIR, program coordinated by the U.S. Small Business Administration, or SBA. Our Technology Development segment revenues have historically accounted for a large portion of our total revenues, and we expect that they will continue to represent a significant portion of our total revenues for the foreseeable future. Our Technology Development segment revenues increased from $2.8 million in the three months ended June 30, 2013 to $3.2 million for the three months ended June 30, 2014. Within the Technology Development segment, we have historically had a backlog of contracts for which work has been scheduled, but for which a specified portion of work has not yet been completed. We define backlog as the dollar amount of obligations payable to us under negotiated contracts upon completion of a specified portion of work that has not yet been completed, exclusive of revenues previously recognized for work already performed under these contracts, if any. Total backlog includes funded backlog, which is the amount for which money has been directly authorized by the U.S. Congress and for which a purchase order has been received by a commercial customer, and unfunded backlog, representing firm orders for which funding has not yet been appropriated. Indefinite delivery and quantity contracts and unexercised options are not reported in total backlog. The approximate value of our Technology Development segment backlog was $12.1 million at June 30, 2014 and $8.7 million at December 31, 2013.

Revenues from product sales are mostly derived from the sales of our sensing systems and products that make use of light-transmitting optical fibers, or fiber optics. We continue to invest in product development and commercialization,

which we anticipate will lead to increased product sales growth. Although we have been successful in licensing certain technology in past years, we do not expect license revenues to represent a significant portion of future revenues. Over time, however, we do intend to gradually increase such revenues. In the near term, we expect revenues from product sales and product development to be primarily in areas associated with our fiber optic instrumentation, test and measurement and sensing platforms. In the long term, we expect that revenues from product sales will represent a larger portion of our total revenues and that as we develop and commercialize new products, these revenues will reflect a broader and more diversified mix of products.

Table of Contents

As described in Note 2 to our consolidated financial statements included in this report, during the quarter ended March 31, 2014, we sold our shape sensing business in the medical field to affiliates of Intuitive Surgical Inc., or Intuitive. As a part of this transaction, we entered into a revocable license agreement with Intuitive pursuant to which we have the right to use all of our transferred technology outside the field of medicine and in respect of our existing non-shape sensing products in certain non-robotic medical fields. Furthermore, in March 2013 we sold the assets associated with our secure computing and communications group, or SCC, to MacAulay-Brown, Inc., or Mac-B, another defense contractor. As a result of these sales, we have reported the results of operations from medical shape sensing and SCC as discontinued operations in our consolidated financial statements included elsewhere in this report. Net loss from continuing operations was $0.6 million for the quarter ended June 30, 2014, compared to $1.0 million for the quarter ended June 30, 2013. After giving effect to the results of discontinued operations, which consisted of a $0.3 million loss, as a result of the intraperiod allocation of income taxes, we recorded net loss attributable to common stockholders of approximately $0.9 million for the quarter ended June 30, 2014. For the quarter ended June 30, 2013, we recorded a net loss attributable to common stockholders of approximately $1.0 million, which included the results of operations of our medical shape sensing business for the period, net of tax and tax expense associated with the sale of SCC.

We may incur increasing expenses as we seek to expand our business, including expenses for research and development, sales and marketing and manufacturing capabilities. We may also grow our business in part through acquisitions of additional companies and complementary technologies, which could cause us to incur transaction expenses, amortization or write-offs of intangible assets and other acquisition-related expenses. As a result, we expect to incur net losses for the foreseeable future, and these losses could be substantial.

In recent years, economic conditions around the world deteriorated, and the outlook for 2014 and beyond remains uncertain. This slowing of the economy, both in the United States and globally, reduced the financial capacities of some of our customers and potential customers, thereby slowing spending on the products and services we provide. Furthermore, reductions in government spending may impact the availability of new program awards in 2014. For example, the Budget Control Act commits the U.S. Government to reduce the federal deficit by $1.2 trillion over ten years through a combination of automatic, across-the-board spending cuts and caps on discretionary spending, or sequestration. Automatic across-the-board cuts required by sequestration could have a material adverse effect on our technology development revenue and, consequently, our results of operations. While the exact manner in which sequestration will impact our business is unclear, funding for programs in which we participate could be reduced, delayed or canceled. Our ability to obtain new contract awards also could be negatively affected.

Our sales of SCC in 2013 and of our medical shape sensing business in 2014 are expected to result in lower revenues than historically realized until we can increase revenues significantly, primarily from product sales. As a result, we may incur greater net losses than we have in prior years.

Description of Our Revenues, Costs and Expenses

Revenues

We generate revenues from technology development, product sales and commercial product development and licensing activities. We derive Technology Development segment revenues from providing research and development services to third parties, including government entities, academic institutions and corporations, and from achieving milestones established by some of these contracts and in collaboration agreements. In general, we complete contracted research over periods ranging from six months to three years, and recognize these revenues over the life of the contract as costs are incurred or upon the achievement of certain milestones built into the contracts. Our Technology Development segment revenues represented approximately 62% and 58% of our total revenues for the three months ended June 30, 2014 and 2013, respectively and 61% for each of the six months ended June 30, 2014 and 2013.

Our Products and Licensing segment revenues reflect amounts that we receive from sales of our products or development of products for third parties, as well as fees paid to us in connection with licenses or sublicenses of certain patents and other intellectual property, and represented approximately 38% and 42% of our total revenues for the three months ended June 30, 2014 and 2013, respectively and 39% each for the six months ended June 30, 2014 and 2013.

Cost of Revenues

Cost of revenues associated with Technology Development segment revenues consists of costs associated with performing the related research activities including direct labor, amounts paid to subcontractors and overhead allocated to Technology Development segment activities.

Table of Contents

Cost of revenues associated with our Products and Licensing segment revenues consists of license fees for use of certain technologies, product manufacturing costs including all direct material and direct labor costs, amounts paid to our contract manufacturers, manufacturing, shipping and handling, provisions for product warranties, and inventory obsolescence as well as overhead allocated to each of these activities.

Operating Expense

Operating expense consists of selling, general and administrative expenses, as well as expenses related to research, development and engineering, depreciation of fixed assets and amortization of intangible assets. These expenses also include compensation for employees in executive and operational functions including certain non-cash charges related to expenses from option grants, facilities costs, professional fees, salaries, commissions, travel expense and related benefits of personnel engaged in sales, product management and marketing activities, costs of marketing programs and promotional materials, salaries, bonuses and related benefits of personnel engaged in our own research and development beyond the scope and activities of our Technology Development segment; product development activities not provided under contracts with third parties, and overhead costs related to these activities.

Interest Expense

Interest expense is composed of interest paid under our bank loans as well as interest accrued on our capital lease obligations.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates, assumptions and judgments that affect the amounts reported in our financial statements and the accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or judgments. Our critical accounting policies are described in the Management's Discussion and Analysis section and the notes to our audited consolidated financial statements previously included in our Annual Report on Form 10-K for the period ended December 31, 2013, as filed with the Securities and Exchange Commission on April 10, 2014 and amended on April 15, 2014. There have been no material changes to the descriptions therein.

Results of Operations

Three Months Ended June 30, 2014 Compared to Three Months Ended June 30, 2013

Revenues

	Three months ended June 30,		Change		
	2014	2013			
Revenues:					
Technology development revenues	$3,219,435	$2,807,296	$412,139	15	%
Products and licensing revenues	2,008,862	2,023,668	$(14,806)	(1)	%
Total revenues	$5,228,297	$4,830,964	$397,333	8	%

Revenues from our Technology Development segment increased $0.4 million due primarily to an increase of $0.2 million in subcontractor costs, particularly within development programs in our biomedical and nanomaterials groups, which are passed through to our customers with an administrative mark up.

Revenues from our Products and Licensing segment did not change significantly compared to the second quarter of 2013.

Cost of Revenues and Gross Profit

Table of Contents

	Three months ended June 30,		Change		
	2014	2013			
Cost of revenues:					
Technology development costs	$2,388,801	$2,209,158	$179,643	8	%
Products and licensing costs	851,490	844,441	$7,049	1	%
Total cost of revenues	$3,240,291	$3,053,599	$186,692	6	%
Gross Profit	$1,988,006	$1,777,365	$210,641	12	%

The cost of our Technology Development segment revenues increased primarily due to $0.2 million increase in costs incurred for subcontractors associated with development programs in our biomedical and nanomaterials groups. These costs may not recur at these levels in future quarters.

The costs from our Products and Licensing segment did not change significantly compared to the second quarter of 2013.

Because of the overall increase in revenues of 8% in the three months ended June 30, 2014 compared to the three months ended June 30, 2013, and an increase of 6% associated cost of revenues, our gross profit increased to $2.0 million for the three months ended June 30, 2014, compared to $1.8 million for the three months ended June 30, 2013.

Operating Expense

	Three months ended June 30,		Change		
	2014	2013			
Operating expense:					
Selling, general and administrative	$2,466,626	$2,875,461	$(408,835)	(14)	%
Research, development and engineering	484,509	641,790	$(157,281)	(25)	%
Total operating expense	$2,951,135	$3,517,251	$(566,116)	(16)	%

Our selling, general and administrative expense decreased 14% during the three months ended June 30, 2014, as compared to the same period in 2013. The decrease is attributable to numerous cost reductions, including headcount reductions in administrative roles following the sale of the medical shape sensing business in the first quarter of 2014, reduced professional fees in areas such as legal and investor relations and lower costs for share-based compensation.

Research, development and engineering expense decreased 25% primarily due to lower headcount resulting from the transfer of engineering employees as part of the sale of our medical shape sensing business in addition to reduced spending for lab supplies for the period.

Other Income

During the three months ended June 30, 2014 and 2013, we recognized approximately $27,000 and $80,000, respectively, of rent from Mac-B for the partial sublease of our Roanoke facility. This sublease expired on April 30, 2014. Also, for the quarter ended June 30, 2013, we recognized approximately $15,000 of other income resulting from the amortization of the discount received on the settlement of our debt with Hansen Medical, Inc., or Hansen.

Interest Expense

Interest expense for the three months ended June 30, 2014 was approximately $27,000 compared to interest expense of approximately $50,000 during the same period in 2013. The monthly average loan balance during the three months ended June 30, 2014 was $1.5 million compared to $3.0 million for the same period in 2013. The lower average loan balance accounted for the decrease in interest expense.

Net Loss from Continuing Operations

As a result of the foregoing, during the three months ended June 30, 2014, we incurred a loss from continuing operations before income taxes of approximately $1.0 million, compared to a loss from continuing operations before income taxes of

Table of Contents

approximately $1.7 million for the three months ended June 30, 2013. We recorded an income tax benefit related to our net operating losses of $0.4 million and $0.7 million for the three months ended June 30, 2014 and 2013, respectively. After recognition of the tax benefit, our net loss from continuing operations was $0.6 million for the three months ended June 30, 2014 compared to a net loss from continuing operations of $1.0 million for the three months ended June 30, 2013.

Net (Loss)/Income from Discontinued Operations

For the three months ended June 30, 2014, we recognized net loss from discontinued operations of $0.3 million, compared to net income from discontinued operations of $0.1 million for the same period in 2013. For the three months ended June 30, 2014, this loss resulted from the intraperiod allocation of income taxes in the second quarter of 2014 in connection with the sale of our medical shape sensing business that occurred during the first quarter of 2014. For the three months ended June 30, 2013, net income from discontinued operations consisted of $0.4 million of operating income from our medical shape sensing business, which was almost entirely offset by a $0.4 million million loss resulting from the intraperiod allocation of income taxes in the second quarter of 2013 in connection with the sale of our SCC business in the first quarter of 2013.

Six Months Ended June 30, 2014 Compared to Six Months Ended June 30, 2013

Revenues

	Six months ended June 30,		Change		
	2014	2013			
Revenues:					
Technology development revenues	$5,894,887	$5,434,537	$460,350	8	%
Products and licensing revenues	3,805,291	3,501,795	$303,496	9	%
Total revenues	$9,700,178	$8,936,332	$763,846	9	%

Revenues from our Technology Development segment increased $0.5 million due primarily to growth in our biomedical and nanomaterials groups, which largely resulted from higher costs of subcontractors, whose costs are passed through to the customer, during the second quarter of 2014 and may not recur at such levels in future quarters.

Revenues from our Products and Licensing segment increased by $0.3 million. This increase in our Products and Licensing revenues was primarily attributable to higher sales of telecom test and measurement equipment in the first quarter of 2014.

Cost of Revenues and Gross Profit

	Six months ended June 30,		Change		
	2014	2013			
Cost of revenues:					
Technology development costs	$4,413,956	$4,394,072	$19,884	Less than 1%	
Products and licensing costs	1,746,130	1,583,130	$163,000	10	%
Total cost of revenues	$6,160,086	$5,977,202	$182,884	3	%
Gross Profit	$3,540,092	$2,959,130	$580,962	20	%

The cost of our Technology Development segment remained relatively unchanged for the six months ended June 30, 2014 compared to the same period last year as a $0.3 million increase in costs of subcontractors were offset by a $0.3 million decrease in overhead expenses.

The cost of revenues in our Products and Licensing segment increased 10% commensurate with the growth in product sales for the same period.

Table of Contents

Because of the overall increase in revenues of 9% in the six months ended June 30, 2014 compared to the six months ended June 30, 2013, and an increase of 3% associated cost of revenues, our gross profit increased to $3.5 million for the six months ended June 30, 2014, compared to $3.0 million for the six months ended June 30, 2013.

Operating Expense

	Six months ended June 30,		Change		
	2014	2013			
Operating expense:					
Selling, general and administrative	$5,221,704	$5,538,569	$(316,865)	(6)	%
Research, development and engineering	1,233,663	1,401,781	$(168,118)	(12)	%
Total operating expense	$6,455,367	$6,940,350	$(484,983)	(7)	%

Our selling, general and administrative expense decreased 6% during the six months ended June 30, 2014, as compared to the same period in 2013. The decrease was primarily due to cost reduction initiatives in the second quarter of 2014 following the sale of our medical shape sensing business. These savings resulted from headcount reductions in administrative roles and reduced professional fees for legal and investor relations services. Share-based compensation expenses also decreased by $0.1 million.

Research, development and engineering expense decreased 12% due to lower headcount following the transfer of certain engineering employees to Intuitive Surgical as part of the sale of our medical shape sensing business.

Other Income

We recognized approximately $106,000 for each of the six months ended June 30, 2014 and 2013, of rent from Mac-B for the partial sublease of our Roanoke facility. As noted above, this sublease expired on April 30, 2014. Also, for the six months ended June 30, 2013, we recognized approximately $48,000 in other income in connection with the receipt of an insurance policy profit share.

Interest Expense

Interest expense for the six months ended June 30, 2014 was approximately $60,000 compared to interest expense of approximately $108,000 during the same period in 2013. The monthly average loan balance during the six months ended June 30, 2014 was $1.7 million compared to $3.3 million for the same period in 2013. The lower average loan balance accounted for the decrease in interest expense.

Net Loss from Continuing Operations

As a result of the foregoing, during the six months ended June 30, 2014, we incurred a loss from continuing operations before income taxes of approximately $2.9 million, compared to a loss from continuing operations before income taxes of approximately $3.9 million for the six months ended June 30, 2013. We recorded an income tax benefit related to our net operating losses of $1.1 million and $1.5 million for the six months ended June 30, 2014 and 2013, respectively. After recognition of the tax benefit, our loss from continuing operations was $1.7 million for the six months ended June 30, 2014 compared to a loss from continuing operations of $2.4 million for the six months ended June 30, 2013.

Net Income from Discontinued Operations

For the six months ended June 30, 2014, we recognized net income from discontinued operations of $9.3 million, compared to net income from discontinued operations of $4.2 million for the same period in 2013. For the six months ended June 30, 2014, this income resulted from the sale of our medical shape sensing business that occurred during the first quarter of 2014.

For the six months ended June 30, 2013, net income from discontinued operations consisted of $3.7 million gain on the sale of our SCC business, net of tax, in addition to operating income from our medical shape sensing business of $0.5 million, partially offset by an operating loss of $0.1 million from our SCC business for the two months prior to its sale on March 1, 2013.

Table of Contents

Liquidity and Capital Resources

At June 30, 2014, our total cash and cash equivalents were $14.7 million.

We have a term loan with SVB which at June 30, 2014 had a balance of $1.8 million. This term loan matures on May 1, 2015. We also previously maintained a revolving line of credit of up to $1.0 million with SVB, under which no amounts were borrowed. The line of credit expired on May 18, 2014, and we did not renew the line of credit. The terms and conditions of our term loan and prior line of credit are described in Note 5 of our consolidated financial statements included in this report.

We believe that our cash balance as of June 30, 2014 will provide adequate liquidity for us to meet our working capital needs over the next twelve months.

Discussion of Cash Flows

Recent Activity

	Six months ended		
	2014	2013	Change
Net cash used in operating activities	$(3,116,347)	$(1,313,794)	$(1,802,553)
Net cash provided by investing activities	10,654,014	4,307,494	$6,346,520
Net cash used in financing activities	(641,235)	(591,292)	$(49,943)
Net change in cash	$6,896,432	$2,402,408	$4,494,024

During the first six months of 2014, operations used $3.1 million of net cash, as compared to the same period in 2013 in which operations used $1.3 million of net cash. During the first six months of 2014, our net income of $7.6 million was primarily the result of the after-tax gain on the sale of our medical shape sensing business of $9.4 million and a tax benefit of $1.1 million. Without the effects of that gain and tax benefit, our pre-tax loss from continuing operations was approximately $2.9 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.3 million and share-based compensation of $0.5 million both of which are non-cash items that do not impact cash flow for the period. Additionally, changes in working capital resulted in a net cash out flow of $1.0 million, consisting primarily of a $0.8 million decrease in accounts payable, due primarily to timing differences between receiving goods and services and remitting the payment, a $0.3 million decreased in deferred credits and a $0.1 million increase in accounts receivable due to timing differences between recognizing a sale and collecting the cash, which was partially offset by a $0.1 million decrease in other assets.

During the six months ended June 30, 2013, operations used $1.3 million of net cash. Our net income of $1.8 million was primarily the result of the gain on the sale of SCC of $3.7 million and a tax benefit of $1.5 million. Without the effects of that gain and tax benefit, our pre-tax loss from continuing operations was $3.9 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.5 million and share-based compensation of $0.6 million, both of which are non-cash items that do not impact cash flow for the period. Additionally, changes in working capital provided net cash inflow of $0.5 million, consisting of a $0.8 million decrease in accounts receivable due to improved collection efforts and a $0.2 million increase in accounts payable and accrued liabilities partially off set by a $0.2 million decrease in deferred credits.

Our cash provided by investing activities is composed of purchases of equipment and capitalized costs associated with the prosecution of patents and the net cash proceeds from our sales of our medical shape sensing business and SCC. During the six months ended June 30, 2014, we had a net cash inflow of $10.9 million due to the sale of our medical shape sensing business. Also, during the period, we used $0.1 million for equipment purchases and $0.1 million in patent costs associated with certain intangible assets. During the six months ended June 30, 2013, we had a net cash inflow of $4.5 million due to the sale of SCC and used $0.1 million for both equipment purchases and patent costs associated with certain intangible assets.

Net cash used in financing activities during the six months ended June 30, 2014 included the scheduled repayments of principal for our debt and lease obligations, which in the aggregate resulted in net cash outflows of $0.8 million partially offset by our receipt of $0.2 million upon the exercise of stock options during the period. Net cash used in financing activities during the six months ended June 30, 2013 included the scheduled repayments of principal for our

debt and lease obligations, which in

Table of Contents

the aggregate resulted in net cash outflows of $0.7 million which was partially offset by our receipt of $0.1 million upon exercise of stock options and warrants during the period.

.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements as defined in Regulation S-K Item 303(a)(4)(ii).

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. We do not hold or issue financial instruments for trading purposes or have any derivative financial instruments. Our exposure to market risk is limited to interest rate fluctuations due to changes in the general level of U. S. interest rates.

Interest Rate Risk

We do not use derivative financial instruments as a hedge against interest rate fluctuations, and, as a result, interest income earned on our cash and cash equivalents and short-term investments is subject to changes in interest rates. However, we believe that the impact of these fluctuations does not have a material effect on our financial position due to the immediately available liquidity or short-term nature of these financial instruments.

We are exposed to interest rate fluctuations as a result of our term loan with SVB having a variable interest rate. However, the term loan has a minimum fixed interest rate of 6%, which has been the actual interest rate in effect since 2011. We do not currently use derivative instruments to alter the interest rate characteristics of our debt. For the principal amount of $1.4 million outstanding under the term loan as of June 30, 2014, a change in the interest rate by one percentage point for one year would result in a change in our annual interest expense of $7,000.

Although we believe that this measure is indicative of our sensitivity to interest rate changes, it does not adjust for potential changes in our credit quality, composition of our balance sheet and other business developments that could affect our interest rate exposure. Accordingly, no assurances can be given that actual results would not differ materially from the potential outcome simulated by this estimate.

Foreign Currency Exchange Rate Risk

As of June 30, 2014, all payments made under our research contracts have been denominated in U. S. dollars. Our product sales to foreign customers are also generally denominated in U.S. dollars, and we generally do not receive payments in foreign currency. As such, we are not directly exposed to currency gains or losses resulting from fluctuations in foreign exchange rates.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are controls and other procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes

Table of Contents

in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a control system, misstatements due to error or fraud may occur and not be detected.

Under the supervision and with the participation of our management, including our principal executive officer and our principal financial officer, we evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report. Based on this evaluation, our principal executive officer and our principal financial officer have concluded that, as of June 30, 2014, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended June 30, 2014 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

You should carefully consider the risks described below before deciding whether to invest in our common stock. The risks described below are not the only ones we face. Additional risks not presently known to us or that we currently believe are immaterial may also impair our business operations and financial results. If any of the following risks actually occurs, our business, financial condition or results of operations could be adversely affected. In such case, the trading price of our common stock could decline and you could lose all or part of your investment. Our filings with the Securities and Exchange Commission also contain forward-looking statements that involve risks or uncertainties. Our actual results could differ materially from those anticipated or contemplated by these forward-looking statements as a result of a number of factors, including the risks we face described below, as well as other variables that could affect our operating results. Past financial performance should not be considered to be a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods.

RISKS RELATING TO OUR BUSINESS GENERALLY

Our technology is subject to a license from Intuitive, which is revocable in certain circumstances. Without this license, we cannot continue to market, manufacture or sell our fiber-optic products.

As a part of the sale of our assets to Intuitive, we entered into a license agreement with Intuitive pursuant to which we received rights to use all of our transferred technology outside the field of medicine and in respect of our existing non-shape sensing products in certain non-robotic medical fields. This license back to us is revocable if after notice and certain time periods, we were to (i) challenge the validity or enforceability of the transferred patents and patent applications, (ii) commercialize our fiber optical shape sensing and localization technology in the field of medicine (except to perform on a development and supply project for Hansen), (iii) violate our obligations related our its ability to sublicense in the field of medicine or (iv) violate our confidentiality obligations in a manner that advantages a competitor in the field of medicine and not cure such violation. Maintaining this license is necessary for us to conduct our fiber-optic products business, both for our telecom products and our ODiSI sensing products. If this license were to be revoked by Intuitive, we would no longer be able to market, manufacture or sell these products which would severely limit our ability to continue operations.

If there are substantial sales of our common stock, or the perception that such sales may occur, our stock price could decline.

If any of our stockholders were to sell substantial amounts of our common stock, the market price of our common stock may decline, which might make it more difficult for us to sell equity or equity-related securities in the future at a time and price

Table of Contents

that we deem appropriate. Substantial sales of our common stock, or the perception that such sales may occur, may have a material adverse effect on the prevailing market price of our common stock.

Pursuant to an Investor Rights Agreement, we filed a Form S-3 registration statement earlier in 2014 registering the potential resale of an aggregate of up to approximately 6.3 million shares of our common stock by our then two largest stockholders, Carilion Clinic, or Carilion and Dr. Kent Murphy. This registration statement has been declared effective by the Securities and Exchange Commission, and Dr. Murphy has sold substantially all of his approximately 2.8 million shares included in the registration statement. As of the date of this report, Carilion continues to hold its approximately 3.5 million shares covered by the registration statement (including approximately 1.3 million shares issuable to Carilion upon conversion of shares of Series A Convertible Preferred Stock that Carilion holds). Because the registration statement is effective, these shares may be sold freely in the public market. Any sales of these shares, or the perception that future sales of shares may occur by Carilion or any of our other significant stockholders, may have a material adverse effect on the market price of our stock. Any such continuing material adverse effect on the market price of our stock could impair our ability to comply with NASDAQ's continuing listing standards in respect of our minimum stock price, as further described below.

Our narrowed scope and focus may make it more difficult for us to achieve or maintain operating profitability.

Through the recent sales of SCC to Mac-B and of our medical shape sensing business to Intuitive, we have reduced our overall size and narrowed our focus to one key growth objective: to become the leading provider of fiber optic sensing systems and standard test methods for composite materials. There can be no guarantee that we will be successful in pursuing this objective. Although we anticipate realizing cost savings as a result of the sale of assets to Mac-B and Intuitive, we will continue to incur significant operating expenses associated with our public company infrastructure. Accordingly, we will need to significantly increase the revenues we generate from our remaining operations in order to achieve or maintain operating profitability, and there can be no guarantee that we will be able to do so.

Our failure to attract, train and retain skilled employees or members of our senior management and to obtain necessary security clearances for such persons or maintain a facility security clearance would adversely affect our business and operating results.

The availability of highly trained and skilled technical and professional personnel is critical to our future growth and profitability. Competition for scientists, engineers, technicians and professional personnel is intense and our competitors aggressively recruit key employees. In the past, we have experienced difficulties in recruiting and hiring these personnel as a result of the tight labor market in certain fields. Any difficulty in hiring or retaining qualified employees, combined with our growth strategy and future needs for additional experienced personnel, particularly in highly specialized areas such as nanomaterial manufacturing and fiber optic sensing technologies, may make it more difficult to meet all of our needs for these employees in a timely manner. Although we intend to continue to devote significant resources to recruit, train and retain qualified employees, we may not be able to attract and retain these employees, especially in technical fields in which the supply of experienced qualified candidates is limited, or at the senior management level. Any failure to do so would have an adverse effect on our business. Any loss of key personnel could have a material adverse effect on our ability to meet key operational objectives, such as timely and effective project milestones and product introductions, which in turn could adversely affect our business, results of operations and financial condition. We also have contractual obligations to adequately staff certain development projects, and a loss of key personnel could lead to our inability to meet these obligations, which in turn could expose us to claims for significant damages under any such agreement.

We provide certain services to the U.S. government that require us to maintain a facility security clearance and for certain of our employees and our board chairman to hold security clearances. In general, the failure for necessary persons to obtain or retain sufficient security clearances, any loss by us of a facility security clearance or any public reprimand related to security matters could result in a U.S. government customer terminating an existing contract or choosing not to renew a contract or prevent us from bidding on or winning certain new government contracts.

In addition, our future success depends in a large part upon the continued service of key members of our senior management team. We do not maintain any key-person life insurance policies on our officers. The loss of any members of our management team or other key personnel could seriously harm our business.

We rely and will continue to rely on contracts and grants awarded under the SBIR program for a significant portion of our revenues. A finding by the SBA that we no longer qualify to receive SBIR awards could adversely affect our business.

Table of Contents

We compete as a small business for some of our government contracts. Our revenues derived from the SBIR program account for a significant portion of our consolidated total revenues, and contract research, including SBIR contracts, will remain a significant portion of our consolidated total revenues for the foreseeable future.

We may not continue to qualify to participate in the SBIR program or to receive new SBIR awards from federal agencies. In order to qualify for SBIR contracts and grants, we must meet certain size and ownership eligibility criteria. These eligibility criteria are applied as of the time of the award of a contract or grant. A company can be declared ineligible for a contract award as a result of a size challenge filed with the SBA by a competitor or a federal agency.

In order to be eligible for SBIR contracts and grants, under current SBA rules we must be more than 50% owned and controlled by individuals who are U.S. citizens or permanent resident aliens, and/or other small business concerns (each of which is more than 50% owned and controlled by individuals who are U.S. citizens or permanent resident aliens) or certain qualified investment companies. In the event our institutional ownership significantly increases, either because of increased buying by institutions or selling by individuals, including any sales of securities by Dr. Kent Murphy under the Form S-3 registration statement described above, we could lose eligibility for new SBIR contracts and grants.

Also, in order to be eligible for SBIR contracts and grants, the number of our employees, including those of any entities that are considered to be affiliated with us, cannot exceed 500. As of June 30, 2014, we had approximately 117 full-time employees. In determining whether we are affiliated with any other entity, the SBA may analyze whether another entity controls or has the power to control us. Carilion is our largest institutional stockholder. Since early 2011, a formal size determination by the SBA that focused on whether or not Carilion is or was our affiliate has been outstanding. Although we do not believe that Carilion has or had the power to control our company, we cannot assure you that the SBA will interpret its regulations in our favor on this question. If the SBA were to make a determination that we are or were affiliated with Carilion, we would exceed the size limitations, as Carilion has over 500 employees. In that case, we would lose eligibility for new SBIR contracts and grants and other awards that are set aside for small businesses based on the criterion of number of employees, and the relevant government agency would have the discretion to suspend performance on existing SBIR grants. The loss of our eligibility to receive SBIR awards would have a material adverse impact on our revenues, cash flows and our ability to fund our growth.

Moreover, if we grow our business, it is foreseeable that we will eventually exceed the SBIR size limitations, in which case we may be required to seek alternative sources of revenues or capital.

We depend on third-party vendors for specialized components in our manufacturing operations, making us vulnerable to supply shortages and price fluctuations that could harm our business.

We primarily rely on third-party vendors for the manufacture of the specialized components used in our products. The highly specialized nature of our supply requirements poses risks that we may not be able to locate additional sources of the specialized components required in our business. For example, there are few manufacturers who produce the special lasers used in our optical test equipment. Our reliance on these vendors subjects us to a number of risks that could negatively affect our ability to manufacture our products and harm our business, including interruption of supply. Although we are now manufacturing tunable lasers in low-rate initial production, we expect our overall reliance on third-party vendors to continue. Any significant delay or interruption in the supply of components, or our inability to obtain substitute components or materials from alternate sources at acceptable prices and in a timely manner could impair our ability to meet the demand of our customers and could harm our business.

As a provider of contract research to the U.S. government, we are subject to federal rules, regulations, audits and investigations, the violation or failure of which could adversely affect our business.

We must comply with and are affected by laws and regulations relating to the award, administration and performance of U.S. government contracts. Government contract laws and regulations affect how we do business with our government customers and, in some instances, impose added costs on our business. A violation of a specific law or regulation could result in the imposition of fines and penalties, termination of our contracts or debarment from bidding on contracts. In some instances, these laws and regulations impose terms or rights that are more favorable to the government than those typically available to commercial parties in negotiated transactions. For example, the

U.S. government may terminate any of our government contracts and, in general, subcontracts, at their convenience, as well as for default based on performance.

In addition, U.S. government agencies, including the Defense Contract Audit Agency and the Department of Labor, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. The U.S. government also may review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's

Table of Contents

purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government. In addition, our reputation could suffer serious harm if allegations of impropriety were made against us.

In addition to the risk of government audits and investigations, U.S. government contracts and grants impose requirements on contractors and grantees relating to ethics and business practices, which carry civil and criminal penalties including monetary fines, assessments, loss of the ability to do business with the U.S. government and certain other criminal penalties.

We may also be prohibited from commercially selling certain products that we develop under our Technology Development segment or related products based on the same core technologies if the U.S. government determines that the commercial availability of those products could pose a risk to national security. For example, certain of our wireless technologies have been classified as secret by the U.S. government and as a result we cannot sell them commercially. Any of these determinations would limit our ability to generate product sales and license revenues.

A decline in government research contract awards or government funding for existing or future government research contracts, including SBIR contracts, could adversely affect our revenues, cash flows and ability to fund our growth.

Technology development revenues, which consist primarily of government-funded research, accounted for approximately 62% and 58% of our consolidated total revenues for the three months ended June 30, 2014 and 2013, respectively. As a result, we are vulnerable to adverse changes in our revenues and cash flows if a significant number of our research contracts and subcontracts were to be simultaneously delayed or canceled for budgetary, performance or other reasons. For example, the U.S. government may cancel these contracts at any time without cause and without penalty or may change its requirements, programs or contract budget, any of which could reduce our revenues and cash flows from U.S. government research contracts. Our revenues and cash flows from U.S. government research contracts and subcontracts could also be reduced by declines or other changes in U.S. defense, homeland security and other federal agency budgets. In addition, we compete as a small business for some of these contracts, and in order to maintain our eligibility to compete as a small business, we, together with any affiliates, must continue to meet size and revenue limitations established by the U.S. government.

Our contract research customer base includes government agencies, corporations and academic institutions. Our customers are not obligated to extend their agreements with us and may elect not to do so. Also, our customers' priorities regarding funding for certain projects may change and funding resources may no longer be available at previous levels.

In addition, the Budget Control Act commits the U.S. Government to reduce the federal deficit by $1.2 trillion over ten years through a combination of automatic, across-the-board spending cuts and caps on discretionary spending. This "sequestration" under the Budget Control Act, which is split equally between defense and non-defense programs, went into effect on March 1, 2013. The appropriate resolution reflecting a budget deal for fiscal years 2014 and 2015 reduces but does not eliminate these sequestration cuts. Any spending cuts required by "sequestration" could have a material adverse effect on our technology development revenues and, consequently, our results of operations. While the exact manner in which this "sequestration" may impact our business remains unclear, funding for programs in which we participate could be reduced, delayed or canceled. Our ability to obtain new contract awards also could be negatively affected.

In addition to contract cancellations and changes in agency budgets, our future financial results may be adversely affected by curtailment of or restrictions on the U.S. government's use of contract research providers, including curtailment due to government budget reductions and related fiscal matters or any legislation or resolution limiting the number or amount of awards we may receive. These or other factors could cause U.S. defense and other federal agencies to conduct research internally rather than through commercial research organizations or direct awards to other organizations, to reduce their overall contract research requirements or to exercise their rights to terminate contracts. Alternatively, the U.S. government may discontinue the SBIR program or its funding altogether. Also, SBIR regulations permit increased competition for SBIR awards from companies that may not have previously been

eligible, such as those backed by venture capital operating companies, hedge funds and private equity firms. Any of these developments could limit our ability to obtain new contract awards and adversely affect our revenues, cash flows and ability to fund our growth.

The results of our operations could be adversely affected by economic and political conditions and the effects of these conditions on our customers' businesses and levels of business activity.

Table of Contents

Global economic and political conditions affect our customers' businesses and the markets they serve. A severe or prolonged economic downturn or a negative or uncertain political climate could adversely affect our customers' financial conditions and the timing or levels of business activity of our customers and the industries we serve. This may reduce the demand for our products or depress pricing for our products and have a material adverse effect on our results of operations. Changes in global economic conditions could also shift demand to products or services for which we do not have competitive advantages, and this could negatively affect the amount of business we are able to obtain. In addition, if we are unable to successfully anticipate changing economic and political conditions, we may be unable to effectively plan for and respond to those changes, and our business could be negatively affected as a result. There was a rapid softening of the economy and tightening of the financial markets in 2008 and 2009. This slowing of the economy has reduced the financial capacity of some of our customers and, to the extent that such economic conditions continue in certain industries, it could continue to affect our potential customers, thereby slowing spending on the products and services we provide. The outlook for the economy in 2014 and beyond remains uncertain, and until there is a sustained economic recovery our revenues and results of operations could be negatively impacted.

We have a history of losses, and because our strategy for expansion may be costly to implement, we may experience continuing losses and may never achieve or maintain profitability or positive cash flow.

We realized a net loss from continuing operations of $0.6 million for the three months ended June 30, 2014, compared to $1.0 million for the same period in 2013. We expect to continue to incur significant expenses as we pursue our strategic initiatives, including increased expenses for research and development, sales and marketing and manufacturing. We may also grow our business in part through acquisitions of additional companies and complementary technologies which could cause us to incur greater than anticipated transaction expenses, amortization or write-offs of intangible assets and other acquisition-related expenses. As a result, we expect to incur net losses for the foreseeable future, and these losses could be substantial. At a certain level, continued net losses could impair our ability to comply with NASDAQ continued listing standards, as described further below.

Our ability to generate additional revenues and to become profitable will depend on our ability to execute our key growth initiative regarding the development, marketing and sale of sensing products, develop and commercialize innovative technologies, expand our contract research capabilities and sell the products that result from those development initiatives. We are unable to predict when or if we will be able to achieve profitability. If our revenues do not increase, or if our expenses increase at a greater rate than our revenues, we will continue to experience losses. Even if we do achieve profitability, we may not be able to sustain or increase our profitability on a quarterly or annual basis.

We have obtained capital by borrowing money under a term loan and we might require additional capital to support and expand our business; our term loan has various loan covenants with which we must comply.

We intend to continue to make investments to support our business growth, including developing new products, enhancing our existing products, obtaining important regulatory approvals, enhancing our operating infrastructure, completing our development activities and building our commercial scale manufacturing facilities. To the extent that we are unable to become or remain profitable and to finance our activities from our continuing operations, we may require additional funds to support these initiatives and to grow our business.

If we are successful in raising additional funds through issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, including as the result of the issuance of warrants in connection with the financing, and any new equity securities we issue could have rights, preferences and privileges superior to those of our existing common stock. Furthermore, such financings may jeopardize our ability to apply for SBIR grants or qualify for SBIR contracts or grants, and our dependence on SBIR grants may restrict our ability to raise additional outside capital. If we raise additional funds through debt financings, these financings may involve significant cash payment obligations and covenants that restrict our ability to operate our business and make distributions to our stockholders. We have a term loan with Silicon Valley Bank, or SVB, which requires us to observe certain financial and operational covenants, including maintenance of a specified cash balance, protection and registration of intellectual property rights, and certain customary negative covenants, as well as other customary events of default. If any event of default occurs SVB may declare due immediately all borrowings under our term loan and foreclose on the collateral. Furthermore, an event of default would result in an increase in the interest rate on any amounts outstanding.

27

Table of Contents

If we are unable to obtain adequate financing or financing terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly limited.

RISKS RELATING TO OUR OPERATIONS AND BUSINESS STRATEGY

If we cannot successfully transition our revenue mix from contract research revenues to product sales and license revenues, we may not be able to fully execute our business model or grow our business.

Our business model and future growth depend on our ability to transition to a revenue mix that contains significantly larger product sales and revenues from the provision of services or from licensing. Product sales and these revenues potentially offer greater scalability than contract research revenues. Our current plan is to increase our sales of commercial products, our licensing revenues and our provision of non-research services to customers so as to represent a larger percentage of our total revenues. If we are unable to develop and grow our product sales and revenues from the provision of services or from licensing to augment our contract research revenues, however, our ability to execute our business model or grow our business could suffer. There can be no assurance that we will be able to achieve increased revenues in this manner.

If we are unable to manage growth effectively, our revenues and net loss could be adversely affected.

We may need to expand our personnel resources to grow our business effectively. We believe that sustained growth at a higher rate will place a strain on our management as well as on our other human resources. To manage this growth, we must continue to attract and retain qualified management, professional, scientific and technical and operating personnel. If we are unable to recruit a sufficient number of qualified personnel, we may be unable to staff and manage projects adequately, which in turn may slow the rate of growth of our contract research revenues or our product development efforts.

We may not be successful in identifying market needs for new technologies or in developing new products.

Part of our business model depends on our ability to correctly identify market needs for new technologies. We intend to identify new market needs, but we may not always have success in doing so in part because our contract research largely centers on identification and development of unproven technologies, often for new or emerging markets. Furthermore, we must identify the most promising technologies from a sizable pool of projects. If our commercialization strategy process fails to identify projects with commercial potential or if management does not ensure that such projects advance to the commercialization stage, we may not successfully commercialize new products and grow our revenues.

Our growth strategy requires that we also develop successful commercial products to address market needs. We face several challenges in developing successful new products. Many of our existing products and those currently under development are technologically innovative and require significant and lengthy product development efforts. These efforts include planning, designing, developing and testing at the technological, product and manufacturing-process levels. These activities require us to make significant investments. Although there are many potential applications for our technologies, our resource constraints require us to focus on specific products and to forgo other opportunities. We expect that one or more of the potential products we choose to develop will not be technologically feasible or will not achieve commercial acceptance, and we cannot predict which, if any, of our products we will successfully develop or commercialize. The technologies we research and develop are new and steadily changing and advancing. The products that are derived from these technologies may not be applicable or compatible with the state of technology or demands in existing markets. Our existing products and technologies may become uncompetitive or obsolete if our competitors adapt more quickly than we do to new technologies and changes in customers' requirements. Furthermore, we may not be able to identify if and when new markets will open for our products given that future applications of any given product may not be readily determinable, and we cannot reasonably estimate the size of any markets that may develop. If we are not able to successfully develop new products, we may be unable to increase our product revenues.

We face and will face substantial competition in several different markets that may adversely affect our results of operations.

We face and will face substantial competition from a variety of companies in several different markets. As we focus on developing marketing and selling fiber optic sensing products, we may also face substantial and entrenched competition in that market.

Many of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than we do. These competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements. In addition, current and potential competitors have established or may establish financial or strategic relationships among

Table of Contents

themselves or with existing or potential customers or other third parties. Accordingly, new competitors or alliances among competitors could emerge and rapidly acquire significant market share. We cannot assure you that we will be able to compete successfully against current or new competitors, in which case our revenues may fail to increase or may decline.

We have limited experience manufacturing our products in commercial quantities in a cost-effective manner, which could adversely impact our business.

In the past, we produced most of our products on a custom order basis rather than pursuant to large contracts that require production on a large volume basis. Accordingly, other than the commercial manufacture of products by our Products and Licensing segment, we have no experience manufacturing products in large volumes. Because our experience in large scale manufacturing is limited, we may encounter unforeseen difficulties in our efforts to manufacture other products or materials in commercial quantities or have to rely on third-party contractors over which we may not have direct control to manufacture our products. We may also encounter difficulties and delays in manufacturing our products for any of the following reasons:

- we may need to expand our manufacturing operations, and our production processes may have to change to accommodate this growth;
- to increase our manufacturing output significantly, we will have to attract and retain qualified employees, who are in short supply, for the assembly and testing operations;
- we might have to sub-contract to outside manufacturers which might limit our control of costs and processes; and
- our manufacturing operations may have to comply with government or customer-mandated specifications.

If we are unable to keep up with demand for our products, our revenues could be impaired, market acceptance of our products could be adversely affected and our customers might instead purchase our competitors' products. Moreover, failure to develop and maintain a U.S. market for goods developed with U.S. government-licensed technology may result in the cancellation of the relevant U.S. government licenses. Our inability to manufacture our products successfully would have a material adverse effect on our revenues.

Even if we are able to manufacture our products on a commercial scale, the cost of manufacturing our products may be higher than we expect. If the costs associated with manufacturing are not significantly less than the prices at which we can sell our products, we may not be able to operate at a profit.

Our nanotechnology-enabled products are new and may be, or may be perceived as being, harmful to human health or the environment.

While we believe that none of our current products contain chemicals known by us to be hazardous or subject to environmental regulation, it is possible that our current or future products, particularly carbon-based nanomaterials, may become subject to environmental or other regulation. We intend to develop and sell carbon-based nanomaterials as well as nanotechnology-enabled products, which are products that include nanomaterials as a component to enhance those products' performance. Nanomaterials and nanotechnology-enabled products have a limited historical safety record. Because of their size or shape or because they may contain harmful elements, such as gadolinium and other rare-earth metals, our products could pose a safety risk to human health or the environment. These characteristics may also cause countries to adopt regulations in the future prohibiting or limiting the manufacture, distribution or use of nanomaterials or nanotechnology-enabled products. Such regulations may inhibit our ability to sell some products containing those materials and thereby harm our business or impair our ability to develop commercially viable products.

The subject of nanotechnology has received negative publicity and has aroused public debate. Government authorities could, for social or other purposes, prohibit or regulate the use of nanotechnology. Ethical and other concerns about nanotechnology could adversely affect acceptance of our potential products or lead to government regulation of nanotechnology-enabled products.

We face risks associated with our international business.

We currently conduct business internationally and we might considerably expand our international activities in the future. Our international business operations are subject to a variety of risks associated with conducting business internationally, including:

-

having to comply with U.S. export control regulations and policies that restrict our ability to communicate with non-U.S. employees and supply foreign affiliates and customers;

Table of Contents

- changes in or interpretations of foreign regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- the imposition of tariffs;
- hyperinflation or economic or political instability in foreign countries;
- imposition of limitations on, or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- conducting business in places where business practices and customs are unfamiliar and unknown;
- the imposition of restrictive trade policies;
- the imposition of inconsistent laws or regulations;
- the imposition or increase of investment and other restrictions or requirements by foreign governments;
- uncertainties relating to foreign laws and legal proceedings;
- having to comply with a variety of U.S. laws, including the Foreign Corrupt Practices Act; and
- having to comply with licensing requirements.

We do not know the impact that these regulatory, geopolitical and other factors may have on our international business in the future.

We could be negatively affected by a security breach, either through cyber attack, cyber intrusion or other significant disruption of our IT networks and related systems.

We face the risk, as does any company, of a security breach, whether through cyber attack or cyber intrusion over the Internet, malware, computer viruses, attachments to e-mails, persons inside our organization or persons with access to systems inside our organization, or other significant disruption of our IT networks and related systems. The risk of a security breach or disruption, particularly through cyber attack or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased.

As a technology company, and particularly as a government contractor, we may face a heightened risk of a security breach or disruption from threats to gain unauthorized access to our proprietary, confidential or classified information on our IT networks and related systems. These types of information and IT networks and related systems are critical to the operation of our business and essential to our ability to perform day-to-day operations, and, in some cases, are critical to the operations of certain of our customers. In addition, as certain of our technological capabilities become widely known, it is possible that we may be subjected to cyber attack or cyber intrusion as third parties seek to gain improper access to information regarding these capabilities and cyber attacks or cyber intrusion could compromise our confidential information or our IT networks and systems generally, as it is not practical as a business matter to isolate all of our confidential information and trade secrets from email and internet access. There can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging.

A security breach or other significant disruption involving these types of information and IT networks and related systems could disrupt the proper functioning of these networks and systems and therefore our operations, compromise our confidential information and trade secrets, or damage our reputation among our customers and the public generally. Any of these developments could have a negative impact on our results of operations, financial condition and cash flows.

RISKS RELATING TO OUR REGULATORY ENVIRONMENT

Our operations are subject to domestic and foreign laws, regulations and restrictions, and noncompliance with these laws, regulations and restrictions could expose us to fines, penalties, suspension or debarment, which could have a material adverse effect on our profitability and overall financial position.

Our operations, particularly our international sales, subject us to numerous U.S. and foreign laws and regulations, including, without limitation, regulations relating to imports, exports (including the Export Administration Regulations and the International Traffic in Arms Regulations), technology transfer restrictions, anti-boycott provisions, economic sanctions and the Foreign Corrupt Practices Act. The number of our various emerging

technologies, the development of many of which has been

Table of Contents

funded by the Department of Defense, presents us with many regulatory challenges. Failure by us or our sales representatives or consultants to comply with these laws and regulations could result in administrative, civil, or criminal liabilities and could result in suspension of our export privileges, which could have a material adverse effect on our business. Changes in regulation or political environment may affect our ability to conduct business in foreign markets including investment, procurement and repatriation of earnings.

Our healthcare and medical products are and may continue to be subject to a lengthy and uncertain domestic regulatory approval process. If we do not obtain and maintain the necessary domestic regulatory approvals or clearances, we will not be able to market and sell our products for clinical use in the United States. Complying with applicable regulations is an expensive and time-consuming process and any failure to fully comply with such regulations could subject us to enforcement actions.

Certain of our current and potential products could require regulatory clearances or approvals prior to commercialization. For example, any nanomaterial-based MRI contrast agent is likely to be considered a drug under the Federal Food, Drug and Cosmetic Act, or the FDC Act. Drugs and some medical devices are subject to rigorous preclinical testing and other approval requirements by the U.S. Food and Drug Administration, or the FDA, pursuant to the FDC Act, and regulations under the FDC Act, as well as by similar health authorities in foreign countries. Various federal statutes and regulations also govern or influence the testing, manufacturing, safety, labeling, packaging, advertising, storage, registration, listing and recordkeeping related to marketing of pharmaceuticals. The process of obtaining these clearances or approvals and the subsequent compliance with appropriate federal statutes and regulations require the expenditure of substantial resources, which we may not be able to obtain on favorable terms, if at all. We cannot be certain that any required FDA or other regulatory approval will be granted or, if granted, will not be withdrawn. Our failure to obtain the necessary regulatory approvals, or our failure to obtain them in a timely manner, will prevent or delay our commercialization of new products and our business or our stock price could be adversely affected as a result.

We will also become subject to inspection and marketing surveillance by the FDA to determine our compliance with regulatory requirements. If the FDA determines that we have failed to comply, it can institute a wide variety of enforcement actions ranging from a regulatory letter to a public warning letter to more severe civil and criminal sanctions. Our failure to comply with applicable requirements could lead to an enforcement action that may have an adverse effect on our financial condition and results of operations.

If our manufacturing facilities do not meet Federal, state or foreign country manufacturing standards, we may be required to temporarily cease all or part of our manufacturing operations, which would result in product delivery delays and negatively impact revenues.

Our manufacturing facilities are subject to periodic inspection by regulatory authorities and our operations will continue to be regulated by the FDA for compliance with Good Manufacturing Practice requirements contained in the quality systems regulations. We are also required to comply with International Organization for Standardization, or ISO, quality system standards in order to produce products for sale in Europe. If we fail to continue to comply with Good Manufacturing Practice requirements or ISO standards, we may be required to cease all or part of our operations until we comply with these regulations. Obtaining and maintaining such compliance is difficult and costly. We cannot be certain that our facilities will be found to comply with Good Manufacturing Practice requirements or ISO standards in future inspections and audits by regulatory authorities. In addition, if we cannot maintain or establish manufacturing facilities or operations that comply with such standards or do not meet the expectations of our customers, we may not be able to realize certain economic opportunities in our current or future supply arrangements.

Medical products are subject to various international regulatory processes and approval requirements. If we do not obtain and maintain the necessary international regulatory approvals for any such potential products, we may not be able to market and sell our medical products in foreign countries.

To be able to market and sell medical products in other countries, we must obtain regulatory approvals and comply with the regulations of those countries. These regulations, including the requirements for approvals and the time required for regulatory review, vary from country to country. Obtaining and maintaining foreign regulatory approvals are expensive, and we cannot be certain that we will have the resources to be able to pursue such approvals or whether we would receive regulatory approvals in any foreign country in which we plan to market our products. For example,

the European Union requires that manufacturers of medical products obtain the right to affix the CE mark to their products before selling them in member countries of the European Union, which we have not yet obtained and may never obtain. If we fail to obtain regulatory approval in any foreign country in which we plan to market our products, our ability to generate revenues will be harmed.

Table of Contents

We are subject to additional significant foreign and domestic government regulations, including environmental and health and safety regulations, and failure to comply with these regulations could harm our business.

Our facilities and current and proposed activities involve the use of a broad range of materials that are considered hazardous under applicable laws and regulations. Accordingly, we are subject to a number of foreign, federal, state and local laws and regulations relating to health and safety, protection of the environment and the storage, use, disposal of, and exposure to, hazardous materials and wastes. We could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental, health and safety laws. Moreover, a failure to comply with environmental laws could result in fines and the revocation of environmental permits, which could prevent us from conducting our business. Liability under environmental laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental and health and safety laws will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, pursue certain technologies, and could require us to acquire costly equipment or incur potentially significant costs to comply with environmental regulations. Compliance with foreign, federal, state and local environmental laws and regulations represents a small part of our present budget. If we fail to comply with any such laws or regulations, however, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our development. We cannot predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures or restrictions and delays in the development of our products and properties.

RISKS RELATING TO OUR INTELLECTUAL PROPERTY

Our proprietary rights may not adequately protect our technologies.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret, copyright and trademark protection of our technologies in the United States and other jurisdictions as well as successfully enforcing this intellectual property and defending it against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties to the extent that valid and enforceable intellectual property protections, such as patents or trade secrets, cover them. In particular, we place considerable emphasis on obtaining patent and trade secret protection for significant new technologies, products and processes. The degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. The degree of future protection of our proprietary rights is also uncertain for products that are currently in the early stages of development because we cannot predict which of these products will ultimately reach the commercial market or whether the commercial versions of these products will incorporate proprietary technologies.

Our patent position is highly uncertain and involves complex legal and factual questions. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;.
- we or our licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that none of our pending patent applications or the pending patent applications of our licensors will result in issued patents;
- patents may issue to third parties that cover how we might practice our technology;
- our issued patents and issued patents of our licensors may not provide a basis for commercially viable technologies, may not provide us with any competitive advantages, or may be challenged and invalidated by third parties; and
- we may not develop additional proprietary technologies that are patentable.

32

Table of Contents

Patents may not be issued for any pending or future pending patent applications owned by or licensed to us, and claims allowed under any issued patent or future issued patent owned or licensed by us may not be valid or sufficiently broad to protect our technologies. Moreover, protection of certain of our intellectual property may be unavailable or limited in the United States or in foreign countries, and we have not sought to obtain foreign patent protection for certain of our products or technologies due to cost, concerns about enforceability or other reasons. Any issued patents owned by or licensed to us now or in the future may be challenged, invalidated, or circumvented, and the rights under such patents may not provide us with competitive advantages. In addition, competitors may design around our technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, and in the case of certain products no foreign patents were filed or can be filed. This could make it easier for competitors to capture or increase their market share with respect to related technologies. We could incur substantial costs to bring suits in which we may assert our patent rights against others or defend ourselves in suits brought against us. An unfavorable outcome of any litigation could have a material adverse effect on our business and results of operations.

We also rely on trade secrets to protect our technology, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. We regularly attempt to obtain confidentiality agreements and contractual provisions with our collaborators, employees and consultants to protect our trade secrets and proprietary know-how. These agreements may be breached or may not have adequate remedies for such breach. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors, or those of our strategic partners, may unintentionally or willfully disclose our information to competitors. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, our enforcement efforts would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes unwilling to protect trade secrets. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our rights and our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies, then we will not be able to exclude competitors from developing or marketing competing technologies and we may not generate enough revenues from product sales to justify the cost of developing our technologies and to achieve or maintain profitability.

We also rely on trademarks to establish a market identity for our company and our products. To maintain the value of our trademarks, we might have to file lawsuits against third parties to prevent them from using trademarks confusingly similar to or dilutive of our registered or unregistered trademarks. Also, we might not obtain registrations for our pending trademark applications, and we might have to defend our registered trademark and pending trademark applications from challenge by third parties. Enforcing or defending our registered and unregistered trademarks might result in significant litigation costs and damages, including the inability to continue using certain trademarks.

Third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result.

Various U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in our technology areas. Such third parties may claim that we infringe their patents. Because patent applications can take several years to result in a patent issuance, there may be currently pending applications, unknown to us, which may later result in issued patents that our technologies may infringe. For example, we are aware of competitors with patents in technology areas applicable to our optical test equipment products. Such competitors may allege that we infringe these patents. There could also be existing patents of which we are not aware that our technologies may inadvertently infringe. We have from time to time, and may in the future, be contacted by third parties, including patent assertion entities or intellectual property advisors, about licensing opportunities that also contain claims that we are infringing on third party patent rights. If third parties assert these claims against us we could incur extremely substantial costs and diversion of management resources in defending these claims, and the defense of these claims could have a material adverse effect on our business, financial condition and results of operations. Even if we believe we have not infringed on a third party’s patent rights, we may have to settle a claim on unfavorable terms because we cannot afford to litigate the claim. In addition, if third parties assert claims against us and we are unsuccessful in defending against these claims, these third parties may be awarded substantial damages as well as injunctive or other

equitable relief against us, which could effectively block our ability to make, use, sell, distribute or market our products and services in the United States or abroad.

Commercial application of nanotechnologies in particular, or technologies involving nanomaterials, is new and the scope and breadth of patent protection is uncertain. Consequently, the patent positions of companies involved in nanotechnologies have not been tested, and there are complex legal and factual questions for which important legal principles will be developed or may remain unresolved. In addition, it is not clear whether such patents will be subject to interpretations or legal doctrines that differ from conventional patent law principles. Changes in either the patent laws or in interpretations of patent laws in the

Table of Contents

United States and other countries may diminish the value of our nanotechnology-related intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our nanotechnology-related patents or in third party patents. In the event that a claim relating to intellectual property is asserted against us, or third parties not affiliated with us hold pending or issued patents that relate to our products or technology, we may seek licenses to such intellectual property or challenge those patents. However, we may be unable to obtain these licenses on commercially reasonable terms, if at all, and our challenge of the patents may be unsuccessful. Our failure to obtain the necessary licenses or other rights could prevent the sale, manufacture or distribution of our products and, therefore, could have a material adverse effect on our business, financial condition and results of operations.

A substantial portion of our technology is subject to retained rights of our licensors, and we may not be able to prevent the loss of those rights or the grant of similar rights to third parties.

A substantial portion of our technology is licensed from academic institutions, corporations and government agencies. Under these licensing arrangements, a licensor may obtain rights over the technology, including the right to require us to grant a license to one or more third parties selected by the licensor or that we provide licensed technology or material to third parties for non-commercial research. The grant of a license for any of our core technologies to a third party could have a material and adverse effect on our business. In addition, some of our licensors retain certain rights under the licenses, including the right to grant additional licenses to a substantial portion of our core technology to third parties for non-commercial academic and research use. It is difficult to monitor and enforce such non-commercial academic and research uses, and we cannot predict whether the third-party licensees would comply with the use restrictions of such licenses. We have incurred and could incur substantial expenses to enforce our rights against them. We also may not fully control the ability to assert or defend those patents or other intellectual property which we have licensed from other entities, or which we have licensed to other entities.

In addition, some of our licenses with academic institutions give us the right to use certain technology previously developed by researchers at these institutions. In certain cases we also have the right to practice improvements on the licensed technology to the extent they are encompassed by the licensed patents and are within our field of use. Our licensors may currently own and may in the future obtain additional patents and patent applications that are necessary for the development, manufacture and commercial sale of our anticipated products. We may be unable to agree with one or more academic institutions from which we have obtained licenses whether certain intellectual property developed by researchers at these academic institutions is covered by our existing licenses. In the event that the new intellectual property is not covered by our existing licenses, we would be required to negotiate a new license agreement. We may not be able to reach agreement with current or future licensors on commercially reasonable terms, if at all, or the terms may not permit us to sell our products at a profit after payment of royalties, which could harm our business.

Some of our patents may cover inventions that were conceived or first reduced to practice under, or in connection with, U.S. government contracts or other federal funding agreements. With respect to inventions conceived or first reduced to practice under a federal funding agreement, the U.S. government may retain a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention throughout the world. We may not succeed in our efforts to retain title in patents, maintain ownership of intellectual property or in limiting the U.S. government’s rights in our proprietary technologies and intellectual property when an issue exists as to whether such intellectual property was developed in the performance of a federal funding agreement or developed at private expense.

RISKS RELATING TO OUR COMMON STOCK

We may become involved in securities class action litigation that could divert management’s attention and harm our business and our insurance coverage may not be sufficient to cover all costs and damages.

The stock market has from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of technology companies. These broad market fluctuations may cause the market price of our common stock to decline. In the past, following periods of volatility in the market price of a particular company’s securities, securities class action litigation has often been brought against that company. Securities class litigation also often follows certain significant business transactions, such as the sale of a business division or a

change in control transaction. We may become involved in this type of litigation in the future. Litigation often is expensive and diverts management's attention and resources, which could adversely affect our business.

We may not be able to comply with all applicable listing requirements or standards of The NASDAQ Capital Market and NASDAQ could delist our common stock.

Our common stock is listed on The NASDAQ Capital Market. In order to maintain that listing, we must satisfy minimum financial and other continued listing requirements and standards. There can be no assurances that we will be able to comply

Table of Contents

with applicable listing standards. In the event that our common stock is not eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock, and there would likely also be a reduction in our coverage by security analysts and the news media, which could cause the price of our common stock to decline further. Also, it may be difficult for us to raise additional capital if we are not listed on a major exchange.

Our common stock price has been volatile and we expect that the price of our common stock will fluctuate substantially in the future, which could cause you to lose all or a substantial part of your investment.

The public trading price for our common stock is volatile and may fluctuate significantly. Since January 1, 2009, our common stock has traded between a high of $5.00 per share and a low of $0.26 per share. Among the factors, many of which we cannot control, that could cause material fluctuations in the market price for our common stock are:

- sales of our common stock by our significant stockholders, or the perception that such sales may occur, including sales pursuant to the Form S-3 registration statement described above;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earnings estimates;
- changes in our status as an entity eligible to receive SBIR contracts and grants;
- quarterly variations in our or our competitors' results of operations;
- general market conditions and other factors unrelated to our operating performance or the operating performance of our competitors;
- announcements by us, or by our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- pending or threatened litigation;
- any major change in our board of directors or management or any competing proxy solicitations for director nominees;
- changes in governmental regulations or in the status of our regulatory approvals;
- announcements related to patents issued to us or our competitors;
- a lack of, limited or negative industry or securities analyst coverage;
- discussions of our company or our stock price by the financial and scientific press and online investor communities such as chat rooms; and
- general developments in our industry.

In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These factors may materially and adversely affect the market price of our common stock.

If our internal control over financial reporting is found not to be effective or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls, investors could lose confidence in our financial reports, and our stock price may be adversely affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include an internal control report with our Annual Report on Form 10-K. That report must include management's assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year.

We evaluate our existing internal control over financial reporting based on the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. During the course of our ongoing evaluation of the internal controls, we may identify areas requiring improvement, and may have to design enhanced processes and controls to address issues identified through this review. Remedying any deficiencies, significant deficiencies or material weaknesses that we identify may require us to incur significant costs and expend significant time and management resources. We cannot assure you that any of the measures we implement to remedy any such deficiencies will effectively mitigate or remedy such deficiencies. Investors could lose confidence in our financial reports, and our stock price may be adversely affected, if our internal controls over

35

Table of Contents

financial reporting are found not to be effective by management or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

Anti-takeover provisions in our amended and restated certificate of incorporation and bylaws and Delaware law could discourage or prevent a change in control, even if an acquisition would be beneficial to our stockholders, which could affect our stock price adversely and prevent attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and bylaws and Delaware law contain provisions that might delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. These provisions include:

- a classified board of directors serving staggered terms;
- advance notice requirements to stockholders for matters to be brought at stockholder meetings;
- a supermajority stockholder vote requirement for amending certain provisions of our amended and restated certificate of incorporation and bylaws; and
- the right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquirer.

We are also subject to provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15% or more of our common stock for five years unless the holder’s acquisition of our stock was approved in advance by our board of directors.

The existence of these provisions could adversely affect the voting power of holders of common stock and limit the price that investors might be willing to pay in the future for shares of our common stock.

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

(a) Unregistered Sales of Equity Securities during the Three Months Ended June 30, 2014

Common Stock Dividend Payable to Carilion

The Company issued 1,321,514 shares of Series A Preferred Stock, par value $0.001 per share, to Carilion Clinic in January 2010, which shares were issued in reliance on the exemptions from registration under the Securities Act provided by Sections 3(a)(9) and 4(2) thereof. The Series A Preferred Stock accrues dividends at the rate of approximately $0.2815 per share per annum, payable quarterly in arrears. Accrued dividends are payable in shares of the Company’s common stock, with the number of shares being equal to the quotient of (i) the cumulative aggregate balance of accrued but unpaid dividends on each share of Series A Preferred Stock divided by (ii) the conversion price of the Series A Preferred Stock, which is currently $4.69159 per share. For the period from January 12, 2010, the original issue date of the Series A Preferred Stock, through June 30, 2014, the Series A Preferred Stock issued to Carilion has accrued $767,046 in dividends. The accrued dividend as of June 30, 2014 will be paid by the issuance of 354,171 shares of the Company’s common stock, which the Company will issue at Carilion’s written request. As the Series A Preferred Stock was issued in reliance on the exemption provided by Section 3(a)(9), the shares of common stock payable as dividends will also be exempt from registration in reliance on Section 3(a)(9) of the Securities Act.

(b) Use of Proceeds from Sale of Registered Equity Securities

Not applicable.

(c) Purchases of Equity Securities by the Issuer and Affiliated Purchasers

During the three months ended June 30, 2014, we repurchased shares of common stock according to the following schedule pursuant to the election of the holders to satisfy tax withholding requirements with respect to the vesting of their respective restricted stock awards.

Table of Contents

Month purchased	Number of shares	Average price paid per share
April	—	N/A
May	1,875	$1.42
June	20,850	$1.42

ITEM 3. DEFAULTS UPON SENIOR SECURITIES
None.

ITEM 4. MINE SAFETY DISCLOSURES
Not applicable.

ITEM 5. OTHER INFORMATION
None.

ITEM 6. EXHIBITS
The exhibits listed on the Exhibit Index hereto are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

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.

Luna Innovations Incorporated

Date: August 14, 2014

By: /s/ Dale Messick
Dale Messick
Chief Financial Officer
(principal financial and accounting officer and duly authorized officer)

Table of Contents

EXHIBIT INDEX

Exhibit Number	Description
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of Principal Financial Officer 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 the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets at June 30, 2014 and December 31, 2013, (ii) Consolidated Statements of Operations for the three and six months ended June 30, 2014 and 2013, (iii) Consolidated Statements of Cash Flows for the six months ended June 30, 2014 and 2013, and (iv) Notes to Unaudited Consolidated Financial Statements.

*	These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and are not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.