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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

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

For the quarterly period ended March 31, 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. ☒ 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). ☒ Yes ☐ No

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

Large accelerated filer ☐ Accelerated filer ☐

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

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

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. ☒ 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 April 30, 2014, there were 14,735,401 shares of the registrant's common stock outstanding.

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," "predicts," "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.

LUNA INNOVATIONS INCORPORATED
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED MARCH 31, 2014

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PART I. FINANCIAL INFORMATION

ITEM 1. *FINANCIAL STATEMENTS*

Luna Innovations Incorporated
Condensed Consolidated Balance Sheets

	March 31, 2014 (unaudited)	December 31, 2013
Assets		
Current assets:		
Cash and cash equivalents	$ 10,886,015	$ 7,778,541
Accounts receivable, net	10,512,087	5,408,281
Inventory, net	3,294,498	3,346,177
Prepaid expenses	542,788	708,974
Other current assets	70,208	70,208
Total current assets	25,305,596	17,312,181
Property and equipment, net	1,960,095	2,060,709
Intangible assets, net	223,366	288,475
Other assets	23,918	42,710
Total assets	$ 27,512,975	$ 19,704,075
Liabilities and stockholders' equity		
Liabilities:		
Current Liabilities:		
Current portion of long-term debt obligation	$ 1,500,000	$ 1,500,000
Current portion of capital lease obligation	67,621	66,617
Accounts payable	1,257,633	1,401,764
Accrued liabilities	3,061,184	3,546,585
Deferred credits	552,831	691,424
Total current liabilities	6,439,269	7,206,390
Long-term debt obligation	250,000	625,000
Long-term lease obligation	93,021	110,307
Total liabilities	6,782,290	7,941,697
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, par value $ 0.001, 1,321,514 shares authorized, issued and outstanding at March 31, 2014 and December 31, 2013	1,322	1,322
Common stock, par value $ 0.001, 100,000,000 shares authorized, 14,731,652 and 14,527,335 shares issued and outstanding at March 31, 2014 and December 31, 2013, respectively	15,066	14,842
Additional paid-in capital	63,213,966	62,756,571
Accumulated deficit	(42,499,669)	(51,010,357)
Total stockholders' equity	20,730,685	11,762,378
Total liabilities and stockholders' equity	$ 27,512,975	$ 19,704,075

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

Luna Innovations Incorporated
Condensed Consolidated Statements of Operations

	Three Months Ended March 31,	
	2014	2013
	(unaudited)	
Revenues:		
Technology development revenues	$ 2,675,452	$ 2,627,241
Products and licensing revenues	1,796,429	1,478,127
Total revenues	4,471,881	4,105,368
Cost of revenues:		
Technology development costs	2,025,155	2,184,914
Products and licensing costs	894,640	785,728
Total cost of revenues	2,919,795	2,970,642
Gross Profit	1,552,086	1,134,726
Operating expense:		
Selling, general and administrative	2,755,078	2,663,108
Research, development and engineering	749,154	712,952
Total operating expense	3,504,232	3,376,060
Operating loss	(1,952,146)	(2,241,334)
Other (expense)/income:		
Other income, net	82,106	98,154
Interest expense	(32,365)	(58,179)
Total other income	49,741	39,975
Loss from continuing operations before income taxes	(1,902,405)	(2,201,359)
Income tax benefit	(769,190)	(882,427)
Net loss from continuing operations	(1,133,215)	(1,318,932)
Income from discontinued operations, net of income taxes	9,673,439	4,104,529
Net income	8,540,224	2,785,597
Preferred stock dividend	29,536	23,629
Net income attributable to common stockholders	$ 8,510,688	$ 2,761,968
Net loss per share from continuing operations:		
Basic	$ (0.08)	$ (0.09)
Diluted	$ (0.08)	$ (0.09)
Net income per share from discontinued operations:		
Basic	$ 0.66	$ 0.29
Diluted	$ 0.56	$ 0.25
Net income per share attributable to common stockholders:		
Basic	$ 0.58	$ 0.20
Diluted	$ 0.49	$ 0.17
Weighted average common shares and common equivalent shares outstanding:		
Basic	14,653,262	14,011,814
Diluted	17,424,769	16,615,574

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

Luna Innovations Incorporated
Condensed Consolidated Statements of Cash Flows

	Three Months Ended March 31,	
	2014	2013
	(unaudited)	
Cash flows used in operating activities		
Net income	$ 8,540,224	$ 2,785,597
Adjustments to reconcile net income to net cash used in operating activities		
Depreciation and amortization	202,305	228,267
Share-based compensation	230,939	313,516
Gain on sale of discontinued operations, net of income taxes	(9,701,515)	(4,046,497)
Tax benefit from utilization of net operating loss carryforward	(787,318)	(843,785)
Change in assets and liabilities:		
Accounts receivable	896,194	2,039,952
Inventory	13,314	(185,004)
Other current assets	112,286	(127,333)
Other assets	18,792	53,792
Accounts payable and accrued expenses	(821,763)	(231,430)
Deferred credits	(138,593)	(259,427)
Net cash used in operating activities	(1,435,135)	(272,352)
Cash flows provided by investing activities		
Acquisition of property and equipment	(67,944)	(50,255)
Intangible property costs	(126,091)	(11,777)
Proceeds from sale of discontinued operations, net of fees	4,958,891	4,522,460
Net cash provided by investing activities	4,764,856	4,460,428
Cash flows used in financing activities		
Payments on capital lease obligations	(16,282)	(13,221)
Payment of debt obligations	(375,000)	(250,000)
Proceeds from the exercise of options and warrants	169,035	1,682
Net cash used in financing activities	(222,247)	(261,539)
Net increase in cash and cash equivalents	3,107,474	3,926,537
Cash and cash equivalents—beginning of period	7,778,541	6,340,461
Cash and cash equivalents—end of period	$ 10,886,015	$ 10,266,998
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 30,000	$ 35,063
Dividend on preferred stock, 19,823 shares of common stock issuable for the quarter ended March 31, 2014 and 2013	$ 29,536	$ 23,629
Cash paid for income taxes	$ —	$ 14,010

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

Luna Innovations Incorporated
Notes to Unaudited Condensed 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 three months ended March 31, 2014 attributable to our operations and other charges. 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, in addition to the funds available to us under the Credit Facilities described in Note 5below, will provide adequate liquidity for us to meet our working capital needs over the next twelve months.

Unaudited Interim Financial Information

The accompanying unaudited condensed 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 condensed 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 March 31, 2014, results of operations for the three months ended March 31, 2014 and 2013, and cash flows for the three months ended March 31, 2014 and 2013. The results of operations for the three months ended March 31, 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. As used herein, the terms "Luna", the "Company", "we", "our" and "us" mean Luna Innovations Incorporated and its consolidated subsidiaries.

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

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.

Net Loss Per Share from Continuing Operations and Net Income Attributable to Common Stockholders

	Net loss per share from continuing operations		Net income attributable to common stockholders per share	
	For the three months ended March 31,		For the three months ended March 31,	
	2014	2013	2014	2013
Numerator:				
Net loss from continuing operations	$ (1,133,215)	$ (1,318,932)		
Net income attributable to stockholders			$ 8,510,688	2,761,968
Denominator:				
Basic weighted average common shares outstanding	14,653,262	14,011,814	14,653,262	14,011,814
Weighted average common stock equivalents from assumed exercise of stock options and restricted stock awards	—	—	1,115,645	1,047,013
Convertible preferred stock	—	—	1,321,514	1,321,514
Preferred stock dividends	—	—	334,348	235,233
Diluted weighted average common shares outstanding	14,653,262	14,011,814	17,424,769	16,615,574
Basic net loss per share from continuing operations	$ (0.08)	$ (0.09)		
Diluted net loss per share from continuing operations	$ (0.08)	$ (0.09)		
Basic net income per share attributable to common stockholders			$ 0.58	$ 0.20
Diluted net income per share attributable to common stockholders			$ 0.49	$ 0.17
Weighted-average anti-dilutive shares related to:				
Outstanding stock options	4,440,731	5,422,130	3,593,929	4,786,630
Convertible preferred stock	1,321,514	1,321,514	—	—
Preferred stock dividends	314,525	195,587	—	—
Restricted stock	268,843	169,515	—	—
Carilion warrants	366,000	366,000	366,000	366,000

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 three months ended March 31, 2014 and 2013 was estimated as of the grant date using the Black-Scholes option pricing model with the following assumptions:

	Three months ended March 31, 2014	Three months ended March 31, 2013
Risk-free interest rate	2.14%	1.27%
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 three months ended March 31, 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	10,000	$1.53	$ 1.53				
Exercised	(204,317)	$0.35 - $1.27	$ 0.83				
Canceled	(202,845)	$0.82 - $2.46	$ 1.39				
Balance, March 31, 2014	4,882,067	$0.35 - $6.55	$ 2.19	$ 733,958	3,983,733	$ 2.29	$ 652,065

(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 March 31, 2014, the outstanding stock options to purchase an aggregate of 4.9 million shares had a weighted average remaining contractual term of 5.5 years, and the exercisable stock options to purchase an aggregate of 4.0 million shares had a weighted average remaining contractual term of 4.9 years.

For the three months ended March 31, 2014 and 2013, we recognized $0.2 million and $0.3 million, respectively, in share-based compensation expense, which is included in our selling, general and administrative expenses in the accompanying consolidated financial statements. We expect to recognize $1.4 million in share-based compensation expense over the weighted average remaining service period of 1.3 years for stock options outstanding as of March 31, 2014.

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. 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 has entered into a sublease with us for the facilities historically occupied by SCC through May1, 2014 for a total of $0.1 million during the three months ended March 31, 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 $6.0 million was paid at closing and a second $6.0 million in cash was received on April 22, 2014, plus up to $8.0 million upon the accomplishment by the buyer of certain technical specifications and 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 $1.1 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 gain on the sale of medical shape sensing business of $9.7 million or $0.56 per diluted share in our first quarter 2014 results.

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	
	March 31, 2014	March 31, 2013
Net revenues	$ —	$ 1,033,124
Cost of revenues	46,204	706,705
Operating expenses	—	229,745
(Loss)/Income before income taxes	(46,204)	96,674
Allocated tax (benefit)/expense	(18,128)	38,642
Operating (loss)/ income from discontinued operations	(28,076)	58,032
Gain on sale, net of $1.0 million, and $0.9 million, of related income taxes, respectively	9,701,515	4,046,497
Income from discontinued operations, net of income taxes	$ 9,673,439	$ 4,104,529

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:

	March 31, 2014	December 31, 2013
Finished goods	$ 666,980	$ 719,574
Work-in-process	454,261	361,754
Parts	2,377,325	2,339,595
	3,498,566	3,420,923
Less: Inventory reserves	204,068	74,746
Total inventory, net	$ 3,294,498	$ 3,346,177

4. Accrued Liabilities

	March 31, 2014	December 31, 2013
Accrued compensation	$ 1,743,898	$ 2,205,612
Accrued sub-contracts	348,348	297,510
Accrued professional fees	211,035	279,991
Accrued income tax	182,340	13,143
Deferred rent	96,662	102,569
Royalties	64,453	290,025
Warranty reserve	56,188	56,700
Accrued liabilities - other	358,260	301,035
Total Accrued Liabilities	$ 3,061,184	$ 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%. 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, we also have a revolving credit facility (the "Line of Credit" and together with the Term Loan, the "Credit Facilities") with a maximum borrowing capacity of $1.0 million. The interest rate on the Line of Credit is SVB's prime rate plus 1.25%, payable monthly in arrears, and we are required to pay an unused Line of Credit fee of one-quarter of one percent (0.25%), payable monthly. We may terminate the Line of Credit for a termination fee of $10,000, which fee would not be payable in the event that the Line of Credit is replaced by another loan facility with SVB. The Line of Credit has a maturity date of May 17, 2014. We are currently discussing extending this maturity date.

Amounts due under the Credit Facilities 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 Credit Facilities also require us to observe a number of operational covenants, including protection and registration of intellectual property rights, and certain customary negative covenants. As of March 31, 2014, we were in compliance with all covenants under the Credit Facilities.

In addition, the Credit Facilities contain 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 Credit Facilities and foreclose on the collateral. Furthermore, an event of default under the Credit Facilities would result in an increase in the interest rate on any amounts outstanding. As of March 31, 2014, there were no events of default on our Credit Facilities.

The balance under the Term Loan at March 31, 2014 was $1.8 million of which $0.3 million was classified as long-term and $1.5 million was classified as short-term. No amounts were outstanding under the Line of Credit and the available credit capacity was $1.0 million at March 31, 2014.

6. Capital Stock and Additional Paid-in Capital

The following details our equity transactions during the three months ended March 31, 2014:

	Preferred Stock		Common Stock		Additional Paid-in Capital
	Shares	$	Shares	$	$
Balances, December 31, 2013	1,321,514	1,322	14,527,335	14,842	62,756,571
Exercise of stock options	—	—	204,317	204	168,831
Share-based compensation (1)	—	—	—	—	259,048
Stock dividends to Carilion Clinic(2)	—	—	—	20	29,516
Balances, March 31, 2014	1,321,514	1,322	14,731,652	15,066	63,213,966

(1) Share-based compensation includes the acceleration of stock options for a former employee included in the sale of our medical shape sensing business to Intuitive.

(2) The stock dividends payable in connection with Carilion Clinic's Series A Preferred Stock will be issued subsequent to March 31, 2014. For the period from January 12, 2010, the original issue date of the Series A Preferred Stock, through March 31, 2014, the Series A Preferred Stock issued to Carilion has accrued $739,711 in dividends. The accrued and unpaid dividends as of March 31, 2014 will be paid by the issuance of 334,348 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 March 31, 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:

	Three Months Ended March 31,	
	2014	2013
	(unaudited)	
Revenues:		
Technology development revenues	$ 2,675,452	$ 2,627,241
Products and licensing revenues	1,796,429	1,478,127
Total revenues	$ 4,471,881	$ 4,105,368
Technology development operating loss	$ (1,527,646)	$ (951,763)
Products and licensing operating loss	(424,500)	(1,289,571)
Total operating loss	$ (1,952,146)	$ (2,241,334)
Depreciation, technology development	$ 56,743	$ 101,566
Depreciation, products and licensing	$ 38,100	$ 57,142
Amortization, technology development	$ 64,293	$ 44,514
Amortization, products and licensing	$ 43,169	$ 25,045

The table below presents assets for reportable segments:

	March 31, 2014	December 31, 2013
Total segment assets:		
Technology development	$ 16,460,555	$ 10,208,433
Products and licensing	11,052,420	9,495,642
Total	$ 27,512,975	$ 19,704,075
Property plant and equipment, and intangible assets, technology development	$ 1,306,328	$ 1,217,083
Property plant and equipment, and intangible assets, products and licensing	$ 877,133	$ 1,132,101

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

The United States Government accounted for approximately 62% and 66% of total consolidated revenues for the three months ended March 31, 2014 and 2013, respectively.

International revenues (customers outside the United States) accounted for approximately 19% and 26% of total consolidated revenues for the three months ended March 31, 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 March 31, 2014, approximately $1.0 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.

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, 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 40% and 36% of our total revenues for the three months ended March 31, 2014 and 2013, respectively.

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 60% and 64% of our total revenues for the three months ended March 31, 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 $2.6 million in the three

months ended March 31, 2013 to $2.7 million for the three months ended March 31, 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 $7.8 million at March 31, 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.

As described in Note 2 to our condensed 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 condensed consolidated financial statements included elsewhere in this report. Net loss from continuing operations was $1.1 million for the quarter ended March 31, 2014, compared to $1.3 million for the quarter ended March 31, 2013. After giving effect to the results of discontinued operations, including the recognition of a $9.7 million gain, net of taxes, we recognized on the sale of medical shape sensing to Intuitive, we recorded net income attributable to common stockholders of approximately $8.5 million for the quarter ended March 31, 2014. For the quarter ended March 31, 2013, we recorded a net income attributable to common stockholders of approximately $2.8 million, including an after-tax gain of $4.0 million recognized on the sale of SCC. We expect to continue to 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 our medical shape sensing business in 2014 are expected to result in lower revenues 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 60% and 64% of our total revenues for the three months ended March 31, 2014 and 2013, respectively.

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 40% and 36% of our total revenues for the three months ended March 31, 2014 and 2013, respectively.

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.

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 March 31, 2014 Compared to Three Months Ended March 31, 2013

Revenues

	Three months ended March 31,			
	2014	2013	Change	
Revenues:				
Technology development revenues	$ 2,675,452	$ 2,627,241	$ 48,211	2%
Products and licensing revenues	1,796,429	1,478,127	$ 318,302	22%
Total revenues	$ 4,471,881	$ 4,105,368	$ 366,513	9%

Revenues from our Technology Development segment remained virtually unchanged from the three months ended March 31, 2013 compared to the three months ended March 31, 2014.

Revenues from our Products and Licensing segment increased by $0.3 million from $1.5 million in the three months ended March 31, 2013 to $1.8 million for the same period in 2014. This increase in our Products and Licensing revenues was primarily attributable to increased sales of our OVA product line.

Cost of Revenues and Gross Profit

	Three months ended March 31,			
	2014	2013	Change	
Cost of revenues:				
Technology development costs	$ 2,025,155	$ 2,184,914	$ (159,759)	(7)%
Products and licensing costs	894,640	785,728	$ 108,912	14 %
Total cost of revenues	$ 2,919,795	$ 2,970,642	$ (50,847)	(2)%
Gross Profit	$ 1,552,086	$ 1,134,726	$ 417,360	37 %

The cost of our Technology Development segment revenues decreased primarily due to the payment of $0.1 million in severance related expenses associated with a reduction in the headcount in our optical systems group in the first quarter of 2013.

The increase in cost of revenues in our Products and Licensing segment resulted from the increase in product sales noted above.

Because of the overall increase in revenues of 9% in the three months ended March 31, 2014 compared to the three months ended March 31, 2013, with essentially no change in the associated cost of revenues, our gross profit increased to $1.6 million for the three months ended March 31, 2014, compared to $1.1 million for the three months ended March 31, 2013.

Operating Expense

	Three months ended March 31,			
	2014	2013	Change	
Operating expense:				
Selling, general and administrative	$ 2,755,078	$ 2,663,108	$ 91,970	3%
Research, development and engineering	749,154	712,952	$ 36,202	5%
Total operating expense	$ 3,504,232	$ 3,376,060	$ 128,172	4%

Our selling, general and administrative expense increased 3% during the three months ended March 31, 2014, as compared to the same period in 2013. The increase was primarily due to increase in bids and proposal expenses in our Technology Development segment.

Research, development and engineering expense remained virtually unchanged.

Other Income

During the three months ended March 31, 2014 and 2013, we recognized approximately $80,000 and $27,000, respectively, of rent from Mac-B for the partial sublease of our Roanoke facility.

During the three months ended March 31, 2013, we also recognized other income of approximately $23,000 resulting from the amortization of the discount on the Hansen debt and approximately $48,000 in an insurance policy profit share.

Interest Expense

Interest expense for the three months ended March 31, 2014 was approximately $32,000 compared to interest expense of approximately $58,000 during the same period in 2013. The monthly average loan balance during the three months ended March 31, 2014 was $1.9 million compared to $3.5 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 March 31, 2014, we incurred a net loss from continuing operations before income taxes of approximately $1.9 million, compared to a net loss from continuing operations before income taxes of approximately $2.2 million for the three months ended March 31, 2013. We also recorded an income tax benefit from utilization of our available net operating loss carryforwards of $0.8 million and $0.9 million for the three months ended March 31, 2014 and 2013, respectively. After recognition of the tax benefit, our loss from continuing operations was $1.1 million for the three months ended March 31, 2014 compared to a loss from continuing operations of $1.3 million for the three months ended March 31, 2013.

Net Income from Discontinued Operations, Net of Income Taxes

For the three months ended March 31, 2014, we recognized net income from discontinued operations of $9.7 million, compared to net income from discontinued operations of $4.1 million for the same period in 2013. For the three months ended March 31, 2014, this income resulted from the sale of our medical shape sensing business that occurred during this quarter.

For the three months ended March 31, 2013, net income from discontinued operations consisted of $4.0 million gain on the sale of our SCC business, net of tax, in addition to an operating income from our medical shape sensing business of $0.2 million, partially offset by an operating loss of $0.1 million from our SCC business for the two months prior to the sale on March 1, 2013.

Liquidity and Capital Resources

At March 31, 2014, our total cash and cash equivalents were $10.9 million.

We have a term loan with SVB which at March 31, 2014 had a balance of $1.8 million. This term loan matures on May 1, 2015. We also maintain a revolving line of credit of up to $1.0 million with SVB, under which no amounts are outstanding and the full borrowing capacity of $1.0 million remains available. The line of credit is currently scheduled to expire on May 18, 2014, and we are contemplating its renewal. The terms and conditions of our term loan and line of credit are described in Note 5 of our condensed consolidated financial statements included in this report.

We believe that our cash balance as of March 31, 2014, in addition to a $6.0 million payment received from Intuitive in April 2014 as part of the sale of our medical shape sensing business, our expected operating cash flows and the funds available to us under the line of credit with SVB, provide adequate liquidity for us to meet our working capital needs over the next twelve months.

Discussion of Cash Flows

Recent Activity

	Three months ended		
	2014	2013	Change
Net cash used in operating activities	$ (1,435,135)	$ (272,352)	$ (1,162,783)
Net cash provided by investing activities	4,764,856	4,460,428	$ 304,428
Net cash used in financing activities	(222,247)	(261,539)	$ 39,292
Net change in cash	$ 3,107,474	$ 3,926,537	$ (819,063)

During the first three months of 2014, operations used $1.4 million of net cash, as compared to the same period in 2013 in which operations used $0.3 million of net cash. During the first three months of 2014, our net income of $8.5 million was primarily the result of the after-tax gain on the sale of our medical shape sensing business of $9.7 million and a tax benefit of $0.8 million. Without the effects of that gain and tax benefit, our pre-tax loss from continuing operations was approximately $1.9 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.2 million and share-based compensation of $0.2 million both of which are non-cash items that do not impact cash flow for the period. Additionally, working capital remained virtually unchanged, and consisted of a $0.9 million decrease in accounts receivable due to improved collection efforts, which was offset by a $0.8 million decrease in accounts payable.

During the three months ended March 31, 2013, operations used $0.3 million of net cash. Our net income of $2.8 million was primarily the result of the gain on the sale of SCC of $4.0 million and a tax benefit of $0.9 million. Without the effects of that gain and tax benefit, our pre-tax loss from continuing operations was $2.2 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.2 million and share-based compensation of $0.3 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 $1.3 million, consisting of a $2.0 million decrease in accounts receivable due to improved collection efforts, partially offset by a $0.2 million decrease in accounts payable and accrued liabilities and $0.3 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 three months ended March 31, 2014, we had a net cash inflow of $5.0 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 three months ended March 31, 2013, we had a net cash inflow of $4.5 million due to the sale of SCC and used $0.1 million for equipment purchases.

Net cash used in financing activities during the three months ended March 31, 2014 included the scheduled repayments of principal for our debt and lease obligations, which in the aggregate resulted in net cash outflows of $0.4 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 three months ended March 31, 2013 included the scheduled repayments of principal for our debt and lease obligations, which in the aggregate resulted in net cash outflows of $0.3 million.

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 and line of credit with SVB each having a variable interest rate. However, the loan facility 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 $1.8 million outstanding under the term loan as of March 31, 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 $14,000.

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 March 31, 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 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 March 31, 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 March 31, 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 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 recently filed a Form S-3 registration statement 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.

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 March 31, 2014, we had approximately 119 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 the SBA has been in the process of performing a formal size determination that focused on whether or not Carilion is or was our affiliate. 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.

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 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 60% and 64% of our consolidated total revenues for the three months ended March 31, 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.

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.

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.

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 $1.1 million for the three months ended March 31, 2014, compared to $1.3 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 credit facility and we might require additional capital to support and expand our business; our credit facility has various loan covenants with which we must comply and if we need any such additional capital or we fail to comply with our loan covenants, this capital might not be available or only available on unfavorable terms.

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 maintain a credit facility 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 credit facility and foreclose on the collateral. Furthermore, an event of default would result in an increase in the interest rate on any amounts outstanding.

If we are unable to borrow under the SVB credit facility or otherwise 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 revenue 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 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;
- 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 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.

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.

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 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 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 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 Month Period Ended March 31, 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 March 31, 2014, the Series A Preferred Stock issued to Carilion has accrued $739,711 in dividends. The accrued dividend as of March 31, 2014 will be paid by the issuance of 334,348 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

None.

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.

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: May 13, 2014

By: /s/ Dale Messick

Dale Messick

Chief Financial Officer

(principal financial and accounting officer and duly authorized officer)

EXHIBIT INDEX

Exhibit Number	Description
2.1*+	Asset Purchase Agreement by and between Luna Innovations Incorporated and Luna Technologies, Inc., and Intuitive Surgical Operations, Inc., and Intuitive Surgical International, Ltd., dated as of January 17, 2014
10.1*	2014 Senior Management Incentive Plan
10.2*	Cross-License Agreement by and among Luna Innovations Incorporated and Luna Technologies, Inc., and Intuitive Surgical Operations, Inc., and Intuitive Surgical International, Ltd., dated as of January 17, 2014
10.3*	Consent, Release and Fifth Loan Modification Agreement between Luna Innovations Incorporated and Silicon Valley Bank dates as of January 21, 2014
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 March 31, 2014, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets at March 31, 2014 and December 31, 2013, (ii) Condensed Consolidated Statements of Operations for the three months ended March 31,2014 and 2013, (iii) Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2014 and 2013, and (iv) Notes to Unaudited Condensed Consolidated Financial Statements.

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* Confidential treatment has been requested with respect to portions of this exhibit, indicated by asterisks, which have been filed separately with the Securities and Exchange Commission.

\+ Pursuant to item 601(b)(2) of Regulation S-K, the schedules and exhibits to this agreement are omitted, but will be furnished to the Securities and Exchange Commission upon request.

** 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.

EXHIBIT 2.1

ASSET PURCHASE AGREEMENT
EFFECTIVE AS OF
JANUARY 17, 2014
BETWEEN
LUNA INNOVATIONS INCORPORATED
AND
INTUITIVE SURGICAL OPERATIONS, INC.
AND
INTUITIVE SURGICAL INTERNATIONAL LTD.

Confidential and Proprietary

CONFIDENTIAL TREATMENT HAS BEEN REQUESTED FOR PORTIONS OF THIS EXHIBIT. THE COPY FILED HEREWITH OMITS THE INFORMATION SUBJECT TO A CONFIDENTIALITY REQUEST. OMISSIONS ARE DESIGNATED [***]. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement (this ***"Agreement"***) is entered as of January 17, 2013 (***"Agreement Date"***), by and between Luna Innovations Incorporated and Luna Technlogies, Inc., Delaware corporations having their principal place of business at 1 Riverside Circle, Suite 400, Roanoke, VA 24016 (collectively, "***Seller"***), and Intuitive Surgical Operations, Inc., a Delaware corporation having its principal place of business at 1266 Kifer Road, Sunnyvale, California 94086 (" ***Purchaser"***), and Intuitive Surgical International, Ltd, a Cayman Islands company and an indirect and wholly-owned subsidiary of Purchaser ("ISIL"). Each of Seller, Purchaser, and ISIL shall be referred to herein as a ***"Party"*** and shall be collectively referred to as the ***"Parties"***. Capitalized terms that are used, whether in the singular or plural, shall have the meanings set forth in **Section 1** (Definitions) or, if not set forth in **Section 1**, the meaning designated in places throughout the Agreement.

W I T N E S S E T H:

WHEREAS, Seller and Purchaser are Parties to a License Agreement dated effective January 10, 2010 (the " ***2010 License Agreement***") and a Development and Supply Agreement dated June 11, 2007 and its associated amendments dated May 20, 2008, Jan. 12, 2010, April 27, 2010, Sept. 2, 2010, March 23, 2011, March 19, 2012, Dec. 15, 2012, and Jan. 1, 2013 (the " ***Development and Supply Agreement***").

WHEREAS, Seller wishes to sell, and Purchaser wishes to purchase, all of Seller's ***Luna Healthcare*** (as defined below) assets related to ***FOSSL Technology*** (as defined below), including employees and intellectual property, as more particularly described herein, all upon the terms and subject to the conditions set forth below.

WHEREAS, Purchaser agrees to concurrently enter into a cross-license agreement attached as **Exhibit A** (the "***2014 License Agreement***") to grant back to Seller, to the extent Purchaser is empowered, an exclusive license (except Purchaser shall reserve for itself a worldwide right to practice on a non-exclusive basis) to the FOSSL Technology outside the Field of Medical Healthcare and an non-exclusive license to the FOSSL Technology in the Field of Non-Robotics Medical Devices (as defined below) strictly limited to applications involving S/T Sensing (as defined below), both licenses subject to the terms and conditions set forth in the 2013 License Agreement.

WHEREAS, further to the 2014 License Agreement, Seller wishes to grant ISIL, and ISIL wishes to accept, certain perpetual, fully paid-up, royalty free rights in and to the intellectual property included in Seller's ***Luna Healthcare*** (as defined below) assets related to ***FOSSL Technology*** (as defined below), upon the terms and subject to the condition set forth below.

WHEREAS, [***]

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WHEREAS, Seller wishes to affirm its obligation under the 2010 License Agreement under which it grants, to the extent Seller is empowered, Purchaser a worldwide co-exclusive license to all Intellectual Property related to FOSSL Technology Controlled by Seller after the Effective Date in the Field of Medical Robotics.

NOW, THEREFORE, in consideration of the mutual covenants and other good and valuable consideration described herein, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto covenant and agree as follows.

1. Definitions.

1.1. Certain Definitions. For purposes of this Agreement, in addition to the terms that are defined parenthetically elsewhere in this Agreement, the following terms shall have the following meanings:

(a) ***"Acquisition Agreements"*** shall mean, collectively, this Agreement; the IP Assignment Agreement attached hereto as **Exhibit B**; the 2014 License Agreement; [***] **Exhibit H**; and any and all other release, transfer, assignment, and assumption documents and all certificates delivered in connection with this Agreement .

(b) ***"Act"*** shall mean the U.S. Federal Food, Drug, and Cosmetic Act, as amended, and the rules and regulations promulgated thereunder.

(c) ***"Action"*** shall mean any claim, dispute, action (including any action seeking injunctive or other equitable relief), arbitration, mediation, litigation, proceeding, suit, or governmental investigation, and any appeal therefrom.

(d) ***"Affiliate"*** shall mean, an entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, a Party, as the case may be, as of or after the Agreement Date and only for the period of such control. For purposes of this definition only, the term "control" means the possession of the power to direct or cause the direction of the management and policies of an entity, whether by ownership of voting stock or partnership interest, by contract or otherwise, including direct or indirect ownership of more than fifty percent (50%) of the voting interest in the entity in question.

(e) ***"Assumed Contracts"*** shall mean all FOSSL Technology related manufacturing, supply, development, consultant, and license obligations and/or agreements of Luna Healthcare, excluding [***]

(f) ***"Books and Records"*** shall mean all books, records, files, documents (including finance documents, regulatory materials/documents, submissions, communications, ownership of approvals from any regulatory agency or approval body, engineering documents and related software), data and information (including regulatory data/information, engineering information and related software), customer lists, supplier lists, distributor lists, wholesaler lists, cost and pricing data, market research reports, reference

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catalogs and, to the extent not originals, true and complete copies of all files relating to the filing, prosecution, issuance, ownership, maintenance, enforcement, and/or defense of any patents, patent applications, trademarks, copyrights, or other intellectual property rights, whether on paper or in electronic format, Controlled by the Seller and materially relating to the design, manufacturing, developing, packaging, labeling, and storing of Luna Healthcare products for sale or the distribution, marketing, sale, promotion, importation, or use of Luna Healthcare products.

(g) ***"Commercialize"*** (or any form thereof, e.g., "***Commercialization***") shall mean to sell, offer for sale, import for sale, export for sale, distribute for sale, promote, and/or market.

(h) ***"Confidential Information"*** shall mean all information and materials received by any Party from another Party pursuant to this Agreement (including the terms of this Agreement) and Non-Disclosure Agreement between Seller and Purchaser dated May 24, 2013, other than that portion of such information or materials that (i) is publicly disclosed by the disclosing Party, either before or after it becomes known to the receiving Party; (ii) was known to the receiving Party, without obligation to keep it confidential, prior to when it was received from the disclosing Party; (iii) is subsequently disclosed to the receiving Party by a Third Party lawfully in possession thereof without obligation to keep it confidential; (iv) has been publicly disclosed other than by the receiving Party and without breach of an obligation of confidentiality with respect thereto; or (v) has been independently developed by the receiving Party without the aid, application or use of, or reference to, Confidential Information of the disclosing Party.

(i) ***"Control"*** or ***"Controlled"*** shall mean, with respect to any particular assets described in this Agreement to which this term is applied, that the Seller owns or has a license to such asset pursuant to an executed, written agreement with a third party but excluding any "shrink-wrap" or similar off-the-shelf software licenses and licenses obtained in connection with the acquisition or use of products, equipment or materials.

(j) ***"Closing"*** shall mean the consummation of delivery of the Transferred Assets, delivery of the fully executed Acquisition Agreements and payment of the First Installment under **Section 2.5(a)** of this Agreement.

(k) ***"Closing Date"*** shall mean January 21, 2014 or such earlier date as the Parties shall mutually agree, if the obligations described in **Sections 5** and **6** hereof have been fully satisfied or waived by the appropriate Party or Parties hereto on or prior to such date (other than those conditions that by their terms are to be satisfied at the Closing, but subject to the satisfaction or waiver of those conditions) or, if the obligations described in **Sections 5** and **6** have not been fully satisfied or waived by the appropriate Party or Parties hereto on or prior to such date (other than those conditions that by their terms are to be satisfied at the Closing, but subject to the satisfaction or waiver of those conditions), as promptly as practicable, but in no event later than two (2) business days thereafter.

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(l) ***"Effective Time"*** shall mean 12:01 a.m., Pacific Time on the Closing Date.

(m) ***"Executive Officers"*** shall mean any of My Chung and Scott Graeff.

(n) "***Field of Colonoscopy Non-robotics***" [***]

(o) "***Field of Endoluminal Non-robotics***" [***]

(p) ***"Field of Medical Healthcare"*** [***]

(q) ***"Field of Medical Robotics"*** [***]

(r) ***"Fiber Optic Shape Sensing/Localization Technology " or FOSSL Technology"*** [***]

(s) "***Field of Non-robotics Medical Devices***" or "***Non-robotics Medical Devices Field***" [***]

(t) "***Field of Orthopedics***" [***]

(u) "***Field of Vascular Non-robotics***" [***]

(v) ***"Governmental Authority"*** shall mean any nation, territory, or government (or union thereof), foreign, domestic, or multinational, any state, local, or other political subdivision thereof, and any bureau, court, tribunal, board, commission, department, agency, or other entity exercising executive, legislative, judicial, regulatory, or administrative functions of government, including all taxing authorities, and all other entities exercising regulatory authority over manufacture, testing, marketing, use, sale, handling, storage, or distribution of medical products or devices.

(w) ***"Intellectual Property"*** or ***"IP"*** shall include (i) United States and foreign patents and patent applications including all divisionals, continuations, reissues, and continuations-in-part, shown in **Schedule 1.1(w)** and all inventions; (ii) trademarks (and goodwill associated therewith) and other trade names, labels, trade dress, advertising, and package designs, and other trade rights, whether or not registered, and all applications therefore, shown in **Schedule 1.1(w)**; (iii) copyrights, whether or not registered, and all applications therefor (including copyrights in computer software, computer software documentation, systems documentation, and source code); (iv) Know-How, trade secrets, research and results thereof, technology, techniques, data, methods, processes, instructions, drawings and specifications, inventions, discoveries, improvements, designs, manufacturing plans, processes, formulae, whether patented or patentable or not (whether or not such items have been reduced to written, computer-readable, or other tangible form); (v) all claims, proceedings, and cause of actions relating to any of the foregoing; and (vi) any similar, corresponding, or equivalent rights to any

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of the foregoing anywhere in the world; to the extent that each of the foregoing are Controlled by Seller and are used or useful in the practice of FOSSL Technology.

(x) ***"IP Assignment Agreement"*** shall mean the agreement transferring to the Purchaser the Seller's right, title and interest in and to the IP, in the form to be mutually agreed upon by the Parties prior to the Effective Time as attached hereto as **Exhibit B**.

(y) ***"Key Employees"*** shall mean Seller employees who have been identified by Purchaser and Seller as key individuals, [***] from a list of all employees associated with ***Luna Healthcare*** and a list of all employees associated with **FOSSL Technology**.

(z) ***"Know-How"*** shall mean all data and information owned or Controlled by Seller and maintained in confidence by Seller, including all processes, plans, designs, research, operating manuals, methods, compounds, formulae, discoveries, developments, designs, drawings, technology, techniques, procedures, specifications, inventions, computer programs, and any other scientific or technical data or information conceived, memorialized, developed, and/or reduced to practice, in each case whether or not patentable in any jurisdiction. Until such time as any particular patent has been published in accordance with the terms of a patent application or such patent application has been published, the term "Know-How" shall be deemed to include all inventions disclosed in such patent application.

(aa) ***"Laws"*** shall mean all applicable laws, statutes, rules, regulations, guidelines, ordinances, and other pronouncements having the effect of law in any nation, state, province, county, city, or other political subdivision, domestic or foreign.

(bb) ***"Liability"*** shall mean any debt, liability, commitment, indemnification, or obligation of any kind, character, or nature whatsoever, whether known or unknown, secured or unsecured, accrued, fixed, absolute, potential, contingent, or otherwise, and whether due or to become due, including any liability for Taxes. An existing contractual obligation that is to be fulfilled or discharged after the Effective Time shall be treated as a Liability arising after the Effective Time under the Assumed Contracts.

(cc) ***"Lien"*** shall mean any lien, statutory lien, pledge, mortgage, deed of trust, security interest, charge, real estate covenant, claim, restriction, right, option, conditional sale, or other title retention agreement or encumbrance of any kind or nature.

(dd) ***"Luna Healthcare"*** shall mean the business portion (and its assets) of Seller that develops, manufactures, and/or Commercializes products and services using FOSSL Technology for shape sensing in the **Field of Medical Healthcare**.

(ee) ***"Material Adverse Effect"*** means any change, effect, event or occurrence or state of facts that is, or would reasonably be expected to be, materially adverse to the business, properties, assets, financial condition or results of operation of a party.

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(ff) [***]

(gg) ***"Person"*** shall mean an individual, corporation, partnership, limited partnership, limited liability company, unincorporated association, trust, joint venture, union, or other organization or entity, including a Governmental Authority.

(hh) [***]

(ii) [***]

(jj) ***"S/T Sensing"*** [***]

(kk) ***"Technology"*** shall mean any technical information, Know-How, processes, procedures, methods, formulae, protocols, techniques, software, computer code (including both object and source code), documentation, works of authorship, data, designations, designs, devise, prototypes, substances, components, Intellectual Property, inventions (whether or not patentable), mask works, ideas, trade secrets, and other information or materials, in tangible or intangible form.

(ll) ***"Transfer"*** shall mean any sale, transfer, conveyance, assignment, grant, delivery or other disposition, and ***"Transfer"*** or ***"Transferred"***, used as a verb, shall each have a correlative meaning.

2. Purchase and Sale of Assets; Purchase Price.

2.1. Purchase and Sale of Assets. Subject to the terms and conditions of this Agreement, and on the basis of the covenants, representations, and warranties set forth herein, at and as of the Effective Time, the Seller shall Transfer to the Purchaser, and the Purchaser shall purchase and accept from the Seller, all of the Seller's right, title, and interests in and to the following assets, free and clear of all Liens, subject to the ***Recognized Seller Licenses*** and excluding the Excluded Assets (collectively, the ***"Transferred Assets"***):

(a) subject to perpetual licenses and sublicenses in the Field of Medical Healthcare, as well as, to the knowledge of the Executive Officers, licenses and sublicenses outside the Field of Medical Healthcare, granted by the Seller prior to the Agreement Date (collectively, as listed under **Schedule 5**) (collectively, the ***"Recognized Seller Licenses"***), all FOSSL Technology including Intellectual Property set forth on but not limited to those set forth on **Schedule 1.1(w)**;

(b) all marketing materials, development plans, market researches, and technical presentations on FOSSL Technology made to ***Executive Officers*** or **Seller's board of directors** over the last two (2) years, except those (i) outside the ***Field of Medical Healthcare,*** (ii) [***], and (iii) those limited to the ***Field of Non-Robotics Medical Devices*** applications involving S/T Sensing, which are required for the Seller's Commercialization of the products and services related to FOSSL Technology and set forth on **Schedule 2.1(b)**;

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(c) all ***Luna Healthcare*** Books and Records, except those outside the ***Field of Medical Healthcare*** and those limited to the ***Field of Non-Robotics Medical Devices*** applications involving S/T Sensing, which are related to the products and services related to FOSSL Technology and set forth on **Schedule 2.1(c)** and except any that constitute the confidential information of a third party and to the extent that the disclosure made to Purchaser would violate applicable confidentiality restrictions;

(d) all FOSSL Technology related assets (except (i) those used outside the ***Field of Medical Healthcare*** and (ii) those used for applications in the ***Field of Non-Robotics Medical Devices*** involving S/T Sensing), including parts and product inventories (e.g., interrogators, connectors, sensors), equipment, tooling, fixtures, computers, digital data, software design tools, displays, furniture, software environment, prototypes, design history files, and CAD models, used for day-to-day work in development, testing, and/or manufacturing activities set forth on **Schedule 2.1(d)**;

(e) all written Books and Records related to ***Phoenix Lasers***;

(f) any claims and causes of action against a third party arising out of those items set forth in **subsections (a)** through **(d)** immediately above as such claims and causes of action exist as of the Closing Date (whether known or unknown, whether asserted or unasserted, whether absolute or contingent, whether accrued or unaccrued, whether liquidated or unliquidated, and whether due or to become due), including escrows relating to the foregoing, as shown in **Schedule 4**; and

(g) all Assumed Contracts.

2.2. Excluded Assets. Notwithstanding anything to the contrary contained herein, including **Section 2.1** above, the Seller and its Affiliates shall retain all of its right, title, and interest in and to, and shall not Transfer to the Purchaser, all the assets of the Seller not listed as Transferred Assets in **Section 2.1**, including without limitation the assets of the Seller set forth below (collectively, the ***"Excluded Assets"***):

(a) any accounts receivable of the Seller;

(b) any cash, cash equivalents, investments, or bank accounts;

(c) any inventory, equipment, office furniture, real property interests and/or obligations, fixtures, or other tangible personal property not expressly set forth in **Section 2.1** as a Transferred Asset:

■ Seller and Purchaser recognize that certain parts inventory maintained by Seller may be applicable to interrogators used in Seller products not conveyed in this transaction. In this case, Seller will provide to Purchaser those parts necessary to complete production of any prototype shape sensing units currently in process and Seller will retain the remainder;

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■ In the event an asset is a dual-use asset (i.e., used by both ***Luna Healthcare*** products as well as other Seller's products, but other than the parts inventory covered above) and Seller wants to retain the asset (a list of such desired dual-use assets, if any, is set forth on **Schedule 2.2(c)(ii)**), Seller will purchase at its own costs a duplicate asset for transfer to Purchaser, unless the asset is only used by Purchaser for a temporary period of up to 90 days after Closing.

(d) agreements, purchase orders and terms and conditions related to [***], and any other contract not explicitly included in the Assumed Contracts (collectively the ***"Excluded Contracts"***);

(e) registered trademarks LUNA INNOVATIONS®, MOTH®, TRIMETASPHERE®, EN-TACT®, and EDAC®.

(f) all minute books, stock records and general corporate documents;

(g) all personnel records for employees retained by Seller and other records Seller is required by law to retain in its possession;

(h) all insurance policies and rights thereunder;

(i) all claims for refund of taxes and other governmental charges of whatever nature; and

(j) all rights of Seller under the Acquisition Agreements.

2.3. Assumption of Liabilities. Subject to the terms and conditions of this Agreement, the Purchaser shall assume only those Liabilities expressly accepted by Purchaser and arising out of ownership or Control of any of the Transferred Assets (including in-process or outstanding POs associated with Transferred Assets) (the ***"Assumed Liabilities"***), but only to the extent such Liabilities arise after the Effective Time.

2.4. Excluded Liabilities. Except for the Assumed Liabilities, the Purchaser shall not assume any, and shall have no liability, responsibility, or obligation whatsoever, at any time, for (and the Seller and its Affiliates shall retain and pay, perform, and discharge when due) any and all other Liabilities of the Seller or any of its Affiliates arising prior to, as of, or after the Effective Time (the ***"Excluded Liabilities"***), including but not limited to:

(a) all accounts payable and other Liabilities of the Seller and its Affiliates for materials and services provided to Seller;

(b) any Liability arising from or relating to, the operation by the Seller or any of its Affiliates of any activity, or the occupancy, use, or operation by the Seller or any of its Affiliates of any real properties at any time prior to or after the Effective Time;

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(c) any Liability arising from or relating to the use/performance or operation by the Seller or any of its Affiliates of any of the Excluded Assets at any time prior to or after the Effective Time or any of the Transferred Assets at any time prior to the Effective Time.

(d) any Liability of the Seller to any of its Affiliates, shareholders, and/or stakeholders;

(e) any Liability for any violation of, or failure to satisfy, any Law by the Seller or any of its Affiliates;

(f) any Liability based on tortious or criminal conduct by the Seller or any of its Affiliates;

(g) all contractual Liabilities, if any, of the Seller or any of its Affiliates, except for Liabilities arising after the Effective Time under the Assumed Contracts;

(h) all indebtedness of the Seller or any of its Affiliates for money, equities, and or other interest promised to, owed to, or borrowed from creditors, shareholders, warrant holders, and option holders;

(i) all Liabilities for product liability claims and recalls arising out of products sold or to be sold by Seller or its Affiliates or their respective licensees (but expressly excluding product liability claims and recalls arising out of products sold or to be sold by Purchaser, its Affiliates, and their respective licensees pursuant to the Transferred Assets or Assumed Contracts);

(j) all Liabilities for returns, rebates, and chargebacks relating to, or arising as a result of, any sale of any of products sold by Seller;

(k) all broker, Closing, and legal fees, costs, expenses, and Liabilities incurred by Seller or any of its Affiliates in connection with the Closing, execution, and delivery of this Agreement and the other Acquisition Agreements.

(l) all Liabilities arising from the Excluded Assets;

(m) all Liabilities with respect to the Seller's employees or former employees, or their dependents; provided that such Liabilities with respect to the Key Employees are limited to those that arise prior to the Effective Time;

(n) all tax Liabilities of the Seller and/or its Affiliates or taxes arising out of or relating to the Transferred Assets for any period prior to the Closing; and

(o) all Liabilities with respect to any Action pending or known to be threatened against the Seller or any of its Affiliates as of the Effective Time.

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2.5. Consideration; Payment; Royalty. The consideration for the Seller's Transfer to the Purchaser of the Transferred Assets and the Seller's performance of its obligations under this Agreement and the other Acquisition Agreements (including the cross licenses under the 2014 License Agreement and [***]) shall equal a total of up to Thirty Million Dollars (US $30,000,000) (the ***"Purchase Price"***), to be paid out [***] by ISIL and [***] by Purchaser to Seller except where noted otherwise over a series of payments as follows:

(a) A payment of Twelve Million Dollars (US $12,000,000) to be made in two installments:

- a first installment of Six Million Dollars (US $6,000,000) to be made at Closing (the ***"First Installment"***);

- a second installment of Six Million Dollars (US $6,000,000) to be paid to Seller on the earlier of (a) the date that Seller has completed its obligations under **Section 9.7** or (b) Ninety (90) days after the Closing, except to the extent Seller materially breaches its obligations under such **Section 9.7** of this Agreement.

(b) A Technical Requirements Payment of up to Eight Million Dollars (US $8,000,000) to be paid to Seller according to the terms and conditions set forth in **Exhibit F** (the **"*Technical Requirements Milestones Payment Conditions*")**.

(c) Up to Ten Million Dollars (US $10,000,000) in royalty payment, at Ten Thousand Dollars ($10,000) fee for each commercially-sold **Medical Robotics** system that incorporates FOSSL Technology (the ***"Commercially-Sold System Royalty"***), to be paid on a quarterly basis. [***] The Commercially-Sold System Royalties shall be paid to Seller by ISIL for sales of **Medical Robotics** systems that incorporate FOSSL Technology to non-US buyers, and by Purchaser for sales of systems to US buyers.

(d) [***]

(e) Purchaser shall be jointly and severally liable for all payments due from ISIL in this **Section 2.5**.

2.6. Transfer Taxes. Notwithstanding anything herein to the contrary, the Seller and its Affiliates shall be solely liable for, and shall pay when due, any transfer, gains, documentary, sales, use, registration, stamp, value-added, or other similar taxes payable by reason of the transactions contemplated under this Agreement, and the Seller or its Affiliates shall file, at their expense, all necessary tax returns and other documentation with respect to all taxes.

2.7. Allocation of Purchase Price. By mutual agreement of the Parties, the Purchase Price will be allocated to broad categories constituting components of the Transferred Assets (according applicable tax laws) as set forth in **Schedule 2.7** (the ***"Allocation"***), the first

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draft of which shall be provided by Purchaser within forty five (45) days following the Effective Date. Each Party will report the transactions consummated hereby in accordance with the agreed upon Allocation (except to the extent modifications are necessary to reflect changes in the Transferred Assets and Assumed Liabilities between the Closing Date and the date of the Allocation) for all federal, state, local and other tax purposes, but such allocation will not constrain reporting for other purposes.

3. Representations and Warranties of the Seller. Except as set forth on the Schedule of Exceptions delivered to the Purchaser at the Closing and attached hereto as **Exhibit G** (the ***"Schedule of Exceptions"***), the Seller hereby represents and warrants to the Purchaser and ISIL as of the date hereof and as of the Closing Date as follows:

3.1. Organization and Good Standing. The Seller is a corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated and is in material compliance with all Laws. Seller has corporate power to own its properties and to conduct its business as currently owned and conducted. The Seller does not have any subsidiaries that own Intellectual Property.

3.2. Power and Authority. The Seller has the corporate power and authority to execute and deliver this Agreement and all other Acquisition Agreements to which it is a party, perform its obligations hereunder and thereunder, and consummate the transactions contemplated hereby and thereby. The execution and delivery by the Seller of this Agreement and all other Acquisition Agreements, the performance by it of its obligations hereunder and thereunder, and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary corporate actions on the part of the Seller and its Affiliates. This Agreement and all other Acquisition Agreements to which the Seller or any of its Affiliates is a party constitutes (or will constitute upon the execution thereof) the legal, valid, and binding obligation of the Seller or its Affiliates, as applicable, enforceable against the Seller or its Affiliates in accordance with its terms, subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, or similar Laws relating to or affecting the rights and remedies of creditors generally. This Agreement has been duly executed and delivered by the Seller.

3.3. No Violation. Neither the execution and delivery by the Seller of this Agreement or any other Acquisition Agreements to which the Seller or its Affiliates is a party, nor the performance by the Seller or its Affiliates, as applicable, of its obligations hereunder or thereunder, nor the consummation by the Seller of the transactions contemplated hereby or thereby, will (i) contravene any provision of the certificate of incorporation and bylaws of the Seller, (ii) contravene any provision of the certificate of incorporation, bylaws, or similar organizational documents of any Affiliate of the Seller; (iii) with or without the giving of notice or the lapse of time or both, violate, be in conflict with, constitute a default under, permit the termination of, cause the acceleration of the maturity of any debt or obligation of the Seller related to the Transferred Assets (other than debts or obligations paid at Closing), (iv) require the consent of any other party to, constitute a breach of, create a Liability or loss of a benefit under,

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or result in the creation or imposition of any Lien upon any of the Transferred Assets under, any agreement to which the Seller or its Affiliates is a party or by which it is bound; and (v) violate or conflict with, any Law or any judgment, decree, or order of any Governmental Authority to which the Seller or its Affiliates is subject or by which the Seller or any of its assets or properties is bound.

3.4. Intellectual Property. **Schedule 1.1(w)** contains a true and complete list of all worldwide patents, pending patent applications, trademark registrations, and trademark applications included in the Intellectual Property to be transferred to Purchaser as part of the Transferred Assets. Such Intellectual Property and the Intellectual Property set forth on **Schedule 2.1(d)** constitutes all the Intellectual Property covering FOSSL Technology. The Seller Controls and has the right to Transfer such Intellectual Property free and clear of all Liens. Other than the items listed in **Schedule 1.1(w)** and the subject matter of the Excluded Contracts, to the knowledge of Seller, there are no additional patents, trademark registrations or pending patent applications or pending trademark applications Controlled by Seller related to the FOSSL Technology based products and naming as an inventor any Seller employee who was an employee of Seller at the time of invention or any consultant/contractor who performed work for Seller at the time of invention and who was obligated to assign such invention to Seller. The Seller has no knowledge of any adversarial proceedings or any claims that are currently being asserted or threatened by any Person involving or challenging the Seller's Control of any Intellectual Property included within the Transferred Assets. To Seller's knowledge, all Assumed Contracts are in full force and effect as of the Closing Date and Seller is not in breach of any of its obligations under the Assumed Contracts.

3.5. Actions.

(a) To the knowledge of the Seller, there is no Action pending or threatened against the Seller or any of its Affiliates, that (i) questions or challenges the validity of this Agreement or the other Acquisition Agreements or any action taken or proposed to be taken by the Seller or any of its Affiliates pursuant hereto or thereto or in connection with the transactions contemplated hereby or thereby, or (ii) relates to any of the Transferred Assets that if adversely determined, could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect;

(b) To the knowledge of the Seller, there is no outstanding judgment, order, decree, writ, award, stipulation, or injunction of any Governmental Authority against the Seller or any of its Affiliates or any of their respective assets or businesses, which, if adversely determined, could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

3.6. Taxes.

(a) All sales, use, payroll withholding, unemployment compensation and similar taxes, and any other taxes the nonpayment of which would result in a tax Lien on any Transferred Asset have been paid or will be paid when due, or adequate deposits have been made

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with the appropriate taxing authorities with respect thereto, and there are no Liens for taxes on any Transferred Asset.

(b) The Seller has not received any written notice from any Governmental Authority of any pending examination or any proposed tax deficiency, addition, assessment, demand for payment, or adjustment the nonpayment of which could result in a tax Lien on any Transferred Asset.

3.7. Title to Property. Seller has good title to or otherwise Controls all of the Transferred Assets (whether personal, mixed, tangible, or intangible), to the Seller's knowledge, free and clear of all Liens, and, to the Seller's knowledge, upon Transfer of the Transferred Assets pursuant hereto, the Purchaser will have good title to and Control of all of the Transferred Assets (whether personal, mixed, tangible, or intangible), to the Seller's knowledge, free and clear of all Liens, but subject to the ***Recognized Seller Licenses***.

3.8. Approvals. No Approval of any Governmental Authority or any third party is required to be made, obtained, or given by or with respect to the Seller in connection with the execution or delivery by the Seller or any of its Affiliates, as applicable, of this Agreement and the other Acquisition Agreements, the performance by Seller or any of its Affiliates of its obligations hereunder or thereunder, or the consummation by Seller or any of its Affiliates of the transactions contemplated hereby or thereby, including without limitation the Transfer of the Transferred Assets to the Purchaser, except where the failure to make, obtain, or give such Approval could not reasonably be expected to have a material adverse effect on the Transferred Assets.

3.9 Material Information. No Executive Officer of Seller is aware of any material information that he reasonably believes will cause a material adverse effect on the value of the Transferred Assets

3.10 Substantially All of Seller's Assets. Transferred Assets constitute substantially all of Seller's assets related to Luna Healthcare.

3.11 True and Accurate Lists. Lists provided by Seller under **Section 7.4(b)-(g)** are true and accurate in all material respects to Seller's knowledge.

4. Representations and Warranties of the Purchaser and ISIL. Each of the Purchaser and ISIL hereby represents and warrants to the Seller as of the date hereof and as of the Closing Date as follows:

4.1. Organization and Good Standing. Each of the Purchaser and ISIL is a corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated and is in material compliance with all Laws. Each of

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Purchaser and ISIL has corporate power to own its properties and to conduct its business as currently owned and conducted.

4.2. Power and Authority. The Purchaser and ISIL have the corporate power and authority to execute and deliver this Agreement and all other Acquisition Agreements to which they are parties, perform their respective obligations hereunder and thereunder, and consummate the transactions contemplated hereby and thereby. The execution and delivery by the Purchaser and ISIL of this Agreement and all other Acquisition Agreements, their performance of their obligations hereunder and thereunder, and their consummation of the transactions contemplated hereby and thereby have been duly authorized by all necessary corporate actions on the part of the Purchaser and ISIL. This Agreement and all other Acquisition Agreements to which the Purchaser and ISIL are parties constitute (or will constitute upon the execution thereof) the legal, valid, and binding obligations of the Purchaser and ISIL, as applicable, enforceable against the Purchaser and ISIL in accordance with their terms, subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, or similar Laws relating to or affecting the rights and remedies of creditors generally. This Agreement has been duly executed and delivered by the Purchaser and ISIL.

4.3. No Violation. Neither the execution and delivery by the Purchaser and ISIL of this Agreement or any of the other Acquisition Agreements to which they are parties, nor their performance of their obligations hereunder or thereunder, nor their consummation of the transactions contemplated hereby or thereby, will (i) contravene any provision of the certificate of incorporation or bylaws of the Purchaser and ISIL; (ii) with or without the giving of notice or the lapse of time or both, violate, be in conflict with, constitute a default under, permit the termination of, cause the acceleration of the maturity of any debt or obligation of the Purchaser or ISIL under, require the consent of any other party to, constitute a breach of, create a Liability or loss of a benefit under, or result in the creation or imposition of any Lien upon any of the properties or assets of the Purchaser or ISIL under, any contract to which they are parties or by which they or any of their assets or properties are bound, other than such violations, conflicts, defaults, terminations, accelerations, breaches, Liabilities, or loss of benefits which could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect; or (iii) violate, conflict with, or require any approval under, any Law or any judgment, decree, or order of any Governmental Authority to which the Purchaser or ISIL is subject or by which it or any of its assets or properties are bound, other than such violations, conflicts, or noncompliance with such requirements which could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

4.4. Actions.

(c) To Purchaser's knowledge, there is no Action pending or threatened against the Purchaser or any of its Affiliates, that (i) questions or challenges the validity of this Agreement or the other Acquisition Agreements or any action taken or proposed to be taken by the Purchaser or any of its Affiliates pursuant hereto or thereto or in connection

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with the transactions contemplated hereby or thereby that if adversely determined, could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect;

(d) To Purchaser's knowledge, there is no outstanding judgment, order, decree, writ, award, stipulation, or injunction of any Governmental Authority against the Purchaser or any of its Affiliates or any of their respective assets or businesses, which, if adversely determined, could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

4.5. Approvals. Except as may be set forth on **Exhibit G**, no Approval of any Governmental Authority or other third party is required to be made, obtained, or given by or with respect to the Purchaser or ISIL in connection with the execution or delivery by it of this Agreement and the other Acquisition Agreements, the performance by it of its obligations hereunder or thereunder, or the consummation of the transactions contemplated hereby or thereby, except where the failure to make, obtain, or give such Approvals could not have, individually or in the aggregate, a Material Adverse Effect.

4.6. Financing. The Purchaser and ISIL will have available funds sufficient to pay the Purchase Price and related expenses of the transactions contemplated by the Acquisition Agreements.

5. Seller's Obligations Prior to and at Closing. The Seller hereby covenants that, except as otherwise consented to in writing by the Purchaser or as otherwise contemplated by this Agreement, hereto and until the Closing or for the period specified below:

5.1. Release of Security Interests

5.2. Conduct of Business. Except as provided herein, Seller shall: (i) maintain its Books and Records in the ordinary course of business in a manner consistent with its past practices; (ii) maintain its properties and assets (to the extent they are material to the Transferred Assets) in the same condition as they are on the date hereof, except for reasonable wear and tear arising in the ordinary course of business; and (iii) comply in all material respects with all Laws applicable to the Transferred Assets.

5.3. Restricted Activities and Transactions. Notwithstanding **Section 5.2** hereof and except as provided in this Agreement, the Seller shall not, and shall not permit any of its Affiliates to, engage, or agree to engage, in any one or more of the following activities or transactions without the prior written consent of the Purchaser, which consent shall not be unreasonably withheld: (i) cause to arise or permit to exist any Lien (other than Liens currently held by Silicon Valley Bank) upon any of the Transferred Assets; (ii) enter into any agreement or perform any act detrimental to the interest of Purchaser that is related to the Transferred Assets; (iii) destroy any Books or Records maintained in connection with the Transferred Assets; (iv) settle any Action if such settlement imposes any continuing Liability or non-monetary obligation on or with respect to any of the Transferred Assets; (v) initiate any litigation, suit, mediation, or arbitration relating to the Transferred Assets; (vi) enter into or become bound by

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any contract or commitment relating to the Transferred Assets; (vii) cancel, compromise, release, or waive any right of material value to the Seller or any of its Affiliates related to the Transferred Assets; (viii) except as required by Law, make or change any tax election affecting the Transferred Assets, or take any position with respect to the Transferred Assets on any Tax Return filed after the date of this Agreement, in each case that is inconsistent with the elections made or positions taken in preparing or filing similar Tax Returns in prior taxable periods; or (ix) take any action or omit to take any action that would knowingly cause the representations and warranties of the Seller contained in **Section 3** hereof to be untrue or inaccurate in any material respect.

5.4. Cooperation. The Seller shall, and shall cause its Affiliates to, use their commercially reasonable efforts to cause the transactions contemplated by this Agreement to be consummated, including, without limitation, (i) obtaining, making, and causing to become effective all Approvals of such Governmental Authorities and other Persons as may be necessary or reasonably requested by the Purchaser in order to consummate the transactions contemplated by this Agreement, and (ii) giving prompt notice to the Purchaser of (A) any notice of, or other communication relating to, any default, or any event which, with the giving of notice or the lapse of time or both, would become a default, under any contract relating to the Transferred Assets, and (B) any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the execution and delivery of this Agreement or the other Acquisition Agreements or the consummation of the transactions contemplated hereby or thereby. The Seller shall use its commercially reasonable efforts to bring about the satisfaction of the Conditions Precedent to the Obligations of the Purchaser that are applicable to the Seller set forth in **Section 7** hereof.

5.5. Confidentiality. Each Party shall hold in confidence any Confidential Information disclosed by another (disclosing) Party as a result of this Agreement, and such receiving Party shall protect the confidentiality thereof with the same degree of care that it exercises with respect to its own information of a like nature, but in no event less than reasonable care. Each receiving Party shall have the right to provide Confidential Information to its Affiliates and third parties who have a right or need to know such information, subject to the confidentiality obligations imposed by this **Section 5.5**. Without the prior written consent of the disclosing Party, a receiving Party shall not use, disclose, or distribute any Confidential Information, in whole or in part, except as required to perform such receiving Party's obligations under this Agreement or as necessary to exercise or further its rights under this Agreement. Access to the disclosing Party's Confidential Information shall be restricted to the receiving Party's employees, agents, and consultants, who, in each case, need to have access to carry out a permitted use and are bound in writing to maintain the use and confidentiality restrictions of such Confidential Information. The rights and obligations set forth in this **Section 5.5** shall survive the Closing or any termination of this Agreement.

5.6. Certain Notifications. From the Agreement Date until the date two weeks following the Agreement Date, the Seller shall have the right to add to, amend, and/or correct the Schedules and Schedule of Exceptions based upon any additional information that becomes available to the Seller, and such additional disclosures (***"Additional Disclosures"***) shall be

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deemed to amend and supplement the Schedule and Schedule of Exceptions for all purposes of this Agreement as if so amended immediately prior to the Agreement Date, provided that Purchaser reasonably agrees to any such Additional Disclosures. In the event that Purchaser reasonably believes that any such Additional Disclosure made by the Seller pursuant to this **Section 5.6** prior to the date two weeks following the Agreement Date results in a material and quantifiable change to the valuation of the Transferred Assets, the Seller and the Purchaser agree to negotiate in good faith to determine if such additional disclosure results in a material and quantifiable change to the valuation of the Transferred Assets. If the Parties so agree, the Purchase Price shall be adjusted to account for such valuation change.

5.7. Engineering Reviews. From the Agreement Date and until the end of the 90-day period set forth in **Section 2.5(a)(ii)**, Seller shall jointly with Purchaser plan, design, and complete a series of in-depth engineering reviews between Seller and Purchaser personnel to transfer from Seller to Purchaser working knowledge of Transferred Assets related to engineering, development systems, document tracking systems, subsystems, software (including software environment and source codes), prototypes, engineering designs, engineering processes, manufacturing tooling and processes. The engineering reviews shall accomplish the goal of providing Purchaser all Know-How necessary to develop, use, manufacture, and sell the FOSSL interrogator, fiber sensors, and connectors (***"Engineering Reviews"***).

5.8. Other Customary Conditions. Seller agrees to perform all reasonably necessary tasks to meet other conditions that are customary in transactions of this type.

6. Purchaser's Obligations Prior to Closing. The Purchaser hereby covenants that, except as otherwise consented to in writing by the Seller, from and after the date hereof until the Closing or termination of this Agreement:

6.1. Cooperation. The Purchaser shall use its commercially reasonable efforts to cause the transactions contemplated by this Agreement to be consummated, including, without limitation, giving prompt notice to the Seller of any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the execution and delivery by Purchaser or ISIL of this Agreement or the other Acquisition Agreements or the consummation by Purchaser of the transactions contemplated hereby. The Purchaser shall use its commercially reasonable efforts to bring about the satisfaction of the Conditions Precedent to the Obligations of the Seller that are applicable to the Purchaser set forth in **Section 6** hereof. In addition, the Purchaser shall not intentionally take any action or omit to take any action that would cause the representations and warranties of the Purchaser contained in **Section 4** hereof to be untrue or inaccurate in any material respects.

6.2. Confidentiality. Purchaser and ISIL shall hold in confidence any Confidential Information disclosed by Seller as a result of this Agreement, and Purchaser shall protect the confidentiality thereof with the same degree of care that it exercises with respect to its own information of a like nature, but in no event less than reasonable care. Purchaser shall have the right to provide Confidential Information to its Affiliates and third parties who have right or

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need to know such information, subject to the confidentiality obligations imposed by this **Section 6.2**. Without the prior written consent of the disclosing Party, a receiving Party shall not use, disclose, or distribute any Confidential Information, in whole or in part, except as required to perform such Party's obligations under this Agreement or as necessary to exercise or further its rights under this Agreement. Access to the disclosing Party's Confidential Information shall be restricted to the receiving Party's employees, agents, and consultants, who, in each case, need to have access to carry out a permitted use and are bound in writing to maintain the use and confidentiality restrictions of such Confidential Information. The rights and obligations set forth in this **Section 6.2** shall survive the Closing or any termination of this Agreement.

1. Conditions Precedent to the Obligations of the Purchaser. The obligation of the Purchaser and ISIL to consummate the transactions contemplated by this Agreement shall be subject to the satisfaction, at the Closing, of each of the following conditions, unless waived by the Purchaser and ISIL (subject to the Law), in their sole and absolute discretion, at or prior to the Closing:

1.2. Representations and Warranties True. All representations and warranties of the Seller contained in this Agreement or any Acquisition Agreement shall be true and correct as of the Agreement Date and as of the Closing Date as though given on and as of such date (or, with respect to such representations and warranties which expressly speak as of an earlier date, as of the earlier date as of which such representations and warranties speak), except for failures of such representations and warranties to be so true and correct that have not had and could not reasonably be expected to have, individually or in the aggregate, a ***Material Adverse Effect*** on the Transferred Assets.

1.3. Performance. The Seller and its Affiliates shall have performed and complied in all material respects with all agreements, covenants, obligations, and conditions required by this Agreement or any of the other Acquisition Agreements to be performed or complied with by the Seller and/or its Affiliates at or prior to the Closing.

1.4. No Material Adverse Change. No changes or events that have had or could reasonably be expected to have, individually or in the aggregate, ***Material Adverse Effect*** on the Seller or the Transferred Assets, shall have occurred since the Agreement Date.

1.5. Deliveries. The Seller and/or its Affiliate shall have given, tendered and/or delivered to the Purchaser and its Affiliates, at or prior to the Closing, and against the deliveries referred to in **Section 7.3**, the following:

(p) Transferred Assets;

(q) a list of all Seller employees associated with Luna Healthcare as of the Agreement Date as attached hereto as **Schedule 7.4**;

(r) a list of Seller employees who, since 2010, have been associated with FOSSL Technology development as attached hereto as **Schedule 7.4**;

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(s) a list of all outstanding purchase orders and payment obligations associated with Luna Healthcare as attached hereto as **Schedule 7.4**;

(t) a list of all expired and on-going Luna Healthcare related manufacturing, supply, development, consultant, and license obligations and/or agreements (other than the Excluded Contracts and Recognized Seller Licenses) as attached hereto as **Schedule 7.4**;

(u) a list of all inventory and WIP associated with Luna Healthcare as attached hereto as **Schedule 7.4**;

(v) reasonable access to, upon reasonable prior notice and at such scheduled times and places during normal business hours as shall be reasonably approved by the Seller (but without any interference with the business operations of the Seller), for reasonable business purposes, to all the Books and Records, Assumed Contracts, and the properties, facilities, employees of the Seller and its Affiliates relating to Luna Healthcare business, to all relevant documents and materials contained in the lists provided in this **Section 7.4**.

(w) an executed counterpart signature page to the IP Assignment Agreement;

(x) an executed signature page to the ***2014 License Agreement***;

(y) [***] and

(z) an executed (with counterpart signature page) release document from all secured debtholders and/or secured creditors, including the entity known as Silicon Valley Bank, that covenant to remove all Liens and/or Liabilities associated with the Transferred Assets upon payment to such debtholders and/or secured creditors of the amounts set forth in such release documents;

1.6. Absence of Litigation. There shall be no outstanding court order, injunction, or Action pending or, to the knowledge of the Seller, the Purchaser, or ISIL as of the Agreement Date, threatened before any court or other Governmental Authority which seeks to (i) invalidate or set aside, in whole or in part, this Agreement or any of the other Acquisition Agreements, or (ii) restrain, prohibit, invalidate, or set aside, in whole or in part, the consummation of the transactions contemplated hereby and thereby.

2. Conditions Precedent to the Obligations of the Seller. The obligation of the Seller to consummate the transactions contemplated by this Agreement shall be subject to the satisfaction, at the Closing, of each of the following conditions, unless waived (subject to Law) by the Seller, in its sole and absolute discretion, at or prior to the Closing:

2.8. Representations and Warranties True. All representations and warranties of the Purchaser and ISIL contained in this Agreement or any Acquisition Agreement shall be

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true and correct as of the date of this Agreement and as of the Closing Date as though given on and as of such date (or, with respect to such representations and warranties which expressly speak as of an earlier date, as of the earlier date as of which such representations and warranties speak), except for failures of such representations and warranties to be so true and correct that have not had and could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

2.9. Performance. The Purchaser and ISIL shall have performed and complied in all material respects with all agreements, covenants, obligations, and conditions required by this Agreement and the other Acquisition Agreements to be performed or complied with by it at or prior to the Closing.

2.10. Deliveries. The Purchaser and ISIL shall have tendered to the Seller, at or prior to the Closing, and against the deliveries referred to in **Section 7.4**, the following:

(a) the first installment of Six Million Dollars (US $6,000,000) in accordance with **Sections 2.5(a)(i)**; and

(b) an executed counterpart signature page to the IP Assignment Agreement, [***] and the 2014 License Agreement.

3. Additional Covenants and Agreements.

3.9. [***]

3.10. Exit Duration. For a period from ***Closing*** until 15 years after Closing, Seller shall exit and shall not develop, use, and/or Commercialize products and services related to FOSSL Technology in the ***Field of Medical Healthcare*** for itself or any third party except Seller shall be allowed to continue to perform and fulfill any of its obligations under the Hansen Agreements, and to develop, use, and/or Commercialize products and services incorporating FOSSL Technology only in the ***Field of Non-Robotics Medical Devices*** applications involving S/T Sensing.

3.11. Non-Compete with Seller's Non-Medical Business. For a period from Closing until 10 years after Closing, Purchaser shall not use the Transferred Assets to compete with Seller's Commercialization of FOSSL Technology outside the Field of Medical Healthcare for shape, strain and/or temperature sensing in the aerospace, automotive, and energy markets and for strain sensing in the civil structural monitoring and composite material markets.

3.12. Approach to Assumed Contracts. To the extent relevant considering the skill sets and knowledge remaining at Seller after Closing, Seller shall diligently work with Purchaser to outline a mutually agreed requirements and approach to properly service and/or support third parties involved in the Assumed Contracts as contractually required.

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9.5 Specific Performance; Injunctive Relief. Each of the Parties hereto acknowledges, understands, and agrees that any breach or threatened breach by it or any of its Affiliates of any of their respective obligations hereunder or under the Acquisition Agreements may cause irreparable injury to another Party and that money damages may not provide an adequate remedy therefor. Accordingly, in the event of any such breach or threatened breach, the non-breaching Party or Parties shall have the right and remedy (in addition to any other rights or remedies available at law or in equity) to seek to have the provisions of such sections specifically enforced by, and to seek injunctive relief and other equitable remedies in, any court having competent jurisdiction.

3.13. Further Assurances. In addition to the actions, documents, and instruments specifically required to be taken or delivered by this Agreement or the other Acquisition Agreements, whether on or before or from time to time after the Effective Time, and without further consideration, each Party hereto shall take such other actions, and execute and deliver such other documents and instruments, as the other Party hereto or its counsel may reasonably request and at the expense of the requesting Party in order to effectuate and perfect the transactions contemplated by this Agreement and the other Acquisition Agreements, including without limitation such actions as may be necessary to Transfer to the Purchaser and to place the Purchaser in possession or control of all of the Transferred Assets intended to be Transferred hereunder.

3.14. Post-Closing Obligations.

(a) Seller shall conduct and complete all the ***Engineering Reviews*** with Purchaser which had been initiated prior to Closing under **Section 5.7**.

(b) Seller shall complete transfer all remaining Books and Records in its possession to Purchaser within 30 calendar days after the Closing.

(c) Seller shall provide Purchaser with physical possession of all remaining tangible Transferred Assets (e.g., software, firmware, physical assets in inventory, WIP, prototypes, tooling). Alternatively, Seller shall facilitate and provide information (e.g., from whom, where, etc.) to allow Purchaser to gain possession of all Transferred Assets. If Purchaser believes that Seller are in possession of FOSSL Technology Related Assets that should have been included in Schedule 2.1(d) but were not, Seller shall disclose all information related to these FOSSL Technology Related Assets for the Parties to determine whether Purchaser's assertion is reasonable. If Purchaser's assertion is reasonable, Seller shall immediately transfer these FOSSL Technology Related Assets to Purchaser within 7 business days.

(d) Seller agrees to shut down all of its Luna Healthcare operations (including sales, marketing, engineering) and inventory and operations related to ***FOSSL Technology,*** except those outside the ***Field of Medical Healthcare***, those related to the ***Field of Non-Robotics Medical Devices*** applications involving S/T Sensing, and [***] within ten (10)

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days after the Closing Date. Seller shall provide Purchaser written notice as to when such shut down is completed.

(e) The Parties shall maintain all trade secrets within the Transferred Assets and shall protect the Know-How transferred to the Purchaser as confidential information.

3.15. Technical Requirements Milestones Payment Conditions. Purchaser shall use all commercially reasonable efforts to achieve the Technical Requirements Milestones Payment Conditions in a timely manner.

3.16. Cooperation. If Seller inadvertently neglects to make copies of any information included in the Transferred Assets needed in connection with its remaining business, then Purchaser will cooperate with Seller and provide copies of any such information to Seller.

3.17. Supply Agreement. At Closing, Purchaser and Seller shall enter into the form of [***] attached hereto as **Exhibit H** with respect to the [***].

3.18. [***]

4. Survival; Indemnification.

4.7. Survival.

(a) The assurances, covenants and agreements of the parties hereto contained in this Agreement shall survive and the representations and warranties of the Parties hereto contained in this Agreement shall survive for so long as Purchaser and ISIL continues to have any obligation to make payments in **Section 2.5**.

(b) Action for indemnification pursuant to this Section 10 alleging an inaccuracy in or a breach of the representations, warranties, assurances, covenants and agreements contained in this Agreement may be brought after a party hereto has notified the other party hereto in writing of a claim for indemnification hereunder based on a breach thereof

4.8. [***]

4.9. [***]

4.10. [***]

4.11. [***]

4.12. Matters Involving Third Parties.

(a) If any third party shall commence a third party Action against any indemnified Party with respect to any matter which may give rise to a claim for indemnification against any indemnifying Party under this **Section 10**, the indemnified Party shall notify the

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indemnifying Party thereof in writing as soon as practicable, but in no event more than ten days after the indemnified Party shall have been served with legal process or otherwise received notice of the commencement of such Action; provided, however, that the right of the indemnified Party to indemnification shall be reduced in the event of its failure to give timely notice only to the extent the indemnifying Party is prejudiced thereby.

(b) The indemnifying Party shall have the right to defend the indemnified Party against the third party Action with counsel and other representatives of its choice so long as (i) the indemnifying Party shall notify the indemnified Party in writing (within the 10-day period after its receipt of notice of the third party Action) that it will indemnify the indemnified Party from and against any damages the indemnified Party may suffer arising out of the third party Action; and (ii) the indemnifying Party diligently conducts the defense of the third party Action in the reasonable opinion of the indemnified Party. In the event the indemnifying Party does not comply with clauses (i) or (ii) of the preceding sentence, the indemnified Party may defend against the third party Action preserving its rights to indemnification hereunder including, without limitation, for the reasonable cost of such defense.

(c) So long as the indemnifying Party is diligently conducting the defense of the third party Action in accordance with **Section 10.6(b)** above, (i) the indemnified Party may retain separate co-counsel, at its sole cost and expense, and participate in the defense of the third party Action, (ii) the indemnified Party shall not consent to the entry of any judgment or enter into any settlement with respect to the third party Action without the prior written consent of the indemnifying Party, which consent shall not be unreasonably withheld or delayed, [***]

(d) [***]

4.13. [***]

4.14. [***] actually receives under insurance policies (net of any related increase in insurance premiums).

5. Miscellaneous.

5.9. Public Announcement. Except as required by applicable Law or any Governmental Authority with competent jurisdiction, Seller or any of its respective Affiliates and representatives shall not issue any press release or make any public announcement or disclosure with respect to this Agreement or the transactions contemplated hereby without the prior written approval and consent of Purchaser hereto, which consent shall not be unreasonably withheld, except as required under applicable SEC and NASDAQ rules.

5.10. Amendment; Waiver. Neither this Agreement, nor any of the terms or provisions hereof, may be amended, modified, supplemented, or waived except by a written instrument signed by all of the Parties hereto (or, in the case of a waiver, by the Party granting such waiver). No waiver of any of the terms or provisions of this Agreement shall be deemed to

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be or shall constitute a waiver of any other term or provision hereof (whether or not similar), nor shall such waiver constitute a continuing waiver. No failure of a Party hereto to insist upon strict compliance by another Party hereto with any obligation, covenant, agreement, or condition contained in this Agreement shall operate as a waiver of, or estoppel with respect to, any subsequent or other failure. Whenever this Agreement requires or permits consent by or on behalf of a Party hereto, such consent shall be given in a manner consistent with the requirements for a waiver of compliance as set forth in this **Section 11.2**.

5.11. Fees and Expenses. Each of the Parties hereto shall bear and pay all fees, costs, and expenses incurred by it or any of its Affiliates in connection with the origin, preparation, negotiation, execution, and delivery of this Agreement and the other Acquisition Agreements and the transactions contemplated hereby or thereby (whether or not such transactions are consummated), including, without limitation, any fees, expenses, or commissions of any of its representatives.

5.12. Notices. All notices, requests, demands, and other communications required or permitted under this Agreement shall be in writing and mailed or facsimiled or delivered by hand or courier service:

(f) If to the Seller:

Luna Innovations Inc.
1 Riverside Circle, Suite 400
Roanoke, VA 95014
Attention: Talfourd Kemper
Facsimile No.: 540-581-0951

(g) If to Purchaser or ISIL:

Intuitive Surgical Operations, Inc.
1266 Kifer Road, Building 101
Sunnyvale, CA 94086-5304
Attention: General Counsel
Facsimile No.: 408-523-1390

5.13. Assignment. [***]

5.14. [***]

(a) [***]

(b) [***]

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(c) [***] shall select a mediation firm in the Chicago, IL area [***] then the dispute shall be resolved by [***] arbitration in Chicago, IL [***]

5.15. Headings. The headings contained in this Agreement and the schedules hereto are for convenience of reference only and shall not constitute a part hereof or define, limit, or otherwise affect the meaning of any of the terms or provisions hereof.

5.16. Entire Agreement. Other than as set forth in this **Section 11.8** or any other Acquisition Agreements, the 2010 License Agreement, the Development and Supply Agreement and the Non-Disclosure Agreement dated May 24, 2013 embody the entire agreement and understanding between the Parties hereto with respect to the subject matter hereof and supersede all prior agreements, commitments, arrangements, negotiations or understandings, whether oral or written, between the Parties hereto, their respective Affiliates or any of the representatives of any of them with respect thereto, except as specifically referenced. There are no agreements, covenants, or undertakings with respect to the subject matter of the Acquisition Agreements other than those expressly set forth or referred to herein or therein and no representations or warranties of any kind or nature whatsoever, express or implied, are made or shall be deemed to be made herein by the Parties hereto except those expressly made in the Acquisition Agreements.

5.17. Severability. Each term and provision of this Agreement constitutes a separate and distinct undertaking, covenant, term, and/or provision hereof. In the event that any term or provision of this Agreement shall be determined by a court of competent jurisdiction to be unenforceable, invalid or illegal in any respect, such unenforceability, invalidity or illegality shall, to the fullest extent permitted by law, not affect any other term or provision hereof, but this Agreement shall be construed as if such unenforceable, invalid or illegal term or provision had never been contained herein. Moreover, if any term or provision of this Agreement shall for any reason be held by a court of competent jurisdiction to be excessively broad as to time, duration, activity, scope or subject, the Parties request that it be construed, by limiting and reducing it, so as to be enforceable to the fullest extent permitted under applicable law.

5.18. No Third Party Beneficiaries. Except as and to the extent otherwise provided herein, nothing in this Agreement is intended, nor shall anything herein be construed, to confer any rights, legal or equitable, in any Person other than the Parties hereto and their respective successors and permitted assigns.

5.19. Counterparts. This Agreement may be executed in one or more counterparts by original, facsimile or PDF signature, each of which shall be deemed an original, but all of which, when taken together, shall constitute one and the same instrument.

6. Termination. The Acquisition Agreements may be terminated and the other transactions contemplated by this Agreement may be abandoned at any time prior to the Closing Date, notwithstanding any requisite approval and adoption of this Agreement and the transactions contemplated by this Agreement if the Closing did not occur on or before January 17, 2014. In the event of termination of this Agreement pursuant to this **Section 12**, this Agreement shall forthwith become void, there shall be no liability under this Agreement on the

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part of Seller or Purchaser or any of their respective officers or directors, and all rights and obligations of each party hereto shall cease; provided, however, that the Parties shall continue to be subject to the Non-Disclosure Agreement between Seller and Purchaser dated May 24, 2013.

* * * * *

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IN WITNESS WHEREOF, the Parties have executed, or caused their duly authorized representatives to execute, this Asset Purchase Agreement as of the date first written above.

LUNA INNOVATIONS INCORPORATED

By: /s/ My E. Chung
Name: My E. Chung
Title: CEO

INTUITIVE SURGICAL OPERATIONS, INC.

By: /s/ Gary S. Guthart
Name: Gary S. Guthart
Title: CEO

INTUITIVE SURGICAL INTERNATIONAL LTD.

By: /s/ Marshall L. Mohr
Name: Marshall L. Mohr
Title: SRVP and CFO

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EXHIBIT 10.1

LUNA INNOVATIONS INCORPORATED
SENIOR MANAGEMENT INCENTIVE PLAN
FISCAL YEAR 2014

SENIOR MANAGEMENT INCENTIVE PLAN (CEO, CFO AND CSO)

Eligible Participants:

The initial participants are: Chief Executive Officer, Chief Financial Officer and Chief Strategy Officer. Others may be added from time to time with prior approval of the Chief Executive Officer or Compensation Committee, as appropriate. The target percentage awards for the initial participants are 50% of their respective annual base salaries as of December 31, 2014.

Metrics and Awards:

The 2014 Senior Management Incentive Plan (the "***Senior Management Incentive Plan***") is structured as a percentage of each participant's annual salary for 2014 and is triggered only if the company achieves a strategic goal approved by the Compensation Committee (the ***"Strategic Goal")*** or achieves an adjusted operating income (loss) exceeding $[***] for the year ending December 31, 2014. If the bonus is based on the achievement of adjusted operating income (loss), the amount of bonus will range from 10% to 150% of target, with 10%, 100% and 150% payable upon achievement of adjusted operating income (loss) levels of $[***], [***] and [***], respectively. If the bonus is based on the achievement of the Strategic Goal, the payout will range from 100% to 150% of target, depending on the timing of achievement.

Payment:

Bonus awards under this plan will be paid annually following the approval of the Compensation Committee and, if the bonus is payable based achievement of adjusted operating income (loss), after the completion of an audit of the company's financial statements for the year ending December 31, 2014.

Confidential and Proprietary

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CROSS-LICENSE AGREEMENT

This Cross-License Agreement (this "2014 License Agreement") is made as of January 17, 2014 ("Agreement Date"), by and among Luna Innovations Incorporated and Luna Technologies, Inc., Delaware corporations having their principal place of business at 1 Riverside Circle, Suite 400, Roanoke, VA 24016 (collectively, "Luna"), and Intuitive Surgical Operations, Inc., a Delaware corporation having its principal place of business at 1266 Kifer Road, Sunnyvale, California 94086 (" ISOI"), and Intuitive Surgical International, Ltd, a Cayman Islands company and an indirect and wholly-owned subsidiary of ISOI (" ISIL"). Luna, ISIL, and ISOI shall each be referred to herein as a "Party" and shall be collectively referred to as the "Parties." Capitalized terms that are used, whether in the singular or plural, shall have the meanings set forth in Section 1 (Definitions) or, if not set forth in Section 1, the meaning designated in places throughout the Agreement.

RECITALS

WHEREAS, Luna and ISOI are Parties to a License Agreement effective January 10, 2010 (the " 2010 License Agreement") and a Development and Supply Agreement dated June 11, 2007 and its associated amendments dated May 20, 2008, Jan. 12, 2010, April 27, 2010, Sept. 2, 2010, March 23, 2011, March 19, 2012, Dec. 15, 2012, and Jan. 1, 2013, (the " Development and Supply Agreement").

WHEREAS, Luna wishes to sell, and ISOI and ISIL wish to purchase, all of Luna's Luna Healthcare (as defined below) assets related to FOSSL Technology (as defined below), including employees and intellectual property, all upon the terms and subject to the conditions set forth in the Asset Purchase Agreement among Luna, ISOI and ISIL, dated January 17, 2014 (the " Asset Purchase Agreement").

WHEREAS, ISOI and ISIL wish to concurrently enter into this 2014 License Agreement to grant back to Luna, to the extent ISOI and ISIL are empowered, a worldwide, exclusive license (except ISOI and ISIL shall reserve for themselves a worldwide right to practice on a non-exclusive basis) to use and exploit the FOSSL Technology outside the Field of Medical Healthcare, and a worldwide, non-exclusive license to use and exploit the FOSSL Technology in the Field of Non-Robotics Medical Devices (as defined below), but strictly limited to applications involving the S/T Sensing, upon the terms and subject to the conditions set forth below.

WHEREAS, further to the 2014 License Agreement, Luna wishes to grant ISIL, and ISIL wishes to accept, certain perpetual, fully paid-up, royalty-free rights in and to the intellectual property included in Luna's Luna Healthcare (as defined below) assets related to FOSSL Technology (as defined below), upon the terms and subject to the conditions set forth below.

WHEREAS, Luna wishes to affirm its obligation under the 2010 License Agreement under which it grants ISOI a worldwide, co-exclusive license under the Licensed IP (as this

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capitalized term is defined in the 2010 License Agreement) solely within the Medical Robotics Field (as this capitalized term is defined in the 2010 License Agreement).

NOW, THEREFORE, in consideration of the mutual covenants and other good and valuable consideration described herein, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto covenant and agree as follows:

1. Definitions.

1.1. Certain Definitions. For purposes of this Agreement, in addition to the terms that are defined on first use in this Agreement, and terms not defined herein that are defined in the Asset Purchase Agreement, the following terms shall have the following meanings:

(a) "Affiliate" shall mean a Person that directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified. For purposes of this definition, the terms "control", "controlled by", and "under common control with" shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person and, in the case of an entity, shall require (i) in the case of a corporate entity, direct or indirect ownership of more than 50 percent of the securities having the right to vote for the election of directors, and (ii) in the case of a non-corporate entity, direct or indirect ownership of more than 50 percent of the equity interests with the power to direct the management and policies of such non-corporate entity.

(b) "Change of Control" shall mean, with respect to each Party, the sale of all or substantially all of the assets of Luna or of ISOI, ISIL and/or Intuitive Surgical, Inc., or a merger or consolidation involving Luna or ISOI, ISIL and/or Intuitive Surgical, Inc., in which stockholders of Luna or Intuitive Surgical, Inc., immediately before such merger or consolidation do not own immediately after such merger or consolidation capital stock or other equity interests of the surviving corporation or entity representing more than fifty percent of the voting power of the outstanding capital stock or other equity interests of such surviving corporation or entity immediately after such merger or consolidation.

(c) "Commercialize" (or any form thereof, e.g., "Commercialization") shall mean to sell, offer for sale, import for sale, export for sale, distribute for sale, promote, and market.

(d) "Commercially Reasonable Efforts" shall mean timely application of efforts and resources, consistent with the exercise of prudent business judgment by a company with similar financial resources, and commercially appropriate prioritization with respect to other company projects and products.

(e) "Confidential Information" shall mean all ideas and information of any kind that are held in confidence by one Person and transferred, disclosed, or made available by such Person to a receiving Person and are identified at the time of disclosure as being

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proprietary or confidential, or would reasonably be regarded as proprietary or confidential by a reasonable Person in like circumstances. Information shall not be deemed to be Confidential Information to the extent the receiving Person can demonstrate (i) now or hereafter, through no act or failure to act on the part of the receiving Person, is or becomes public; (ii) is known to the receiving Person or one of its Affiliates at the time such person receives such Confidential Information from the disclosing Person; (iii) is hereafter furnished to the receiving Person by an unrelated third Person without violating any agreement with the disclosing Person; or (iv) is independently developed by the receiving Person or one of its Affiliates without use of any Confidential Information received from the other Person.

(f) "Control" or "Controlled" shall mean the ability of a Person to grant a license, sublicense, and/or enforce under Intellectual Property and without violating the terms of any agreement or other arrangement with any third party.

(g) "Field of Colonoscopy Non-robotics" [***]

(h) "Field of Endoluminal Non-robotics" [***]

(i) "Field of Medical Healthcare" [***]

(j) "Field of Medical Robotics" [***]

(k) "Field of Non-robotics Medical Devices" or "Non-robotics Medical Devices Field" [***]

(l) "Field of Orthopedics" [***]

(m) "Field of Vascular Non-robotics" [***]

(n) "FOSSL Technology" [***]

(o) "Governmental Authority" shall mean any nation, territory, or government (or union thereof), foreign, domestic, or multinational, any state, local, or other political subdivision thereof, and any bureau, court, tribunal, board, commission, department, agency, or other entity exercising executive, legislative, judicial, regulatory, or administrative functions of government, including all taxing authorities and all European notified bodies, including notified bodies within the sense of Article 16 of the European Union Medical Device Directive 93/42/EEC, and all other entities exercising regulatory authority over medical products or devices.

(p) "Intellectual Property" or "IP" shall mean: technology, know-how, trade secrets, contract and licensing rights, goodwill, and patent rights (including, without limitation, (i) any patents, patent applications, any patents issuing therefrom, and all provisional rights with respect to patent applications, and (ii) any improvements, substitutions, divisionals, patents of addition, continuations, continuations-in-part, reissues, renewals, registrations,

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confirmations, re-examinations, extensions, supplementary protection certificates, term extensions (under applicable patent law or regulation or other law or regulation), and certificates of invention of any patents or patent applications, regardless of whether such rights arise under the law of the United States or any other state, country, region, or jurisdiction.

(q) "Licensed Product" shall mean, as the context requires, (i) if outside the Field of Medical Healthcare, a Luna product or service that embodies Licensed Technology, and (ii) if in the Field of Non-robotics Medical Devices, a Luna product or service that embodies Licensed Technology but strictly limited to applications involving S/T Sensing.

(r) "Licensed Technology" shall mean only the Technology within the Transferred Assets acquired by ISOI and ISIL from Luna under the Asset Purchase Agreement, which but for the license granted herein to Luna, would be infringed, exploited, practiced or otherwise used by Luna (and/or its assignees and sublicensees) in its efforts to Commercialize, develop, use, and manufacture products and services, and shall exclude any derivatives of FOSSL Technology, improvements of FOSSL Technology, or new FOSSL Technology, that are developed, invented, created, reduced to practice, licensed and/or acquired by ISOI and/or ISIL but shall include any derivatives of FOSSL Technology, improvements of FOSSL Technology, or new FOSSL Technology, that are reduced to practice (which is intended to include constructive or actual reduction to practice and include the filing of an invention disclosure form) solely by any of the Key Employees or jointly by any of them with any other persons prior to the first anniversary of the Agreement Date.

(s) "Litigation Matter" shall mean any claim, investigation, arbitration, grievance, litigation, action, suit, or proceeding, administrative or judicial, to which a Party is (or, to such Party's knowledge, is threatened in writing to be made) a party, and relating to the Licensed Patents or this Agreement (whether such Party is a plaintiff, defendant, or otherwise), at law or in equity or otherwise, or before any Governmental Authority.

(t) "Luna Healthcare" shall mean the business portion (and its assets) of Luna that develops, manufactures, and/or Commercializes products and services using FOSSL Technology for shape sensing in the Field of Medical Healthcare.

(u) "Patent Costs" shall mean the costs and expenses paid to outside legal counsel, Governmental Authorities, and other third parties incurred in connection with preparing, filing, prosecuting, obtaining, and maintaining patents and patent applications included within the Licensed Technology, or taking any Patent Prosecution Action, including costs and expenses of patent interference, re-examination, reissue, protest, opposition, nullification, and similar proceedings (and any appeal thereof in any court or administrative agency).

(v) "Patent Prosecution Action" shall mean any and all actions that may be taken in connection with preparing, filing, prosecuting, obtaining, and maintaining throughout the world patent protection for the IP included within the Licensed Technology, including patent applications and other related material submissions and correspondence with

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any patent authorities, and including with regard to any patent interference, re-examination, reissue, protest, opposition, nullification, and similar proceedings (and any appeal thereof in any court or administrative agency).

(w) "Person" shall mean an individual, corporation, partnership, limited partnership, limited liability company, unincorporated association, trust, joint venture, union or other organization or entity, including a Governmental Authority.

(x) "Sublicensee" shall mean any Person to whom (i) Luna sublicenses its rights under this 2014 License Agreement in the manner provided in Section 2.2 or (ii) grants a covenant not to sue with respect to its rights under the Licensed Technology.

(y) "S/T Sensing" [***]

(z) "Technology" shall mean any technical information, know-how, processes, procedures, methods, formulae, protocols, techniques, software, computer code (including both object and source code), documentation, works of authorship, data, designations, designs, devise, prototypes, substances, components, Intellectual Property, inventions (whether or not patentable), mask works, ideas, trade secrets, and other information or materials, in tangible or intangible form.

(aa) "Term" shall have the meaning as set forth in Section 9.1.

(bb) "Third Party License" shall mean an IP license that ISOI Controls pursuant to an agreement with a third party, which license or agreement is executed and/or in effect during the Term.

2. License and Other Rights.

2.1. License and Other Rights.

(a) [***]

(b) Upon the execution of the Asset Purchase Agreement [***], ISOI and ISIL shall grant an exclusive license to Luna [***] under the Licensed Technology [***]outside the Field of Medical Healthcare. The exclusive license [***] will be [***] revocable [***]

(c) [***]

(d) ISOI, ISIL, and Luna will not, and will ensure that their Affiliates do not, during the Term assign, transfer, convey, or otherwise dispose of any Licensed Technology other than to an Affiliate (an "IP Transfer") unless such IP Transfer shall have been made subject to the license grant and exclusivity requirements set forth in this Section 2.1 and to the other express terms of this Agreement.

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(e) ISOI, ISIL, and Luna will not, and will ensure that their Affiliates do not, during the Term, utilize or practice, or grant any rights to any third party with respect to, the Licensed Technology that are in any way inconsistent with the rights granted by ISOI and ISIL to Luna and the rights granted by Luna to ISIL under this Agreement.

2.2. Sublicenses. To the extent Luna is granted the right to sublicense, any sublicense by Luna is subject to the following requirements:

(a) Sublicense Agreement. Luna shall execute a written sublicense agreement with each Sublicensee which shall be subject to Luna's rights and obligations under the terms of this Agreement. Luna shall report the granting of all such sublicenses to ISOI within thirty (30) days of the granting of the same, and along with such notification shall provide a copy of the sublicense agreement (redacted as appropriate to fulfill Luna's obligations of confidentiality to third parties, but not sections required for ISOI to understand the relevant field and scope of the sublicense agreement). Each such sublicense agreement will contain terms that are at least as protective of the Licensed Technology and Confidential Information as trade secrets, and no less restrictive than, the terms set forth in this 2014 License Agreement, and shall not include provisions that would be in violation of the license grant set forth in this 2014 License Agreement. Luna shall be obligated to use Commercially Reasonable Efforts in monitoring the performance of its Sublicensees and shall indemnify and hold harmless ISOI, ISIL and its Affiliates, and their respective officers, directors, employees, agents, attorneys, representatives, sucessors, and assigns for any breach by a Sublicensee of Luna's obligations under this 2014 License Agreement.

(b) Performance of Other Obligations by Sublicensees. Luna shall, and by this 2014 License Agreement hereby does, agree to cause any Sublicensee to assume and agree to perform all of the covenants and obligations of Luna to ISOI contained in this 2014 License Agreement as fully and to the same extent as if such person were Luna under this 2014 License Agreement but with such modifications as may be appropriate to reflect the extent, if any, to which the sublicense is narrower in scope than the license grant contained this 2014 License Agreement.

(c) Distributors. Luna may exercise its rights and obligations under this 2014 License Agreement through wholesalers, distributors and sub-distributors through multiple tiers. Such exercise shall not constitute or require a sublicense by Luna.

2.3. [***]

3. Enforcement Rights and Settlement/Royalty Payments.

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3.1. Rights to Enforce.

[***]

3.2. Enforcement Proceedings Records; Audits. Each Party shall maintain complete and accurate records in sufficient detail to confirm the Primary Enforcing Party's payment obligations provided under Section 3.1 of this Agreement (the "Audit Purpose"). For a period of three (3) years from the creation of individual records, such records shall be available during regular business hours, upon reasonable prior notice and not more often than once each calendar year, for examination by an independent accounting firm selected by a Party and reasonably acceptable to the other Party, for the sole purpose of the Audit Purpose. The accounting firm shall disclose to the auditing Party only such information as is necessary for the Audit Purpose. Any undisputed amounts shown to be owed but unpaid shall be paid within thirty (30) days from the accountant's report (which shall be provided to both Parties), plus interest from the original due date. Any undisputed amounts shown to have been overpaid shall be paid within forty-five (45) days from the accountant's report (which shall be provided to both Parties), plus interest from the original due date. [***]

3.3. Enforcement Action by Third Party.

(a) If a Party receives notice by counterclaim, declaratory judgment action or otherwise, alleging the invalidity, unenforceability, non-infringement, misuse, or misappropriation outside the Field of Medical Healthcare with respect to any Licensed Technology, it shall bring such fact to the attention of the other Party in writing, including all relevant information related to such claim. Where such allegation is made in the form of a patent opposition, patent reexamination, patent interference or other patent office proceeding or otherwise in connection with any Patent Prosecution Action, the provisions of Section 4 hereof shall apply. Where such allegation is made in a counterclaim to, or otherwise in connection with, a suit or other action brought under Section 3.1, the provisions of Section 3.1 shall apply. In all other cases (e.g., declaratory judgment action filed by a third party), for Licensed Technology, ISOI shall have the first right to defend such action at its own expense; provided, if a Party has brought an Infringement action or elects to bring an Infringement counterclaim pursuant to Section 3.1, the provisions of Section 3.1 shall apply.

(b) [***]

4. Prosecution of Patent Rights.

4.1. Prosecution and Maintenance of Patent Rights. ISOI shall use Commercially Reasonable Efforts to prepare, file, prosecute, obtain, and maintain the Licensed Technology patents. ISOI shall otherwise take all Patent Prosecution Actions as it shall deem to be commercially reasonable, in its discretion, to protect and preserve the value of such Licensed Technology, and shall pay all Patent Costs in connection with the foregoing activities.

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4.2. Cooperation with Respect to Licensed Technology Patents. Upon request from Luna, ISOI shall provide Luna with copies of all related material submissions and correspondence proposed to be submitted to, as well as actually submitted to, any patent authorities dealing with actual or potential Licensed Technology patents outside the Field of Medical Healthcare, in sufficient time to allow for review and comment by Luna. In addition, ISOI shall provide Luna and its counsel with an opportunity to consult with ISOI regarding Patent Prosecution Actions relating to the Licensed Technology patents and any decisions by ISOI not to take any Patent Prosecution Actions, and ISOI shall reasonably take into consideration, in good faith, the reasonable requests of Luna regarding the same (and if Luna requests foreign patent filing, maintenance, and prosecution in any given country(ies) that ISOI and ISIL would not otherwise pursue, then ISOI will reasonably comply with such requests at Luna's sole expense).

4.3 [***]

5. Confidentiality.

5.1. Limited Disclosure and Use. Each of ISOI and Luna shall hold in confidence any Confidential Information (including trade secrets) disclosed by the other or otherwise obtained by such Party from the other Party as a result of this Agreement, and each of ISOI and Luna shall protect the confidentiality thereof with the same degree of care that it exercises with respect to its own information of a like nature, but in no event less than reasonable care. Luna shall have the right to provide Confidential Information to its Affiliates and Sublicensees, subject to the confidentiality obligations imposed by this Section 5.1. Without the prior written consent of the disclosing Party, a receiving Party shall not use, disclose, or distribute any Confidential Information, in whole or in part, except as required to perform such Party's obligations under this 2014 License Agreement or in exercise or furtherance of its rights under this 2014 License Agreement. Access to the disclosing Party's Confidential Information shall be restricted to the receiving Party's and its Affiliates' employees, agents, auditors and business, financial, and legal advisers, who, in each case, need to have access to carry out a permitted use and are bound in writing to maintain the use and confidentiality restrictions of such Confidential Information. The obligations set forth in this Section 5.1 shall survive any termination or expiration of this Agreement in perpetuity (with respect to trade secrets and confidential financial information) and for a period of five (5) years (with respect to all other Confidential Information).

5.2. Exceptions. Each receiving Party may disclose Confidential Information, without prior approval from the other Party, to the extent such disclosure is reasonably necessary to protect Intellectual Property rights to which such Party has a right or license under this Agreement, to prosecute or defend litigation, to comply with applicable law or regulations (for example, Unites States Securities and Exchange Commission filings), to obtain necessary or desirable regulatory approvals or concurrences, or to respond to a valid order of a Governmental Authority, *provided that*, other than with respect to disclosure for protecting Intellectual Property rights in connection with a Patent Prosecution Action in which such

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disclosure is required by applicable law, the receiving Party shall (a) use Commercially Reasonable Efforts to secure confidential treatment of such Confidential Information required to be disclosed, (b) use Commercially Reasonable Efforts to protect the financial terms of this Agreement, and (c) unless precluded by applicable law from doing so, give advance written notice to the disclosing Party reasonably in advance of the proposed disclosure so as to permit the disclosing Party the opportunity to object to such disclosure or otherwise protect its Confidential Information.

5.3. Use of Name; Disclosure of Terms of the Agreement. Except as required by applicable law or regulation, neither Party shall use the name of the other Party or any Affiliate or Sublicensee of the other Party in any advertising without the prior written approval of the other Party. Except as may be required by applicable law or regulation, neither Party shall disclose any terms or conditions of this Agreement without the prior written consent of the other, *provided that* (a) either Party may disclose such terms and conditions to comply with law or the rules of any stock exchange on which its securities are listed; and (b) either Party may disclose such terms and conditions to existing and potential bona fide lenders, material investors, and buyers who have agreed in writing to keep such information confidential in accordance with provisions at least as protective as those contained herein.

5.4. Termination. Each receiving Party shall, upon termination of this 2014 License Agreement, immediately discontinue use of the other's Confidential Information (except to the extent that such receiving Party retains a right or license to use such Confidential Information, or requires such Confidential Information to complete the transactions and purposes of this Agreement). Within thirty (30) days after termination of this Agreement, or upon receipt of written request by the disclosing Party, if earlier, all materials containing such Confidential Information shall be returned by the receiving Party or (at the receiving Party's election) destroyed, *provided, however,* that each receiving Party may retain copies of Confidential Information in which such receiving Party has a proprietary or licensed interest that survives termination, and the receiving Party shall be entitled to retain a file copy of the Confidential Information under the control of its general counsel or its outside counsel for archival purposes and for monitoring its obligations under this Agreement, and in connection with any related obligations under law

6. Representations and Warranties.

5.5. Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) It is a corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated. It has corporate power to own its properties and to conduct its business as currently owned and conducted.

(b) It has the full legal right and power to enter into and perform the transactions contemplated by this 2014 License Agreement, without need for any consent, approval, authorization, license or order of, or notice to or filing with, any Governmental

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Authority or other Person. The execution, delivery, and performance by such Party of this 2014 License Agreement and the consummation by it of the transactions contemplated hereby have been duly and validly authorized and approved by all necessary corporate action of such Party. This 2014 License Agreement evidences the legal, valid, and binding obligations of such Party, enforceable against it in accordance with its terms, subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium, or similar laws relating to or affecting the rights and remedies of creditors generally. This 2014 License Agreement has been duly executed and delivered by such Party.

(c) The execution, delivery, and performance by it of this 2014 License Agreement does not and will not violate any applicable law or regulation, breach, create any liability, or loss of a benefit under any agreement to which it is a party or by which it is bound.

(d) The execution, delivery, and performance by it of this Agreement does not require the approval of any Governmental Authority nor the application for or filing of or for any license, permit, approval, waiver, no-action, or similar permission from any Governmental Authority.

5.6. Representations and Warranties of Luna. Luna hereby represents and warrants, as at the Agreement Date, as follows:

(a) Rights to License. To the best of its knowledge, Luna (i) owns, holds, and/or Controls right, title, and interest in the Licensed Technology licensed to ISIL in Section 2.1(a); (ii) has the right to grant the license to ISIL under Sections 2.1(a); (iii) until the execution of the Asset Purchase Agreement, has the exclusive right to bring actions for the Infringement of the issued Licensed Technology (i.e., issued patents and copyrights); (iv) is empowered and has sufficient rights to grant the rights contemplated by this 2014 License Agreement.

(b) Acknowledgement. ISOI and ISIL acknowledge that the license rights granted to ISOI and ISIL hereunder may not provide ISOI and ISIL with all the intellectual property or other rights needed to perform the activities contemplated by ISOI and ISIL in entering into this 2014 License Agreement to Commercialize products and services.

(c) No Intellectual Property Warranty. Nothing in this Agreement shall be construed as: (i) a warranty or representation by Luna that anything made, used or sold or otherwise disposed of under any license granted in this 2014 License Agreement is or will be free of infringement of any intellectual property right of third parties; (ii) a representation that Luna has or shall file any patent application, secure any patent, pursue any pending patent application, except as expressly provided herein; or (iii) an obligation of Luna to bring or prosecute any action or suit against a third party for infringement of the licensed technology.

5.7. Disclaimer. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NO PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES,

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EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY REPRESENTATIONS OR WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.NO PARTY WARRANTS THAT THE OTHER PARTY WILL RECEIVE ANY PARTICULAR AMOUNT, OR ANY, REVENUES OR PROFITS AS A RESULT OF ENTERING INTO THE BUSINESS ARRANGEMENTS DESCRIBED IN THIS AGREEMENT.

6. [***]

7. [***]

8. Term and Termination.

8.1. Term. Unless earlier terminated in accordance with this Section 9, the "Term" and the license grants set forth in this 2014 License Agreement shall take effect at the Agreement Date and shall continue until the later to occur of the following: (i) expiration of the last to expire of the Licensed Technology patents, including any extensions thereof, and (ii) the date when Luna (or its assignee or sublicensee) is no longer Commercializing Licensed Products and the Licensed Technology licensed to Luna hereunder.

8.2. Termination for Cause by ISOI. ISOI and ISIL shall have the right to terminate this 2014 License Agreement, including all license and rights granted to Luna: (i) effective within 10 business days upon written notice to Luna, if Luna or its Affiliates initiates or joins a proceeding to challenge the validity or enforceability of the patents or patent applications included in the Licensed Technology and such proceeding is not dropped within such 10-business day period; (ii) effective immediately upon written notice to Luna, if Luna or its Affiliates continues to Commercialize FOSSL Technology in the Field of Medical Healthcare (except for Licensed Products in the Field of Non-robotics Medical Devices and except pursuant to its fulfillment of obligations to Hansen Medical, Inc. as permitted under Section 9.2 of the Asset Purchase Agreement) ninety (90) days after written notice from ISOI or ISIL specifying the nature of Luna's violation(s); (iii) upon written notice to Luna, if Luna or its Affiliates continues to sublicense, or attempts to sublicense, its rights hereunder in the Field of Medical Healthcare in violation of Section 2.2, such termination to be effective ninety (90) days after Luna's receipt of written notice of such violation from ISOI or ISIL specifying the nature of Luna's violation(s); and (iv) effective immediately upon written notice to Luna, if Luna or its Affiliates violates Section 5.1 of this Agreement in a manner that advantages a competitor in the Field of Medical Healthcare and such violation remains uncured ninety (90) days after Luna's receipt of written notice specifying the nature of such violation from ISOI and ISIL.

9.3 [***].

9.4 [***]

9.5 After Termination. [***], Sections 5 (Confidentiality), 7 (Indemnification), 9 (Termination), and 10 (General) shall survive.

CONFIDENTIAL TREATMENT HAS BEEN REQUESTED FOR PORTIONS OF THIS EXHIBIT. THE COPY FILED HEREWITH OMITS THE INFORMATION SUBJECT TO A CONFIDENTIALITY REQUEST. OMISSIONS ARE DESIGNATED [***]. A COMPLETE VERSION OF THIS EXHIBIT HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

9.6 Section 365(n). All rights and licenses granted under or pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11, U.S. Code (the "Bankruptcy Code"), licenses of rights to "intellectual property" as defined in the Bankruptcy Code. The Parties agree that Luna (as licensee under Section 2) shall retain and may fully exercise all of its respective rights and elections under the Bankruptcy Code. ISOI shall, during the Term, create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, of all such Intellectual Property. All rights, powers, and remedies of Luna provided under this Article 9 are in addition to and not in substitution for any and all other rights, powers, and remedies now or hereafter existing at law or in equity in the event of any such commencement of a bankruptcy proceeding by or against ISOI.

10 General.

10.1 Waivers and Amendments.

(a) This Agreement may be amended, modified, or supplemented only by a written instrument executed by the Parties to this 2014 License Agreement.

(e) No waiver of any provision of this Agreement, or consent to any departure from the terms of this 2014 License Agreement, shall be effective unless the same shall be in writing and signed by the Party waiving or consenting thereto. No failure on the part of any Party to exercise, and no delay in exercising, any right or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or remedy by such Party preclude any other or further exercise thereof or the exercise of any other right or remedy. The waiver by any Party to this Agreement of a breach of any provision of this Agreement shall not operate as a waiver of any subsequent breach.

10.2 Entire Agreement. This 2014 License Agreement constitutes the entire agreement between the Parties to this 2014 License Agreement with respect to the subject matter of this 2014 License Agreement and supersedes all prior agreements and understandings, whether written or oral, between the Parties, or any of the Parties, in connection with such subject matter. Any representation, promise, or condition in connection with such subject matter, which is not incorporated in this 2014 License Agreement, shall not be binding upon either Party.

10.3 Severability. If any provision of this 2014 License Agreement is found invalid or unenforceable by a court of competent jurisdiction, such provision shall be enforced to the maximum extent permissible by law and the other provisions of this 2014 License Agreement shall remain in full force and effect.

10.4 Relationship of the Parties. This 2014 License Agreement shall not constitute either Party the agent or legal representative of the other Party

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for any purpose whatsoever, and neither Party shall hold itself out as an agent of the other Party. This Agreement creates no relationship of joint venturers, partners, associates, employment, or principal and agent between the Parties, and both Parties are acting as independent contractors. Neither ISOI nor Luna is granted in this 2014 License Agreement any right or authority to, and shall not attempt to, assume or create any obligation or responsibility for or on behalf of the other. Neither ISOI nor Luna shall have any authority to bind the other to any contract, whether of employment or otherwise, and ISOI and Luna shall bear all of their respective expenses for their operations, including the compensation of their employees and the maintenance of their offices and service facilities. ISOI and Luna shall each be solely responsible for their own employees and salespeople and for their acts and the things done by them.

10.5 No Election of Remedies. Except as otherwise specifically provided in this 2014 License Agreement, the rights and remedies accorded in this 2014 License Agreement to ISOI and to Luna are cumulative and in addition to those provided by law, and may be exercised separately, concurrently, or successively.

10.6 Costs and Expenses. Except as expressly stated otherwise in this 2014 License Agreement, each Party shall bear its own costs and expenses of performance of this Agreement.

10.7 Notice. All notices, requests, demands, claims, and other communications under this Agreement shall be in writing. Any notice, request, demand, claim or other communication under this Agreement with respect to any alleged breach of this Agreement or the alleged termination of this Agreement shall be deemed duly delivered (a) four (4) business days after it is sent by registered or certified mail, return receipt requested, postage prepaid, or (b) one (1) business day after it is sent for next business day delivery via a reputable nationwide overnight courier service, in each case addressed to the intended recipient as set forth below. Any other form of notice, request, demand, or other communication between the Parties shall be deemed duly delivered one (1) business day after it is sent on a business day via electronic facsimile transmission, with confirmation of delivery, addressed to the intended recipient as set forth below:

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(a) if to Luna, to:

Luna Innovations Incorporated
1 Riverside Circle, Suite 400
Roanoke, VA 24016
Attention: General Counsel—Legal Dept.
Facsimile No.: 540-581.0951
E-mail: kemperf@lunainc.com

(f) if to ISOI, to:

ISOI Surgical Operations, Inc.
1266 Kifer Road
Building 101
Sunnyvale, CA 94086-5304
Attention: General Counsel—Legal Dept.
Facsimile No.: (408) 523-1390
E-mail: mark.meltzer@intusurg.com

(g) if to ISIL, to:

Intuitive Surgical International, Ltd.
1266 Kifer Road
Building 101
Sunnyvale, CA 94086-5304
Attention: General Counsel—Legal Dept.
Facsimile No.: (408) 523-1390

E-mail: mark.meltzer@intusurg.com or at such other address for a Party as shall be specified by like notice.

10.8 Counterparts. This Agreement and all Exhibits, Schedules and Appendices may be executed in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when two or more counterparts have been signed by each Party and delivered to the other Party, it being understood that all Parties need not sign the same counterpart. Facsimile or PDF execution and delivery of this Agreement and any Exhibits, Schedules, and Appendices by any of the Parties shall be legal, valid, and binding execution and delivery of such document for all purposes.

10.9 Benefits and Burdens; Assignments. This 2014 License Agreement shall be binding upon and shall inure to the benefit of each of the Parties as well as their respective legal representatives, successors,

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and permitted assigns. This 2014 License Agreement shall be assignable, by operation of law or otherwise, by the Parties; *provided* in each case of assignment the assignee agrees in writing to assume the assigning Party's obligations under this 2014 License Agreement; *provided further* that Luna may not assign its rights in the Field of Non-Robotics Medical Devices except pursuant to a Change of Control; and *provided further* that ISOI and ISIL may not assign this 2014 License Agreement to the extent the assignment would transfer their retained rights outside the Field of Medical Healthcare (as set forth in Section 2.1(b)) except pursuant to a Change of Control. Any attempt to assign or transfer this 2014 License Agreement or any portion thereof in violation of this Section 10.9 shall be void.

10.10 Interpretation. When a reference is made in this 2014 License Agreement to Sections or Exhibits, such reference shall be to a Section of or Exhibit to this Agreement unless otherwise indicated. References to Sections include subsections, which are part of the related Section (e.g., a section numbered "Section 5.1(a)" would be part of "Section 5.1", and references to "Section 5.1" would also refer to material contained in the subsection described as "Section 5.1(a)"). The recitals to this 2014 License Agreement constitute an integral part of this 2014 License Agreement. Headings contained in this 2014 License Agreement are for convenience of reference only and shall not affect in any way the meaning or interpretation of this 2014 License Agreement. The language used in this Agreement shall be deemed to be the language chosen by the Parties to this 2014 License Agreement to express their mutual intent, and no rule of strict construction shall be applied against any Party (e.g., ambiguities, if any, in this Agreement shall not be construed by default against either Party simply because one or the other Party is deemed to have drafted the provision at issue). Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine, or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa. Any reference to any federal, state, local, or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise. Whenever the words "include," "includes" or "including" are used in this 2014 License Agreement, they shall be deemed to be followed by the words "but not limited to". No summary of this 2014 License Agreement prepared by any Party shall affect the meaning or interpretation of this 2014 License Agreement. All references to dollars in this 2014 License Agreement shall be to United States Dollars.

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10.11 License Registration and Recordal. Subject to the confidentiality provisions of Section 5, each Party shall have the right, at its sole cost and expense, to register, record, and otherwise document the license granted in Section 2 in any country where there are any pending or issued Licensed Technology patent rights. Each Party shall have the right, at its sole cost and expense, to register, record, and otherwise document any assignments of Licensed Technology patent rights provided for by this 2014 License Agreement.

10.12 Public Announcement. Neither ISOI nor Luna shall issue any press release or make any public announcement or disclosure with respect to this 2014 License Agreement or the transactions contemplated hereby, without the prior written permission of the other Party.

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IN WITNESS WHEREOF, the Parties have executed, or caused their duly authorized representatives to execute, this 2014 License Agreement under seal as of the date first written above.

LUNA INNOVATIONS INCORPORATED

By: /s/ My Chung
Name: My Chung
Title: CEO

INTUITIVE SURGICAL OPERATIONS, INC.

By: /s/ Gary S. Guthart
Name: Gary S. Guthart
Title: CEO

INTUITIVE SURGICAL INTERNATIONAL, LTD.

By: /s/ Marshall L. Mohr
Name: Marshall L. Mohr
Title: SRVP & CFO

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Exhibit 10.3

CONSENT, RELEASE AND FIFTH LOAN MODIFICATION AGREEMENT

This Consent, Release and Fifth Loan Modification Agreement (this "**Loan Modification Agreement**") is entered into as of January 21, 2014, by and between (i) **SILICON VALLEY BANK**, a California corporation with a loan production office located at 8020 Towers Crescent Drive, Suite 475, Vienna, Virginia 22182 ("**Bank**"), and (ii) **LUNA INNOVATIONS INCORPORATED**, a Delaware corporation ("**Innovations**") and **LUNA TECHNOLOGIES, INC.**, a Delaware corporation ("**Technologies**"), each with offices located at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016 (Innovations and Technologies are referred to herein, individually and collectively, jointly and severally, the "**Borrower**").

1. DESCRIPTION OF EXISTING INDEBTEDNESS AND OBLIGATIONS. Among other indebtedness and obligations which may be owing by Borrower to Bank, Borrower is indebted to Bank pursuant to a loan arrangement dated as of February 18, 2010, evidenced by, among other documents, a certain Loan and Security Agreement dated as of February 18, 2010, between Borrower and Bank, as amended by a certain First Loan Modification Agreement, dated as of March 7, 2011, as further amended by a certain Second Loan Modification Agreement, dated as of May 18, 2011, as further amended by a certain Third Loan Modification Agreement, dated as of June 1, 2012, and as further amended by a certain Fourth Loan Modification Agreement, dated as of March 1, 2013 (as amended, the "**Loan Agreement**"). Capitalized terms used but not otherwise defined herein shall have the same meaning as in the Loan Agreement.

2. DESCRIPTION OF COLLATERAL. Repayment of the Obligations is secured by the Collateral as described in the Loan Agreement and in certain Intellectual Property Security Agreements executed by each Borrower in favor of Bank (collectively, the "**IP Agreements**", and together with any other collateral security granted to Bank, the "**Security Documents**").

Hereinafter, the Security Documents, together with all other documents evidencing or securing the Obligations shall be referred to as the "**Existing Loan Documents**".

3. DESCRIPTION OF CHANGE IN TERMS.

A. Modifications to Loan Agreement.

1 The Loan Agreement shall be amended by deleting the following text appearing as Section 6.9(a) thereof:

"(a) Minimum Cash. Borrower's unrestricted cash at Bank of not less than Five Million Dollars ($5,000,000)."

and inserting in lieu thereof the following:

"(a) Minimum Cash. Borrower's unrestricted cash at Bank of not less than Three Million Five Hundred Thousand Dollars ($3,500,000)."

2 The loan Agreement shall be amended by inserting the following definitions in Section 13.1 thereof, each in its appropriate alphabetical order:

"**Fifth Loan Modification Effective Date**" is January 21, 2014."

3 The Compliance Certificate appearing as Exhibit B to the Loan Agreement is hereby replaced with the Compliance Certificate attached as Exhibit A hereto.

4. CONSENT. Borrower has requested that Bank consent to the sale by Innovations of certain of its assets to Intuitive Surgical Operations, Inc., a Delaware corporation (the "**Purchaser**") pursuant to an Asset Purchase Agreement dated as of January

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17, 2014 (the "**Purchase Agreement**"). Innovations intends to sell certain Collateral in connection with its Fiber Optic Shape Sensing/Localization technology to Purchaser in accordance with the terms contained in the Purchase Agreement (the " **Transaction**"). Absent such consent, the Transaction would be a violation of Section 7.1 (*Dispositions*) of the Loan Agreement. Bank hereby consents to the Transaction pursuant to the terms of the Purchase Agreement and agrees that: (i) notwithstanding anything to the contrary contained in Section 7.1 or otherwise in the Loan Agreement, the Transaction shall be permitted under the Loan Agreement, and (ii) notwithstanding anything to the contrary contained in Section 6.4 or otherwise in the Loan Agreement, Borrower shall not be obligated to remit the proceeds of the Transaction to Bank to be applied to the Obligations; provided, however, that Borrower retain at least $12,000,000 of the proceeds from the Transaction on its balance sheet as cash and deposits (a) on the closing date of the Transaction, $6,000,000 of such proceeds in an account of Borrower maintained at Bank and (b) upon receipt, and in any event not later than ninety (90) days after the closing date of the Transaction, $6,000,000 of such proceeds in an account of Borrower maintained at Bank, in each case until used by Borrower in the ordinary course of business.

5. PARTIAL RELEASE. Bank hereby fully and unconditionally releases and reassigns to Borrower any and all liens, security interests, right, title and interest of Bank pursuant to the Loan Agreement in certain of the Collateral described on Schedule 1 attached hereto (as more specifically defined in the Purchase Agreement, the "**Transferred Assets**"), without recourse or representation or warranty, express or implied, of any kind. Bank authorizes Borrower, Purchaser, or any other party on behalf of Borrower, after review by Bank, to file any UCC-3 Termination Statements or other documents necessary to evidence the release of Bank's security interests in the Purchased Assets. In addition, Bank shall take any other actions, as may be reasonably requested by Borrower or which are required to evidence the release of the Purchased Assets, in each case at the expense of Borrower (including all reasonable attorneys' fees and expenses).

6. FEES. Borrower shall reimburse Bank for all legal fees and expenses incurred in connection with this amendment to the Existing Loan Documents.

7. RATIFICATION OF IP AGREEMENTS. Other than with respect to the Purchased Assets being released herein, Borrower hereby ratifies, confirms and reaffirms, all and singular, the terms and conditions of the IP Agreements, and acknowledges, confirms and agrees that said IP Agreements, as modified by certain disclosures made by Borrower to Bank through and including the date hereof, contain an accurate and complete listing of all Intellectual Property Collateral as defined in each respective IP Agreement, and each remains in full force and effect. Notwithstanding the terms and conditions of any of the IP Agreements, Borrower shall not register any Copyrights or Mask Works in the United States Copyright Office unless it: (i) has given at least fifteen (15) days' prior written notice to Bank of its intent to register such Copyrights or Mask Works and has provided Bank with a copy of the application it intends to file with the United States Copyright Office (excluding exhibits thereto); (ii) executes a security agreement or such other documents as Bank may reasonably request in order to maintain the perfection and priority of Bank's security interest in the Copyrights proposed to be registered with the United States Copyright Office; and (iii) records such security documents with the United States Copyright Office contemporaneously with filing the Copyright application(s) with the United States Copyright Office. Borrower shall promptly provide to Bank a copy of the Copyright application(s) filed with the United States Copyright Office, together with evidence of the recording of the security documents necessary for Bank to maintain the perfection and priority of its security interest in such Copyrights or Mask Works. Borrower shall provide written notice to Bank of any application filed by Borrower in the United States Patent Trademark Office for a patent or to register a trademark or service mark within thirty (30) days of any such filing.

8. RATIFICATION OF PERFECTION CERTIFICATE. Other than with respect to the Purchased Asstes being released herein, Borrower hereby ratifies, confirms and reaffirms, all and singular, the terms and disclosures contained in certain Perfection Certificates, each dated as of February 18, 2010, each as modified by written disclosures made by Borrower to Bank through and including the date hereof, and acknowledges, confirms and agrees the disclosures and information above Borrower provided to Bank in each such Perfection Certificate, as modified through the date hereof, remains true and correct in all material respects as of the date hereof.

9. AUTHORIZATION TO FILE. Borrower hereby authorizes Bank to file UCC financing statements without notice to Borrower, with all appropriate jurisdictions, as Bank deems appropriate, in order to further perfect or protect Bank's interest in the Collateral, including a notice that any disposition of the Collateral, by either the Borrower or any other Person, shall be deemed to violate the rights of the Bank under the Code.

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10. CONSISTENT CHANGES. The Existing Loan Documents are hereby amended wherever necessary to reflect the changes described above.

11. RATIFICATION OF LOAN DOCUMENTS. Borrower hereby ratifies, confirms, and reaffirms all terms and conditions of the Loan Agreement (as modified by this Loan Modification Agreement), and all security or other collateral granted to the Bank, and confirms that the indebtedness secured thereby includes, without limitation, the Obligations.

12. NO DEFENSES OF BORROWER. Borrower hereby acknowledges and agrees that Borrower has no offsets, defenses, claims, or counterclaims against Bank with respect to the Obligations, or otherwise, and that if Borrower now has, or ever did have, any offsets, defenses, claims, or counterclaims against Bank, whether known or unknown, at law or in equity, all of them are hereby expressly WAIVED and Borrower hereby RELEASES Bank from any liability thereunder.

13. CONTINUING VALIDITY. Borrower understands and agrees that in modifying the existing Obligations, Bank is relying upon Borrower's representations, warranties, and agreements, as set forth in the Existing Loan Documents. Except as expressly modified pursuant to this Loan Modification Agreement, the terms of the Existing Loan Documents remain unchanged and in full force and effect. Bank's agreement to modifications to the existing Obligations pursuant to this Loan Modification Agreement in no way shall obligate Bank to make any future modifications to the Obligations. Nothing in this Loan Modification Agreement shall constitute a satisfaction of the Obligations. It is the intention of Bank and Borrower to retain as liable parties all makers of Existing Loan Documents, unless the party is expressly released by Bank in writing. No maker will be released by virtue of this Loan Modification Agreement.

14. JURISDICTION/VENUE. Section 11 of the Loan Agreement is hereby incorporated by reference in its entirety.

15. COUNTERSIGNATURE. This Loan Modification Agreement shall become effective only when it shall have been executed by Borrower and Bank.

[Signatures included on the following page]

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IN WITNESS WHEREOF, the parties hereto have caused this Loan Modification Agreement to be executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of the date first above written.

BORROWER:

LUNA INNOVATIONS INCORPORATED

By /s/ Kent A. Murphy
Name: Kent A. Murphy
Title: President and CEO

LUNA TECHNOLOGIES, INC.

By /s/ Scott A. Graeff
Name: Scott A. Graeff
Title: President

BANK:

SILICON VALLEY BANK

By: /s/ Alicia Fuller
Name: Alicia Fuller
Title: Vice President

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SCHEDULE 1

TRANSFERRED ASSETS

[***]

Confidential and Proprietary

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EXHIBIT B

COMPLIANCE CERTIFICATE

TO: SILICON VALLEY BANK Date: _____
FROM: LUNA INNOVATIONS INCORPORATED
LUNA TECHNOLOGIES, INC.

The undersigned authorized officer of Luna Innovations Incorporated, a Delaware corporation, and Luna Technologies, Inc., a Delaware corporation (individually and collectively, jointly and severally, the "**Borrower**") certifies that under the terms and conditions of the Loan and Security Agreement between Borrower and Bank (the "**Agreement**"), (1) Borrower is in complete compliance for the period ending _____ with all required covenants except as noted below, (2) there are no Events of Default, (3) all representations and warranties in the Agreement are true and correct in all material respects on this date except as noted below; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof; and provided, further that those representations and warranties expressly referring to a specific date shall be true, accurate and complete in all material respects as of such date , (4) Borrower, and each of its Subsidiaries, has timely filed all required tax returns and reports, and Borrower has timely paid all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower except as otherwise permitted pursuant to the terms of Section 5.9 of the Agreement, and (5) no Liens have been levied or claims made against Borrower or any of its Subsidiaries, if any, relating to unpaid employee payroll or benefits of which Borrower has not previously provided written notification to Bank. Attached are the required documents supporting the certification. The undersigned certifies that these are prepared in accordance with GAAP consistently applied from one period to the next except as explained in an accompanying letter or footnotes. The undersigned acknowledges that no borrowings may be requested at any time or date of determination that Borrower is not in compliance with any of the terms of the Agreement, and that compliance is determined not just at the date this certificate is delivered. Capitalized terms used but not otherwise defined herein shall have the meanings given them in the Agreement.

Please indicate compliance status by circling Yes/No under "Complies" column.

Reporting Covenant	Required	Complies
Monthly financial statements with Compliance Certificate	Monthly within 30 days	Yes No
Annual financial statement (CPA Audited) + CC	FYE within 120 days	Yes No
10-Q, 10-K and 8-K	Within 5 days after filing with SEC	Yes No
A/R & A/P Agings, Deferred Revenue/billings in excess of cost report/project identifiers for Assignments of Claim tracking purposes	Monthly within 15 days	Yes No
Transaction Reports	Bi-weekly (monthly with 30 days during a Streamline Period) and with each request for an advance	Yes No
Projections	FYE within 30 days, and as amended	Yes No
The following Intellectual Property was registered after the Effective Date (if no registrations, state "None") _____		

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Financial Covenant	Required	Actual	Complies
Maintain as indicated:			
Minimum Cash	$3,500,000	$_____	Yes No

Confidential and Proprietary

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The following financial covenant analyses and information set forth in Schedule 1 attached hereto are true and accurate as of the date of this Certificate.

The following are the exceptions with respect to the certification above: (If no exceptions exist, state "No exceptions to note.")

LUNA INNOVATIONS INCORPORATED
LUNA TECHNOLOGIES, INC.

By: __
Name: __
Title: __

BANK USE ONLY

Received by: _____
AUTHORIZED SIGNER
Date: _____

Verified: _____
AUTHORIZED SIGNER
Date: _____

Compliance Status: Yes No

Confidential and Proprietary

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Schedule 1 to Compliance Certificate

Financial Covenants of Borrower

Dated: _____

I. **Minimum Cash** (Section 6.9(a))

Required: Borrower shall maintain at all times unrestricted cash at Bank of not less than Three Million Five Hundred Thousand Dollars ($3,500,000).

Actual:

A. Aggregate value of Borrower's unrestricted cash at Bank $__

Is line A equal to or greater than $3,500,000?

No, not in compliance __ Yes, in compliance

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Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, My E. Chung, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Luna Innovations Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2014

/S/ MY E. CHUNG

My E. Chung
President and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Dale E. Messick, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Luna Innovations Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 13, 2014

/S/ DALE E. MESSICK

Dale E. Messick
Chief Financial Officer
(principal financial officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Luna Innovations Incorporated (the "Company") on Form 10-Q for the quarter ended March 31, 2014 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, My E. Chung, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

This certification accompanies this Report to which it relates, shall not be deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.

/S/ MY E. CHUNG

My E. Chung
President and Chief Executive Officer
(principal executive officer)

May 13, 2014

Exhibit 32.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report of Luna Innovations Incorporated (the "Company") on Form 10-Q for the quarter ended March 31, 2014 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Dale E. Messick, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

This certification accompanies this Report to which it relates, shall not be deemed "filed" with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.

/S/ DALE E. MESSICK

Dale E. Messick
Chief Financial Officer
(principal financial officer)

May 13, 2014