Table of Contents

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, 2010

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 May 12, 2010, there were 12,893,901 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 Disclosure About Market Risk" under Items 2 and 3, respectively, of Part I of this report, and the sections entitled "Legal Proceedings," "Risk Factors," and "Unregistered Sales of Equity Securities and Use of Proceeds" under Items 1, 1A and 2, respectively, 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 facts are "forward-looking statements" for purposes of these provisions, 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, 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 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, 2010

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Luna Innovations Incorporated
Consolidated Balance Sheets

	March 31, 2010 (unaudited)	December 31, 2009
Assets		
Current assets		
Cash and cash equivalents	$ 6,467,080	$ 5,228,802
Accounts receivable, net	7,754,801	7,203,203
Inventory, net	2,822,059	2,890,364
Prepaid expenses	672,685	560,964
Other current assets	46,916	729,532
Total current assets	17,763,541	16,612,865
Property and equipment, net	3,855,226	4,129,015
Intangible assets, net	553,794	580,785
Other assets	359,585	435,259
Total assets	**$ 22,532,146**	**$ 21,757,924**
Liabilities and stockholders' equity (deficit)		
Liabilities:		
Current Liabilities		
Line of credit	2,500,000	—
Current portion of long term debt obligation	1,096,981	—
Accounts payable	1,881,731	1,142,267
Accrued liabilities	3,978,413	3,386,849
Deferred credits	1,355,541	1,027,016
Total current liabilities	10,812,666	5,556,132
Long-term debt obligation	3,903,019	—
Liabilities subject to compromise	—	19,062,000
Total liabilities	14,715,685	24,618,132
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, par value $0.001, 1,321,514 shares authorized, issued and outstanding at March 31, 2010	1,322	—
Common stock, par value $0.001, 100,000,000 shares authorized, 12,785,895 and 11,351,967 shares issued and outstanding at March 31, 2010 and December 31, 2009, respectively	12,823	11,352
Additional paid-in capital	53,180,051	41,228,698
Accumulated deficit	(45,377,735)	(44,100,258)
Total stockholders' equity (deficit)	7,816,461	(2,860,208)
Total liabilities and stockholders' equity (deficit)	**$ 22,532,146**	**$ 21,757,924**

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

Luna Innovations Incorporated
Consolidated Statements of Operations

	Three Months Ended March 31,	
	2010 (unaudited)	2009 (unaudited)
Revenues:		
Technology development revenues	$ 5,811,094	$ 6,882,372
Product and license revenues	2,074,697	1,611,184
Total revenues	7,885,791	8,493,556
Cost of revenues :		
Technology development costs	3,832,342	4,897,756
Product and license costs	1,219,241	878,601
Total cost of revenues	5,051,583	5,776,357
Gross profit	2,834,208	2,717,199
Operating expense:		
Selling, general and administrative	3,421,262	4,235,588
Research, development, and engineering	509,899	995,643
Litigation reserve	—	36,303,643
Impairment of intangible assets	—	1,310,598
Total operating expense	3,931,161	42,845,472
Operating loss	(1,096,953)	(40,128,273)
Other expense		
Interest expense, net	84,014	158,988
Other	14,877	923
Total other expense	98,891	159,911
Loss before income taxes	(1,195,844)	(40,288,184)
Income tax expense	—	600,000
Net loss	$ (1,195,844)	$(40,888,184)
Preferred stock dividend	81,633	—
Net loss attributable to common stockholders	(1,277,477)	(40,888,184)
Net loss per share of common stock:		
Basic	$ (0.10)	$ (3.66)
Diluted	$ (0.10)	$ (3.66)
Weighted average shares of common stock:		
Basic	12,497,502	11,161,423
Diluted	12,497,502	11,161,423

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

Luna Innovations Incorporated
Consolidated Statements of Cash Flows

	Three months ended March 31,	
	2010 (unaudited)	2009 (unaudited)
Cash flows used in operating activities		
Net loss	$(1,195,844)	$(40,888,184)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	328,959	619,788
Impairment of Intangible Assets	—	1,310,598
Share-based compensation	840,101	789,511
Warrant expense	47,239	
Deferred tax expense	—	600,000
Change in assets and liabilities:		
Accounts receivable	(551,599)	(589,248)
Inventory	80,168	(21,336)
Other current assets	570,896	(5,317)
Other assets	33,446	17,728
Accounts payable and accrued expenses	(1,923,634)	(263,459)
Litigation reserve	—	36,303,643
Deferred credits	328,525	200,260
Net cash used in operating activities	(1,441,743)	(1,926,016)
Cash flows used in investing activities		
Acquisition of property and equipment	(11,010)	(34,037)
Capitalized intellectual property costs	(34,362)	(30,749)
Net cash used in investing activities	(45,372)	(64,786)
Cash flows provided by financing activities		
Payments on capital lease obligations	(1,367)	(2,799)
Payments on debt obligation	—	(357,143)
Borrowings under line of credit	2,500,000	—
Proceeds from the exercise of options	226,759	10,824
Net cash provided by/ (used in) financing activities	2,725,392	(349,118)
Net change in cash	1,238,278	(2,339,920)
Cash—beginning of period	5,228,802	15,518,960
Cash—end of period	$ 6,467,080	$ 13,179,040
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 1,035	$ 85,815
Common stock issued in litigation settlement (1,247,330 shares)	$ 4,565,227	—
Installment note issued in litigation settlement	$ 5,000,000	—
Preferred stock issued in exchange of notes (1,321,514)	$ 4,836,742	—
Warrants issued in exchange of notes payable (356,000 warrants)	$ 1,261,879	—
Common stock issued in settlement of other claims (25,000 shares)	$ 91,500	—
Dividend on preferred stock, 37,446 shares of common stock issuable	$ 81,633	—

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

Luna Innovations Incorporated
Notes to Unaudited Consolidated Financial Statements

1. Basis of Presentation and Significant Accounting Policies

Nature of Operations

Luna Innovations Incorporated ("Luna Innovations") was incorporated in the Commonwealth of Virginia in 1990 and subsequently reincorporated in the State of Delaware in April 2003. We are engaged in the research, development and commercialization of innovative technologies in the areas of test & measurement, sensing, and instrumentation products and health care products. We are organized into two main groups, which work closely together to turn ideas into products: our Technology Development Group, and our Product and License Group. We have a disciplined and integrated business model that is designed to accelerate the process of bringing new and innovative technologies to market. We identify technology that can fulfill identified market needs. We then take these solutions from the applied research stage through commercialization.

Unaudited Interim Financial Information

The accompanying unaudited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US 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 US GAAP for audited financial statements. The unaudited consolidated financial statements have been prepared on the same basis as the annual financial statements and in the opinion of management reflect all adjustments, consisting of only normal recurring accruals considered necessary to present fairly our financial position at March 31, 2010 and results of operations and cash flows for the three months ended March 31, 2010 and 2009. The results of operations for the three months ended March 31, 2010 are not necessarily indicative of the results that may be expected for the year ending December 31, 2010.

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, 2009, included in the Company's Annual Report on Form 10-K as filed with the Securities and Exchange Commission on March 26, 2010. As used herein, the terms "Luna", "Company", "we", "our" and "us" mean Luna Innovations Incorporated and its consolidated subsidiaries.

Consolidation Policy

Our consolidated financial statements are prepared in accordance with US GAAP and include the accounts of the Company, our wholly owned subsidiaries and other entities in which we have a controlling financial interest. We eliminate from our financial results all significant inter-company transactions. We do not have any investments in entities we believe are variable interest entities for which we are the primary beneficiary.

Emergence from Chapter 11 Reorganization

On July 17, 2009, Luna Innovations, along with Luna Technologies, Inc., which together included all of the operations of the consolidated Company, filed a voluntary petition for relief in order to reorganize under Chapter 11 of the United States Bankruptcy Code, including a proposed plan of reorganization, in the United States Bankruptcy Court for the Western District of Virginia (the "Bankruptcy Court"). During the period from July 17, 2009 through January 12, 2010, the Company continued to operate its business in the ordinary course as a Debtor-in-Possession. On January 12, 2010, the Bankruptcy Court approved our plan of reorganization, and the Company successfully emerged from Chapter 11.

Upon our emergence and in connection with our litigation settlement, we issued approximately 1.2 million shares of common stock to Hansen Medical, Inc., as described below. Other outstanding shares of common stock were not impacted as a result of our reorganization activities. Because the shareholders immediately prior to our emergence from Chapter 11 continue to own more than 50% of the total outstanding common stock immediately following our emergence from Chapter 11, we did not adopt the fresh-start reporting principles of Accounting Standards Codification "ASC" 852-10-45 Financial Reporting During Reorganization.

Settlement of Hansen Litigation (the "Hansen Settlement")

In June 2007, Hansen Medical, Inc. ("Hansen"), a company for which we had conducted certain research and performed certain services, filed a lawsuit against us for using allegedly misappropriated trade secrets from Hansen in connection with our work with Intuitive Surgical, Inc. ("Intuitive"), or otherwise. On April 21, 2009, a jury found in favor of Hansen and awarded a verdict for $36.3 million against us. As a result of this jury verdict, we filed for Chapter 11 reorganization in July 2009, as described above under "Emergence from Chapter 11 Reorganization."

On December 11, 2009, we and our wholly owned subsidiary Luna Technologies, Inc., entered into a settlement agreement with Hansen to settle all claims arising out of the litigation. As a result of the settlement our accrual of $36.3 million recorded during the quarter ended March 31, 2009 was adjusted to $9.7 million at December 31, 2009. On January 12, 2010, as part of our reorganization plan, we entered into a series of agreements with Hansen and Intuitive that were contemplated by the settlement agreement. The following is a summary of the material terms of these agreements.

License Agreement with Hansen (the "Hansen License")

Under the Hansen License, we granted Hansen (i) a co-exclusive (with Intuitive), royalty-free, fully paid, perpetual and irrevocable license to our fiber optic shape sensing/localization technology within the medical robotics field. The license can only be sublicensed by Hansen in connection with Hansen products, except that Hansen can grant full sublicenses to third parties for single degree of freedom robotic medical devices; (ii) an exclusive (and fully sublicenseable) royalty-free, fully paid, perpetual and irrevocable license to our fiber optic shape sensing/localization technology for non-robotic medical devices within the orthopedics, vascular, and endoluminal fields; and (iii) a co-exclusive (with us) royalty-free, fully paid, perpetual and irrevocable license to our fiber optic shape sensing/localization technology for non-robotic medical devices in other medical fields (including colonoscopies but not including devices described in clause (ii) above). After five years, the exclusive license in the non-robotic endoluminal field may be converted to a co-exclusive (with us) license in certain circumstances in connection with certain supply provisions applicable to that field under the Development and Supply Agreement described below.

The Hansen License provides that Hansen and Intuitive have the right to enforce the intellectual property licensed by us within the medical robotics field. Hansen has the sole right to enforce such intellectual property for non-robotic devices in the orthopedics field, the vascular field and the endoluminal field. We have the right to enforce such intellectual property in other non-robotic medical fields.

In addition, Hansen granted us a nonexclusive, sublicenseable, royalty-free, fully paid, perpetual and irrevocable license to certain Hansen fiber optic shape sensing/localization technology in all fields outside of the medical robotics field and the orthopedics, vascular and endoluminal fields. Furthermore, we confirmed Hansen's ownership of certain intellectual property developed in whole or in part by us under a prior agreement between us and Hansen.

Development and Supply Agreement with Hansen (the "Development and Supply Agreement")

In connection with the settlement agreement, we also entered into a development and supply agreement with Hansen. Under the terms of this agreement, we will perform product development services with respect to fiber optic shape sensing at Hansen's request and provide Luna shape sensing products to Hansen. Revenues earned for product development will be determined in a manner consistent with our contract development services in our Technology Development business segment and will be payable monthly to us. Each quarter, to the extent such revenues exceed the installment payment owed by us to Hansen under the Hansen Note described below, then such excess will not be payable in cash and instead will be credited against the outstanding principal balance of the Hansen Note. Revenue is recognized under the development and supply agreement as time and expenses are incurred based upon contractual billing rates. Under the agreement, 30% of the amounts worked under the contract are not billable until specified milestones are met. Additionally, such amounts maybe reduced if such milestones are not met within the timetable specified in the agreement. Since such amount is not fixed and determinable as of March 31, 2010, we have deferred such amounts until the milestone is achieved.

Luna Securities Issued to Hansen

In connection with the settlement agreement, on January 12, 2010, we issued 1,247,330 shares of common stock to Hansen, representing 9.9% of our common stock then outstanding. In addition, we issued to Hansen a warrant entitling Hansen to purchase, until January 12, 2013, a number of shares of our common stock as necessary for Hansen to maintain a 9.9% ownership interest in our common stock, at an exercise price of $0.01 per share.

Note Payable to Hansen (the "Hansen Note")

In connection with the settlement agreement, we issued a promissory note to Hansen in the principal amount of $5.0 million, payable in 16 quarterly installments beginning in April 2010. The Hansen Note bears interest at a fixed rate of 8.5% and is secured by substantially all of our assets. The Hansen Note is subordinated to our primary bank credit facility.

Preferred Stock Issued to Carilion Clinic

In January 2010, we entered into a transaction with Carilion Clinic ("Carilion"), in which Carilion agreed to exchange all of its Senior Convertible Promissory Notes in the principal amount of $5.0 million plus all accrued but unpaid interest, totaling $1.2 million, for (i) 1,321,514 shares of our newly designated Series A Convertible Preferred Stock and (ii) an additional warrant to purchase 356,000 shares of our common stock at an exercise price of $2.50 per share. This warrant is exercisable beginning February 1, 2013, and continuing until December 31, 2020. We also agreed to reduce the exercise price of Carilion's prior common stock warrant from $7.98 to $2.50 per share and to extend its expiration date to December 31, 2020. The Series A Convertible Preferred Stock carries a dividend of 6% payable in shares of common stock and maintains a liquidation preference up to $6.2 million. Each share of Series A Convertible Preferred Stock may be converted into one share of our common stock at the option of the holder. We recorded the fair value of the Series A Convertible Preferred Stock, determined based upon the conversion value immediately prior to the exchange, the fair value of the new warrant issued, determined using the Black-Scholes valuation model, and the incremental fair value of the prior warrant due to the re-pricing and extension of maturity to stockholders' equity.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern, which contemplates the realization of assets and the liquidation of liabilities in the normal course of business. We have a history of net losses from 2005 through the three months ended March 31, 2010, attributable to our operations and other charges. We experienced continued negative cash flow from operations in the three months ended March 31, 2010. We have historically managed our liquidity through cost reduction initiatives, debt financings, and capital markets 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 is expected to be extremely limited. The deteriorating economic and market conditions may not improve significantly during 2010, may continue past 2010, and could get worse.

We believe that our current cash balance in addition to the funds available to us under the Credit Facility described below provide adequate liquidity for us to meet our working capital needs through 2010.

Use of Estimates

The preparation of our consolidated financial statements in accordance with US 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

We compute net loss per share in accordance with ASC 260-10-45, Earnings Per Share. Basic per share data is computed by dividing loss available to common stockholders by the weighted average number of shares outstanding during the period. Diluted per share data is computed by dividing loss available to common stockholders by the weighted average shares outstanding during the period increased to include, if dilutive, the number of

additional common share equivalents that would have been outstanding if potential common shares had been issued using the treasury stock method. Diluted per share data would also include the potential common share equivalents relating to convertible securities by application of the if-converted method.

The effect of 6,802,234 and 4,834,418 common stock equivalents (which include conversion of preferred stock, outstanding warrants and stock options) are not included for the three months ended March 31, 2010 and 2009, respectively, as they are anti-dilutive to earnings per share.

Stock-Based Compensation

We recognize stock-based compensation expense based upon the fair market value of the underlying equity award on the date of the grant. The Company has elected to use the Black-Scholes option pricing model to value any awards granted. We amortize stock-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 lifetime volatility of our common stock. The risk-free interest rate is based on US 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.

The fair market value of each option granted is estimated as of the grant date using the Black-Scholes option pricing model with the following assumptions:

	Three Months ended March 31, 2010	Three months ended March 31, 2009
Risk-free interest rate	3.16 – 3.22%	3.38%
Expected life of options	7.5	7.5
Expected stock price volatility	117%	83%

A summary of the status of our 2003 Stock Plan and 2006 Equity Incentive Plan is presented below for the periods indicated:

	Options Outstanding				Options Exercisable		
	Number of Shares	Price per Share Range	Weighted Average	Aggregate Intrinsic Value (1)	Number of Shares	Weighted Average	Aggregate Intrinsic Value (1)
Balance, December 31, 2009	4,727,360	$0.35 - $8.20	$ 2.43	$3,545,705	2,987,955	$ 1.72	$2,734,841
Granted	563,667	$ 3.45 - 4.43	$ 4.21				
Exercised	(210,104)	$ 0.35 - 2.11	$ 1.49				
Canceled	(24,277)	$1.77 - $5.73	$ 4.03				
Balance, March 31, 2010	5,056,646	$0.35 - $8.20	$ 0.76	$3,866,520	2,924,567	$ 2.10	$2,980,196

(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 price of $2.29, which was the closing price of the Company's Common Stock on the NASDAQ Capital Market on March 31, 2010.

At March 31, 2010, our approximately 5.1 million outstanding stock options had a weighted average remaining contractual term of 7.0 years, and our approximately 3.0 million outstanding and exercisable stock options had a weighted average remaining contractual term of 6.1 years.

For the three months ended March 31, 2010 and 2009, we recognized $887,340 and $789,511 in share-based payment expense, respectively, including the expense of warrants issued to a third party. We expect to recognize approximately $6.0 million in stock-based compensation expense over the remaining requisite service period of five years for stock options outstanding as of March 31, 2010.

Income Taxes

We have not recorded an income tax benefit during the current period as we have determined that it is not more likely than not that such amount will be recovered.

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.

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. Inventory reserves at March 31, 2010 and December 31, 2009 were approximately $64,665 and $47,757, respectively.

Recent Accounting Pronouncements

There have been no recent accounting pronouncements or changes in accounting pronouncements during the three months ended March 31, 2010, as compared to the recent accounting pronouncements described in our Annual Report on Form 1O-K for the fiscal year ended December 31, 2009, that we believe are of significance, or potential significance, to us.

In October 2009, the Financial Accounting Standards Board issued “Revenue Arrangements with Multiple Deliverables.” The standard revises guidance on (1) the determination of when individual deliverables may be treated as separate units of accounting and (2) the allocation of transaction consideration among separately identified deliverables. It also expands disclosure requirements regarding an entity’s multiple element revenue arrangements. The standard is effective for fiscal years beginning on or after June 15, 2010, with early adoption permitted. We expect to adopt this guidance at June 30, 2010 and do not believe the adoption of this standard will have a material impact on our Consolidated Financial Statements.

In October 2009, the Financial Accounting Standards Board issued authoritative guidance which removes non-software components of tangible products and certain software components of tangible products from the scope of existing software revenue guidance, resulting in the recognition of revenue similar to that for other tangible products. It also requires expanded qualitative and quantitative disclosures. The guidance is effective for the Company beginning in the first quarter of fiscal 2011. The Company is currently evaluating the potential impact, if any, of the adoption of this guidance on its consolidated financial statements.

2. Debt

Silicon Valley Bank Facility

On February 18, 2010, we entered into a Loan and Security Agreement (the “Credit Facility”) with Silicon Valley Bank (the “Bank”). The Credit Facility is a revolving credit facility that provides the Company with borrowing capacity of up to $5 million, subject to a percentage of our outstanding eligible accounts receivable, at a floating annual interest rate equal to the greater of (a) 6% or (b) the Bank’s prime rate then in effect plus 2%. The Credit Facility matures on February 17, 2011, unless earlier terminated, and any amounts due under the Credit Facility will be secured by substantially all of the Company’s assets, including our intellectual property, personal property and bank accounts. Outstanding borrowings under the facility were $2.5 million as of March 31, 2010, at an annual rate of 6%.

The Credit Facility includes a fee of one-half of one percent (0.50%) per annum based on the average unused portion of the Credit Facility from time to time.

The Credit Facility requires the Company to observe a number of financial and operational covenants, including maintenance of a specified liquidity ratio, achievement of certain adjusted EBITDA targets, protection and registration of intellectual property rights, and certain customary negative covenants. If the Company draws on the Credit Facility, we may use the proceeds of the loans for any variety of purposes, including working capital and general corporate purposes. As of March 31, 2010 we were in compliance with all covenants.

In addition, the Credit Facility contains customary events of default, including nonpayment of principal, interest or other amounts, violation of covenants, material adverse change, an event of default under any subordinated debt documents, incorrectness of representations and warranties in any material respect, bankruptcy, judgments in excess of a threshold amount, and violations of other agreements in excess of a threshold. If any event of default occurs the Bank may declare due immediately all borrowings under the Credit Facility and foreclose on the collateral. Furthermore, an event of default under the Credit Facility would result in an increase in the interest rate on any amounts outstanding.

Hansen Note

As described in Note 1, we issued the Hansen Note in the principal amount of $5 million in January 2010. Hansen agreed to subordinate its right to payment under the Hansen Note in favor of the Bank's right to payment under the Credit Facility, subject to certain terms and conditions.

Issuance of Preferred Stock in exchange for Carilion Promissory Note

In 2005, we issued $5.0 million in principal amount of convertible promissory notes to Carilion Clinic ("Carilion") that were convertible into shares of our Common Stock at a fixed price of $4.69 per share. The notes accrued simple interest at a rate of 6.0% per year and were originally scheduled to mature on December 30, 2009. In May 2008, we amended the terms of the notes to extend their due date to December 31, 2012 and to subordinate them to our credit facility with Silicon Valley Bank. We also issued warrants to purchase 10,000 shares of Common Stock at a price of $7.98 per share in connection with the amended terms. We valued the warrants using the Black-Scholes option pricing model, and we were amortizing the value as a deferred financing cost over the life of the promissory notes.

On January 12, 2010, we exchanged the convertible notes for 1,321,514 shares of convertible preferred stock in full satisfaction of the $5.0 million principal amount due under the convertible notes and $1.2 million in accrued but unpaid interest under the notes. In addition, the warrants issued in May 2008 to purchase 10,000 shares of Common Stock were amended to reduce their strike price to $2.50 per share. As part of the exchange, the company also issued additional warrants to Carilion to purchase an aggregate of 356,000 shares of Common Stock with a strike price of $2.50. The warrants are exercisable beginning December 31, 2012 and February 1, 2013, respectively, and continuing until December 31, 2020.

3. Capital Stock and Additional Paid-in Capital

For the three months ended March 31, 2010, we issued shares of capital stock as follows:

	Preferred Stock		Common Stock		Additional Paid-in Capital
	Shares	$	Shares	$	$
Balance, December 31, 2009	—	$ —	11,351,967	$ 11,352	41,228,697
Exercise of stock options	—	—	161,598	162	226,596
Share-based compensation	—	—	—	—	887,340
Issuance of Common Stock, Hansen Settlement	—	—	1,247,330	1247	4,563,980
Stock dividends, not yet issued (1)	—	—	—	37	81,596
Issuance of Warrants, in connection with Carilion note conversion	—	—	—	—	1,264,946
Issuance of Common Stock, Other (2)	—	—	25,000	25	91,475
Issuance of Preferred Stock, in exchange of Carilion notes	1,321,514	1,322	—	—	4,835,420
Balance, March 31, 2010	**1,321,514**	**$ 1,322**	**12,785,895**	**$ 12,823**	**$ 53,180,051**

(1) The stock dividends will be issued subsequent to March 31, 2010.

(2) In January 2010 we settled a complaint filed by a former employee in exchange for the payment of $13,000 in cash and the issuance of 25,000 shares of our common stock. The settlement was included as an accrued liability on our December 31, 2009 consolidated balance sheet.

See Note 1 for a description of the securities issued to Hansen and Note 2 for a description of the issuance of preferred stock to Carilion.

4. Operating Segments

Our operations are divided into two operating segments—Technology Development and Product 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 Product and Licensing segment develops and sells products or licenses technologies based on commercially viable concepts developed by the Technology Development segment. The Product and Licensing segment derives its revenue from product sales, funded product development and technology licenses.

Through March 31, 2010, our Chief Executive Officer and his direct reports collectively represented our chief operating decision makers, and they evaluate 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 March 26, 2010).

The table below presents revenues and operating loss for reportable segments:

	Three Months Ended March 31,	
	2010	2009
Technology Development revenue	$ 5,811,094	$ 6,882,372
Product and License revenue	2,074,697	1,611,184
Total revenue	7,885,791	8,493,556
Technology Development operating loss	(808,352)	(32,516,145)
Product and License operating loss	(288,601)	(7,612,128)
Total operating loss	$(1,096,953)	$(40,128,273)
Depreciation, Technology Development	201,128	291,747
Depreciation, Product and License	71,808	68,299
Amortization, Technology Development	41,284	210,471
Amortization, Product and License	14,739	49,272

Additional segment information is as follows:

The table below presents assets for reportable segments:

	March 31, 2010	December 31, 2009
Total segment assets:		
Technology Development	$16,604,094	$15,937,039
Product and License	5,928,052	5,820,885
Total	$22,532,146	$21,757,924
Property plant and equipment, and intangible assets, Technology Development	$ 3,249,037	$ 3,449,790
Property plant and equipment, and intangible assets, Product and License	$ 1,159,983	$ 1,260,010

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

The United States Government accounted for approximately 76% and 82% of total consolidated revenues for the three months ended March 31, 2010 and 2009 respectively.

International revenues (customers outside of the United States) accounted for 9.7% and 5.4% of total revenues for the three months ended March 31, 2010 and 2009 respectively.

5. 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.

We have an outstanding letter of credit as of March 31, 2010, in the amount of $239,832 in favor of the Industrial Development Authority of Montgomery County, Virginia, to support a lease of office space. This letter of credit expires in June 2011.

In September 2008, our Luna Technologies Division executed a non-cancelable, non-reschedulable $2.0 million purchase order for multiple shipments of tunable lasers to be delivered over an 18-month period beginning in September 2008. As of March 31, 2010, approximately $0.9 million of this commitment remained. The delivery of the remaining lasers has been extended through September 2010.

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 research, develop and commercialize innovative technologies in two primary areas of focus: instrumentation, test & measurement and sensing products, and healthcare products. We have a disciplined and integrated business model that is designed to accelerate the process of bringing new and innovative products to market. We identify technologies that can fulfill large and unmet market needs and then take these technologies from the applied research stage through commercialization. Although revenues from product sales currently represent less than a quarter of our total revenues, we continue to invest in product development and commercialization, which we anticipate will lead to increased product sales growth. In the future, we expect that revenues from product sales will represent a larger proportion of our total revenues. In addition, we anticipate that these revenues will reflect a broader and more diversified mix of products as we develop and commercialize new products.

We have developed a disciplined and integrated process to accelerate the development and commercialization of innovative technologies. Our business model employs a market-driven approach and provides the infrastructure, resources and know-how throughout the process of developing and commercializing new products. To manage a diverse set of products effectively across a range of development stages, we are organized into two main groups: our Technology Development Division and our Products and License Division. These groups work together through all product development stages, including:

- Searching for emerging technologies based on market needs;
- Conducting applied research;
- Developing and commercializing innovative products; and
- Applying proven technologies and products to new market opportunities.

Our total revenues were $7.9 million and $8.5 million during the three months ended March 31, 2010 and 2009, respectively, and we had net losses attributable to common stockholders of $1.3 million and $40.9 million for the same periods, respectively. Our loss attributable to common stockholders for the three months ended March 31, 2009 included the expense associated with a litigation reserve of approximately $36.3 million recognized in connection with the then estimated losses from our litigation with Hansen Medical, Inc., or Hansen, and approximately $1.3 million in impairment charges against goodwill and other intangible assets related to the impact of the estimated costs of the litigation on our future cash flows.

We generate revenues through technology development services provided under contractual arrangements, product sales and license fees. Historically, our technology development revenues have accounted for a large and growing proportion 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 revenues decreased from $6.9 million for the three months ended March 31, 2009 to $5.8 million for the three months ended March 31, 2010. We regularly have 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 (the amount for which money has been directly authorized by the U.S. Congress or for which a purchase order has been received by a commercial customer) and unfunded backlog (firm orders for which funding has not been appropriated). Indefinite delivery and quantity contracts and unexercised options are not reported in total backlog. The approximate value of our backlog was $28.4 million as of March 31, 2010.

Revenues from product sales currently represent a smaller proportion of our total revenues, and, historically, we have derived most of these revenues from the sales of our sensing systems and products that make use of light-transmitting optical fibers, or fiber optics. 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; however, over time we do intend to gradually increase such revenues. In the near term, we expect revenues from product sales to increase primarily in areas associated with our fiber optic instrumentation and test and measurement platforms. We also expect to continue our efforts in product development and commercialization, which we anticipate will lead to increased product sales growth. In the future, we expect that revenues from product sales will represent a larger proportion 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.

While the magnitude of loss in the first quarter of 2009 was driven by accrual of a litigation reserve associated with the Hansen litigation, we do expect to continue to incur significant expenses as we expand our business, including increased expenses for research and development, sales and marketing, and manufacturing capability, which could result in losses. 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 that we may likely continue to incur losses in 2010 and for the foreseeable future, and these losses could be substantial.

There was a rapid softening of the economy and tightening of the financial markets in the second half of 2008 that continued throughout 2009 and into 2010. This slowing of the economy has in some instances reduced the financial capacity of our customers and possibly our potential customers, thereby slowing spending on the products and services we provide. The outlook for the economy for the remainder of 2010 remains uncertain.

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 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 product revenues reflect amounts that we receive from sales of our products or development of products for third parties and represented approximately 26% of our total revenues for the three month period ended March 31, 2010. Our license revenues are composed of fees paid to us in connection with licenses or sublicenses of certain patents and other intellectual property.

Cost of Revenues

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

Cost of revenues associated with product sales and license 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; shipping and handling; provisions for product warranty; inventory obsolescence; and overhead costs related to these activities.

Operating Expense

Operating expense consists of selling, general and administrative expenses, as well as expenses related to research and development, 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 Division; product development activities not provided under contracts with third parties; and overhead costs related to these activities.

Our operating expenses include stock-based compensation charges. We recorded stock-based compensation charges of approximately $0.9 million including the expense of warrants issued to a third party, for the three months ended March 31, 2010. We also expect to recognize aggregate stock-based compensation expenses of $6.0 million in future periods through 2014 relating to stock options outstanding as of March 31, 2010.

Litigation Reserve

In the first quarter of 2009, we established a litigation reserve of $36.3 million in connection with the Hansen litigation, equal to the original jury verdict against us, pending final resolution of the matter. In January 2010, we concluded the settlement of our litigation with Hansen and issued to Hansen a secured promissory note in the principal amount of $5.0 million as well as 1,247,330 shares of our common stock, with a fair value of approximately $4.7 million, based on the closing price of our common stock on January 11, 2010. Therefore, in the fourth quarter of 2009, we adjusted the prior litigation reserve downward to $9.7 million. This adjustment was recorded on our statement of operations as a reduction of operating expenses during the fourth quarter of 2009.

Interest Income/Expense

Interest expense includes interest accrued on our outstanding bank credit facilities, our 6% senior convertible notes issued to Carilion Clinic and our promissory note issued to Hansen in January 2010, which we refer to in this report as the Hansen Note, as well as interest incurred with respect to our capital lease obligations. From January 1, 2009 through July 15, 2009, we had borrowed $5.0 million under a term loan with Silicon Valley Bank. On July 15, 2009, we repaid the outstanding balance of our term loan with Silicon Valley Bank and terminated the credit facility. In February 2010, we entered into a new revolving line of credit with Silicon Valley Bank for up to $5.0 million, of which $2.5 million was outstanding as of March 31, 2010. In addition, as of March 31, 2010 we also had the full $5.0 million principal balance outstanding on the Hansen Note. During the year ended December 31, 2009, we also had the full $5.0 million principal balance outstanding under the senior convertible notes issued to Carilion. During January 2010, the principal balance and accrued interest under the senior convertible notes was converted in full into shares of our Series A Preferred Stock and no amounts were outstanding under these notes as of March 31, 2010.

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 US 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 significant 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, 2009, as filed with the Securities and Exchange Commission on March 26, 2010. There have been no material changes to the descriptions therein.

Results of Operations

Three Months Ended March 31, 2010 Compared to Three Months Ended March 31, 2009

Revenues

Total revenues decreased 7.2% to $7.9 million for the three months ended March 31, 2010 from $8.5 million for the three months ended March 31, 2009. Revenues within our Technology Development Division decreased 15.6% from the corresponding period in 2009, while revenues in our Product and License Division increased by 28.8%. Technology development revenues decreased to $5.8 million for the three months ended March 31, 2010 from $6.9 million for the corresponding 2009 period. Technology development revenue in the first quarter of 2009 was favorably impacted by approximately $0.6 million higher pass through charges incurred in the execution of one of our largest government contracts. We generated approximately $2.1 million in product and license revenues in the first quarter of 2010 as compared with $1.6 million in the first quarter of 2009, an increase of 28.8% in revenue for this segment, primarily reflecting increased demand for fiber optic test and measurement equipment during the quarter.

Cost of Revenues

Cost of revenues decreased by 12.5%, to $5.1 million for the three months ended March 31, 2010 from $5.8 million for the corresponding 2009 period, primarily corresponding to decreased revenue in our Technology Development Division business segment. The Technology Development Division cost of sales decreased by approximately 21.8%, from $4.9 million to $3.8 million, reflecting the 15.6% decrease in Technology Development Division revenues and the lower costs attendant to that reduced activity. Product and license cost of sales increased by $0.3 million, or 38.8%, from $879,000 to $1.2 million, reflecting the growth in our product sales during the first quarter of 2010. Additionally, Product and License Division cost of sales includes the costs associated with certain product development activities for which approximately $145,000 was deferred until the achievement of certain milestones and, accordingly, this revenue has been deferred as of March 31, 2010.

Our resulting gross profit increased to $2.8 million, or 35.9% of revenue, for the quarter ended March 31, 2010, from $2.7 million, or 32.0% of revenue, for the quarter ended March 31, 2009. The improvement in gross profit is attributable to the mix of revenues, with a greater proportion of revenues in the first quarter of 2010 being realized in our Products and License Division business segment, which typically carries a higher gross margin percentage than revenues in our Technology Development Division business segment.

Operating Expense

Operating expense decreased to $3.9 million for the three months ended March 31, 2010 from $42.8 million for the corresponding quarter in 2009. This decrease is primarily due to the $36.3 million Hansen litigation reserve recorded in the first quarter of 2009 and the associated impairment of goodwill and other intangible assets totaling $1.3 million in our Products and License Division business segment. Excluding those charges, operating expenses were $5.2 million for the quarter ended March 31, 2009. Operating expenses in the first quarter of 2009 also included approximately $0.8 million of professional fees associated with the Hansen litigation. The remaining improvement in operating expenses is primarily attributable to our expense reduction initiatives undertaken after the first quarter of 2009 and carrying into the first quarter of 2010.

Other Income (Expense)

Net interest expense for the three months ended March 31, 2010 was approximately $84,000 compared to a net interest expense of approximately $159,000 during the same period in 2009. During the first quarter of 2009, the company had approximately $4.6 million outstanding under a term loan with Silicon Valley Bank and recognized approximately $66,000 in interest expense, along with a promissory note of $5.0 million with Carilion Clinic with approximately $75,000 in interest expense. For the quarter ended March 31, 2010, we had a $5.0 million promissory note to Hansen for which we recognized approximately $89,000 in interest expense. While we had a balance of $2.5 million outstanding with Silicon Valley Bank on our revolving line of credit as of March 31, 2010, we did not have this balance for most of the quarter and therefore incurred no significant interest expense associated with that balance.

Liquidity and Capital Resources

At March 31, 2010, our total cash and cash equivalents were approximately $6.5 million. We expect the settlement of our litigation with Hansen and our emergence from bankruptcy in January 2010 will improve our cash flows in future periods.

On February 18, 2010, we entered into a line of credit facility with Silicon Valley Bank, or SVB, under which we have a borrowing capacity of up to $5 million at a floating annual interest rate equal to the greater of (a) 6% or (b) SVB's prime rate then in effect plus 2%. The facility matures on February 17, 2011, unless earlier terminated, and any amounts due under the facility are secured by substantially all of our assets, including our intellectual property, personal property and bank accounts. Amounts due to Hansen under our January 2010 promissory note are subordinated to amounts due to SVB under the line of credit, subject to certain terms and conditions. On March 30, 2010, we borrowed $2.5 million under the line of credit with SVB, and $2.5 million remains available under the facility as of the date of this report. The line of credit includes a fee of one-half of one percent (0.50%) per annum based on the average unused portion of the facility from time to time.

The SVB facility requires us to observe a number of financial and operational covenants, including maintenance of a specified liquidity ratio, achievement of certain adjusted EBITDA targets, protection and registration of intellectual property rights, and certain customary negative covenants. We may use the proceeds of borrowings for any variety of purposes, including working capital and general corporate purposes. At March 31, 2010 we were in compliance with the required covenants.

The line of credit with SVB contains customary events of default, including nonpayment of principal, interest or other amounts, violation of covenants, material adverse change, an event of default under any subordinated debt documents, incorrectness of representations and warranties in any material respect, bankruptcy, judgments in excess of a threshold amount, and violations of other agreements in excess of a threshold. If any event of default occurs, SVB may declare due immediately all borrowings and foreclose on the collateral. Furthermore, an event of default under the line of credit would result in an increase in the interest rate on any amounts outstanding.

We believe that our current cash balance, in addition to the funds available to us under the line of credit with SVB, provide adequate liquidity for us to meet our working capital needs during 2010.

Discussion of Cash Flows

Recent Activity

We used approximately $1.4 million and $2.0 million of net cash in operations during the three months ended March 31, 2010 and 2009, respectively. Our cash use in the quarter ending March 31, 2010 was primarily driven by our net loss from operations of $1.2 million. Our net loss in the quarter ending March 31, 2009 was $3.3 million, excluding the litigation reserve and charge for impairment of intangible assets incurred in the first quarter of 2009. During the first quarter of 2010, we incurred other non-cash expenses of $1.3 million, as compared to other non-cash expenses of $2.0 million in the first quarter of 2009. Changes in working capital resulted in a net cash outflow of $1.5 million during the first quarter of 2010, primarily due to the payment of significant amounts of accounts payable and accrued expenses as of December 31, 2009 resulting from our litigation and reorganization. During the first quarter of 2009, changes in working capital resulted in a net cash outflow of $661,000.

Our cash flows from investing activities were not material during the three months ended March 31, 2010 or 2009.

Net cash provided to us by financing activities during the first quarter of 2010 was $2.7 million, which was the result of our $2.5 million borrowing under the new line of credit with SVB and $227,000 from the exercise of employee stock options during the quarter. During the first quarter of 2009, our only material financial activities were repayments of approximately $357,000 under our term loan with SVB in place at that time.

Summary of Contractual Obligations

We lease our facilities in Blacksburg, Charlottesville, Danville and Roanoke, Virginia under operating leases that expire on various dates through December 2015 or under a month-to-month arrangement. Upon expiration of the leases, we may exercise certain renewal options as specified in the leases.

We also lease certain computer equipment and software under capital lease agreements that expire through September 2013. The assets subject to these obligations are included in property and equipment on our consolidated balance sheet.

In September 2008, our Luna Technologies division executed a non-cancelable, non-reschedulable $2.0 million purchase order for multiple shipments of tunable lasers to be delivered over an 18-month period beginning in September 2008. As of March 31, 2010, approximately $0.9 million of this commitment remained. The delivery of the remaining lasers has been extended through September 2010.

The Hansen Note is payable in quarterly installments through April 2014. As of March 31, 2010, the full $5.0 million principal amount was outstanding under the Hansen Note.

We have licensed certain third-party technologies from vendors for which we owe minimum royalties aggregating $2.0 million payable over the remaining patent terms of the underlying technology.

Off-Balance Sheet Arrangements

We have no material off-balance sheet arrangements as defined in Regulation S-K 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 United States 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. As of March 31, 2010 we had $6.5 million deposited in cash and cash equivalents.

We are exposed to interest rate fluctuations as a result of our $2.5 million revolving line of credit with SVB, which has a variable rate. We do not currently use derivative instruments to alter the interest rate characteristics of any of our debt. As of March 31, 2010, the revolving debt facility interest rate was 6%. At the principal amount of our outstanding liabilities under the line of credit as of March 31, 2010, a change in the prime interest rate by one percentage point for one year would result in a change in our annual interest expense of approximately $25,000.

Although we believe that these measures are indicative of our sensitivity to interest rate changes, they do 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, 2010, all payments made under our research contracts have been denominated in United States dollars. Our product sales to foreign customers are also denominated in U.S. dollars, and we 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 (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 Chief Executive Officer and Chief 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 Chief Executive Officer and Chief Financial Officer have concluded that, as of March 31, 2010, 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 quarter ended March 31, 2010 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*

On June 22, 2007, Hansen Medical Inc., or Hansen, a company for which we had performed certain services, filed a complaint against us in the Superior Court of the State of California, County of Santa Clara. On March 18, 2008, the complaint was amended and alleged misappropriation of trade secrets, aiding and abetting breach of fiduciary duty, unfair competition, breach of contract, conversion, intentional interference with contract, breach of implied covenant of good faith and fair dealing, and fraud. In addition to monetary damages in an unspecified amount, Hansen sought, among other things, equitable relief, including an injunction against our using the allegedly misappropriated Hansen trade secrets in connection with our work with Intuitive Surgical, Inc., or Intuitive, or otherwise.

The matter proceeded to jury trial in March 2009. Prior to and during the course of the trial, Hansen's claims for conversion, unfair competition, aiding and abetting breach of fiduciary duty and intentional interference with contract were all dismissed. Hansen's remaining claims for misappropriation of trade secrets, breach of contract, breach of implied covenant of good faith and fair dealing and fraud were submitted to a jury following a

trial on the merits that concluded in April 2009. On April 21, 2009, a jury found in favor of Hansen on its breach of contract, breach of the covenant of good faith and fair dealing and misappropriation of trade secrets claims, and it awarded a verdict for $36.3 million against us. The jury did not find in favor of Hansen on its fraud claims against us, but it did find that our misappropriation was willful or malicious. As a result of the jury verdict, we filed for Chapter 11 reorganization in July 2009.

On December 11, 2009, we and our wholly owned subsidiary Luna Technologies, Inc. entered into a settlement agreement with Hansen to settle all claims arising out of the litigation. On January 12, 2010, we entered into a series of agreements with Hansen and Intuitive that were contemplated by the settlement agreement.

On May 30, 2006, we were served with a complaint filed by a former employee in the Circuit Court for the City of Roanoke, Virginia, alleging that we breached a consulting agreement with the former employee, and that we were indebted to the former employee in an unspecified amount of at least $100,000. In February 2010 we settled the matter in exchange for the payment of $13,000 in cash and the issuance of 25,000 shares of our common stock.

From time to time, we may become involved in other litigation in relation to claims arising out of our operations in the normal course of business. While management currently believes the amount of ultimate liability, if any, with respect to these actions will not materially affect our financial position, results of operations, or liquidity, the ultimate outcome of any litigation is uncertain. Were an unfavorable outcome to occur, or if protracted litigation were to ensue, the impact could be material to us.

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 business could suffer as a result of our filing for reorganization under Chapter 11 of the U.S. Bankruptcy Code in 2009.

As described elsewhere in this report, in July 2009, we filed a voluntary petition for relief in order to reorganize under Chapter 11 of the United States Bankruptcy Code, including a proposed plan of reorganization, under Chapter 11 of the U.S. Bankruptcy Code. In January 2010, the bankruptcy court approved our reorganization plan and we emerged from bankruptcy on that date. Even though our plan of reorganization has been implemented, operating results may be adversely affected by the possible reluctance of prospective customers, suppliers and lenders to do business with a company that recently emerged from bankruptcy proceedings. In addition, our emergence from bankruptcy may result in reputational risks that increase our difficulty in attracting and retaining employees.

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 level of business activity.

Global economic and political conditions affect our customers' businesses and the markets they serve. A severe and/or prolonged economic downturn or a negative or uncertain political climate could adversely affect our customers' financial condition 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 that 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.

There was a rapid softening of the economy and tightening of the financial markets in the second half of 2008 that continued throughout 2009. This slowing of the economy has reduced the financial capacity of our customers and possibly our potential customers, thereby slowing spending on the products and services we provide. The outlook for the economy for the remainder of 2010 remains uncertain, and until there is a sustained economic recovery our revenues and results of operations could be negatively impacted.

Our failure to attract, train and retain skilled employees or manage leadership transitions 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 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 such difficulty, 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 where the supply of experienced qualified candidates is limited. Any failure to do so would have an adverse effect on our business.

In May 2010, we announced a number of significant senior management changes. These changes include the appointment of Jonathan Cool, an existing member of our board of directors, as our acting president and chief operating officer and the transition of Scott Graeff from the position of chief operating officer to chief commercialization officer. We also announced that, in the future, there will be a transition of Dr. Kent Murphy, our founder and chief executive officer, from his present role to a role that best enables Dr. Murphy to focus on our strategic and scientific vision.

Leadership transitions can be inherently difficult to manage and may cause uncertainty, a disruption to our business or increase the likelihood of turnover in key officers and employees.

Competition for qualified personnel, particularly those with the significant skills and expertise of many of Luna’s officers and employees, remains intense. 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 could adversely affect our business, results of operations and financial condition. Also, the uncertainty inherent in our senior management transitions could lead to concerns from current and potential customers, suppliers and other third parties with whom the company does business, any of which could have a material adverse impact on our operations.

In addition, our future success depends in a large part upon the continued service of key members of our senior management team. Except with respect to our CEO and founder, Kent A. Murphy, Ph.D., we do not maintain any key-person life insurance policies on our officers. The loss of any of our management or key personnel could seriously harm our business.

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

We incurred consolidated net losses attributable to common stock holders of approximately $1.3 million and $40.9 million for the quarters ended March 31, 2010 and 2009, respectively. As of March 31, 2010, our accumulated deficit totaled $45.4 million. While the magnitude of our net loss during the first quarter of 2009 exceeded our historical losses due to expenses associated with litigation, which was resolved in December 2009, we expect to continue to incur significant expenses as we expand our operations, including increased expenses for research and development, sales and marketing, manufacturing, finance and accounting personnel and expenses associated with being a public company. 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 that we may likely continue to incur losses for the foreseeable future, and these losses could be substantial.

Because of the numerous risks and uncertainties associated with our business, we are unable to predict when or if we will be able to achieve profitability again. 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 might require additional capital to support and expand our business, and this capital might not be available on favorable terms, if at all.

We intend to continue to make investments to support our business growth, including the development of new products and the enhancement of 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 warrants in connection with the financing, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders 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.

As part of the settlement of our litigation with Hansen Medical, Inc., or Hansen, we issued to Hansen a warrant for additional shares of our common stock in an amount such that Hansen may maintain ownership of 9.9% of our total outstanding common stock for a period of three years at a price of one cent per common share. In the event that we raise capital through the issuance of common stock, shareholders will experience further dilution to the extent that Hansen exercises this warrant, which may make it more difficult to raise equity capital or adversely impact the price at which we are able to raise equity capital.

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

We rely on contract research, including government-funded research contracts, for a significant portion of our revenues. A decline in government funding of existing or future government research contracts, including Small Business Innovation Research (SBIR), could adversely affect our revenues and cash flows and our ability to fund our growth.

Technology development revenue, which consists primarily of government-funded research, accounted for approximately 74% of our consolidated total revenues for the quarter ended March 31, 2010 and 81% for the same period in 2009. 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. The U.S. government, for example, 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. In addition, we may not be successful in securing future contracts. Our customers' priorities regarding funding for certain projects may change and funding resources may no longer be available at previous levels.

In addition to contract cancellations and changes in agency budgets, our future financial results may be adversely affected by curtailment of the U.S. government's use of contract research providers, including curtailment due to government budget reductions and related fiscal matters. These or other factors could cause U.S. defense and other federal agencies to conduct research internally rather than through commercial research 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. Any of these actions could limit our ability to obtain new contract awards and adversely affect our revenues and cash flows and our ability to fund our growth.

We rely and will continue to rely on contracts and grants awarded under the Small Business Innovation Research program for a significant portion of our revenues. A finding by the U.S. Small Business Administration, or SBA, that we no longer qualify to receive SBIR funding could adversely affect our business.

We compete as a small business for some of our government contracts. Our revenues under the Small Business Innovation Research, or SBIR, program accounts 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 receive new SBIR awards from federal agencies. In order to qualify for SBIR contracts and grants, we must meet certain size and revenue eligibility criteria. These eligibility criteria are applied as of the time of the award of a contract or grant. We believe that we are currently in compliance with the SBIR eligibility criteria, but we cannot assure you that the U.S. Small Business Administration, or SBA, the federal agency that administers the SBIR program, will interpret its regulations in our favor. As we grow our business, it is foreseeable that we will eventually exceed the SBIR eligibility limitations, in which case we may be required to seek alternative sources of revenues or capital.

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. In determining whether we are affiliated with any other entity, the SBA analyzes whether another entity controls or has the power to control us. As of March 31, 2010, we had approximately 195 employees. Our largest institutional stockholder, Carilion Clinic, holds approximately 28% of our common stock, including shares issuable upon conversion of preferred stock. If the SBA were to make a determination that we are affiliated with Carilion Clinic, we could exceed the size limitations, as Carilion Clinic has over 500 employees. In that case, we could lose eligibility for new SBA contracts, public contracts, grants and other awards that are set aside for small businesses, including SBIR grants.

Alternatively, the U.S. government may decrease the scope of or discontinue the SBIR program or its funding altogether, which would limit our ability to obtain new contract awards and adversely affect our revenues and cash flows and our ability to fund our growth.

Our settlement agreement and related agreements with Hansen could result in our making substantial future cash payments.

As part of the settlement of our litigation with Hansen, we issued a promissory note payable to Hansen in the principal amount of $5.0 million. The note bears interest at a rate of 8.5% and is payable in quarterly installments commencing April 2010 and continuing through January 2014. Additionally, we entered into a Development and Supply Agreement with Hansen under which we will develop certain fiber optic shape sensing technologies or products for Hansen. Hansen is required to pay us for the development services provided. In the event that the amounts owed by Hansen under the Development and Supply Agreement exceed the quarterly installment payment under Hansen's promissory note, then the excess amount will not be payable in cash by Hansen but will reduce the outstanding principal balance on the note to Hansen. Additionally, Hansen may terminate the Development and Supply Agreement at any time without further obligation, while we would remain liable for the payments due under the note, which would have a material adverse effect on our cash flows. The Development and Supply Agreement also provides for substantial liquidated damages in the event that we are deemed not to have complied in a commercially reasonable good faith manner with respect to our technology development obligations under the agreement. In the event that we are required to make substantial payments to Hansen under the Development and Supply Agreement, it would adversely affect our results of operations and cash flows.

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 revenues mix that contains significantly larger product sales and license revenues components. Product sales and license revenues potentially offer greater scalability than services-based contract research revenues. Our current plan is to increase our portfolio of commercial products and, accordingly, we expect that our future product sales and license revenues will represent a larger percentage of total revenues. However, if we are unable to develop and grow our product sales and license revenues to augment our contract research revenues, our ability to execute our business model or grow our business could suffer.

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

While historically we have developed and commercialized only a few products at a time, we plan to grow our revenues by developing and commercializing multiple products concurrently across many industries, technologies and markets. Our ability to expand our business by developing and commercializing multiple products simultaneously requires that we manage a diverse range of projects, and expand our personnel resources. Our inability to do any of these could prevent us from successfully implementing our growth strategy, and our revenues and profits could be adversely affected.

To advance the development of multiple promising potential products concurrently, we need to manage effectively the logistics of maintaining the requisite corporate, operational, administrative and financing functions for each of these product opportunities. Potentially expanding our operations into new geographic areas and relying on multiple facilities to develop and manufacture different products concurrently pose additional challenges. We have little experience in managing these functions simultaneously for multiple projects in development or in building new infrastructure and integrating the operations of various facilities. If we cannot manage this process successfully, we may be subject to operating difficulties, additional expenditures and limited revenue growth.

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; this may slow the rate of growth of our contract research revenue or our product development efforts.

We may not be successful in identifying market needs for new technologies and developing new products to meet those needs.

The success of our business model depends on our ability to identify correctly 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 not only identify new technologies that meet market needs, but that we also develop successful commercial products that address those needs. We face several challenges in developing successful new products. Many of our existing products and those currently under development, including our Trimetasphere® carbon nanomaterials, 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 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 in a timely manner, could impair our ability to meet the demand of our customers and harm our business.

If we are unable to secure third-party reimbursement for our health care products, including our EDAC® product, our revenue and net loss could be adversely affected.

In both the United States and foreign markets where we intend to sell our medical products, third-party payers such as the government and health insurance companies are generally responsible for hospital and doctor reimbursement for medical products and services. Governments and insurance companies carefully review and increasingly challenge the prices charged for medical products and services. Reimbursement rates from private insurance companies vary depending on the procedure performed, the third party involved, the insurance plan involved, and other factors. In the United States, reimbursement for medical procedures under the Medicare and Medicaid programs is administered by Centers for Medicare & Medicaid Services. Medicare reimburses both hospitals and physicians a pre-determined, fixed amount based on the procedure performed. This fixed amount is paid regardless of the actual costs incurred by the hospital or physician in furnishing the care and is often unrelated to the specific devices used in that procedure. Thus, any reimbursements that hospitals or physicians obtain for using our medical products will generally have to cover any additional costs that hospitals incur in purchasing such products.

Hospitals and medical centers to which we intend to sell our EDAC® product typically bill the services performed with our products to various third-party payers, such as Medicare, Medicaid and other government programs and private insurance plans. If hospitals do not obtain sufficient reimbursement from third-party payors' for procedures performed with our products, or if governmental and private payors' policies do not permit reimbursement for services performed using our products, demand for our product may be negatively impacted.

In countries outside the United States, reimbursement is obtained from various sources, including governmental authorities, private health insurance plans and labor unions. To sell our product in foreign markets, we may need to seek international reimbursement approvals. We cannot be certain whether such required approvals will be obtained in a timely manner or at all.

Furthermore, any regulatory or legislative developments in domestic or foreign markets that eliminate or reduce reimbursement rates for procedures performed with our products could harm our ability to sell our products or cause downward pressure on the prices of our products, either of which would have a negative effect on our product revenue and net loss.

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

We face or will face substantial competition from a variety of companies in several different markets. Our competitors in contract research include, but are not limited to, companies such as General Dynamics Corporation, Lockheed Martin Corporation, SAIC, Inc. and SRA International, Inc. In the instrumentation and test and measurement products market, our competitors include, but are not limited to, large companies such as Agilent Technologies, Inc., Analog Devices, Inc., Freescale Semiconductor, Inc., JDS Uniphase Corp., Robert Bosch GmbH and Silicon Sensing, as well as emerging companies. In addition, in the MRI contrast agent market our competitors include Amersham Plc, Berlex Laboratories, Inc., Bracco Diagnostics, Inc., and Mallinckrodt Inc.

The products that we have developed or are currently developing will compete with other technologically innovative products as well as products incorporating conventional materials and technologies. We expect that our products will face competition in a wide range of industries, including telecommunications, industrial instrumentation, healthcare, military and security applications.

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 net 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 Luna Technologies division, we have no experience manufacturing products in large volume. 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. For example, we may need to develop or in-license Trimetasphere® nanomaterial purification and isolation technology, which would result in manufacturing delays or shortfalls. 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 specifications.

If we are unable to keep up with demand for our products, our revenues could be impaired, market acceptance for 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 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.

RISKS RELATING TO OUR REGULATORY ENVIRONMENT

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 specific laws and regulations could result in the imposition of fines and penalties or the 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 division 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.

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 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. 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 health care and medical products are 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.

Certain of our current and potential products will require regulatory clearances or approvals prior to commercialization. In particular, our Trimetasphere® nanomaterial-based MRI contrast agent will be considered a drug under the Federal Food, Drug and Cosmetic Act, or FDC Act, and our EDAC® ultrasound diagnostic devices for measuring certain medical conditions will be considered medical devices under 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 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.

In general, the FDA regulates the research, testing, manufacturing, safety, labeling, storage, record keeping, promotion, distribution and production of medical devices in the United States to ensure that medical products distributed domestically are safe and effective for their intended uses. In order for us to market medical devices for clinical use in the United States, we generally must first obtain clearance from the FDA pursuant to Section 510(k) of the FDC Act, which has occurred in the case of the EDAC® product. Clearance under Section 510(k) requires demonstration that a new device is substantially equivalent to another device with 510(k) clearance or is eligible for grandfather status. If we significantly modify our products after they receive FDA clearance, the FDA may require us to submit a separate 510(k) or premarket approval application, or PMA, for the modified product before we are permitted to market the products in the United States. In addition, if we develop products in the future that are not considered to be substantially equivalent to a device with 510(k) clearance or is eligible for grandfather status, we will be required to obtain FDA approval by submitting a PMA.

The FDA may not act favorably or quickly in its review of our 510(k) or PMA submissions, or we may encounter significant difficulties and costs in our efforts to obtain FDA clearance or approval, all of which could delay or preclude sale of new products for clinical use in the United States. Furthermore, the FDA may request additional data or require us to conduct further testing, or compile more data, including clinical data and clinical

studies, in support of a 510(k) submission. The FDA may also, instead of accepting a 510(k) submission, require us to submit a PMA, which is typically a much more complex and burdensome application than a 510(k). To support a PMA, the FDA would likely require that we conduct one or more clinical studies to demonstrate that the device is safe and effective. We may not be able to meet the requirements to obtain 510(k) clearance or PMA approval, or the FDA may not grant any necessary clearances or approvals. In addition, the FDA may place significant limitations upon the intended use of our products as a condition to a 510(k) clearance or PMA approval. Product applications can also be denied or withdrawn due to failure to comply with regulatory requirements or the occurrence of unforeseen problems following clearance or approval. Any delays or failure to obtain FDA clearance or approvals of new products we develop, any limitations imposed by the FDA on new product use, or the costs of obtaining FDA clearance or approvals could have a material adverse effect on our business, financial condition and results of operations.

Complying with FDA regulations is an expensive and time-consuming process. Our failure to comply fully with such regulations could subject us to enforcement actions.

Our commercially distributed medical device products will be subject to numerous post-market regulatory requirements, including the following:

- Quality System Regulation, or QSR, which requires manufacturers to follow elaborate design, testing, control, documentation and other quality assurance procedures during the manufacturing process;
- labeling regulations;
- the FDA's general prohibition against false or misleading statements in the labeling or promotion of products for unapproved or "off-label" uses;
- the Reports of Corrections and Removals regulation, which requires that manufacturers report to the FDA recalls and field corrective actions taken to reduce a risk to health or to remedy a violation of the FDC Act that may pose a risk to health; and
- the Medical Device Reporting regulation, which requires that manufacturers report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur.

We will also become subject to inspection and marketing surveillance by the FDA to determine our compliance with regulatory requirements. If the FDA finds 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 revenue.

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 QSRs. 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.

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

To be able to market and sell our 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 receive regulatory approvals in any foreign country in which we plan to market our products. If we fail to obtain regulatory approval in any foreign country in which we plan to market our products, our ability to generate revenue will be harmed.

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. The CE mark is an international symbol of adherence to quality assurance standards and compliance with applicable European medical device directives. In order to obtain the right to affix the CE mark to products, a manufacturer must obtain certification that its processes meet certain European quality standards.

We have not yet received permission to affix the CE mark to our medical products. We do not know whether we will be able to obtain permission to affix the CE mark for new or modified products. If we are unable to obtain permission to affix the CE mark to our products, we will not be able to sell our products in member countries of the European Union.

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 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 to incur potentially significant costs to comply with environmental regulations.

The European Union Directive 2002/96/EC on Waste Electrical and Electronic Equipment, known as the “WEEE Directive,” requires producers of certain electrical and electronic equipment, including monitoring instruments, to be financially responsible for specified collection, recycling, treatment and disposal of past and present covered products placed on the market in the European Union. As a manufacturer of covered products, we may be required to register as a producer in some European Union countries, and we may incur some financial responsibility for the collection, recycling, treatment and disposal of both new product sold, and product already sold prior to the WEEE Directive’s enforcement date, including the products of other manufacturers where these are replaced by our own products. European Union Directive 2002/95/EC on the Restriction of the use of Hazardous Substances in electrical and electronic equipment, known as the “RoHS Directive,” restricts the use of certain hazardous substances, including mercury, lead and cadmium in specified covered products; however, the RoHS Directive currently exempts monitoring instruments from its requirements. If the European Commission were to remove this exemption in the future, we would be required to change our manufacturing processes and redesign products regulated under the RoHS Directive in order to be able to continue to offer them for sale within the European Union. For some products, substituting certain components containing regulated hazardous substances may be difficult, costly or result in production delays. We will continue to review the applicability and impact of both directives on the sale of our products within the European Union, and although we cannot currently estimate the extent of such impact, they are likely to result in additional costs and could require us to redesign or change how we manufacture our products, any of which could adversely affect our operating results. Failure to comply with the directives could result in the imposition of fines and penalties, inability to sell covered products in the European Union and loss of revenues.

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 are committed to complying with and, to our knowledge, are in compliance with, all governmental regulations. 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 this intellectual property 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. Furthermore, 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—such as the Trimetasphere® carbon nanomaterials products—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 certain of our products—including our Trimetasphere® carbon nanomaterials products—do not have foreign patent protection. 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, such as our litigation with Hansen, 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 and 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 development of 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 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. If third parties assert claims against us alleging that we infringe their patents or other intellectual property rights—including third parties that have asserted claims against businesses that we have acquired prior to our acquisition of these businesses—we could incur 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. 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 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 noncommercial academic and research use. It is difficult to monitor and enforce such noncommercial 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 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 that 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 nonexclusive, 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 be successful or 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 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 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 quotations for the price of 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 in such event, 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 and will continue to be affected by a number of factors, many of which we cannot control For example, since January 1, 2008, our

common stock has traded between a high of $8.49 per share and a low of $0.30 per share. Among the factors that could cause material fluctuations in the market price for our common stock include:

- 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 our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- litigation, such as our recently settled litigation with Hansen;
- any major change in our board of directors or management;
- 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 security 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 there are substantial sales of our common stock, or the perception that such sales may occur, our stock price could decline.

Certain of our employees, including some of our executive officers, have entered into agreements with us that restrict their ability to sell shares of our common stock beyond specified amounts through December 31, 2010. These employees currently beneficially own approximately 24% of our outstanding common stock, including shares issuable upon exercise of stock options. We have the right to waive any of these sale restrictions for employees and management at our discretion, and in such instance, the shares would become freely tradable.

If our stockholders 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. We are unable to predict the effect that sales of our common stock may have on the prevailing market price of our common stock.

If our internal controls over financial reporting are 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. Additionally, our independent registered public accounting firm will be required to issue a report on their evaluation of the operating effectiveness of our internal control over financial reporting beginning with our Annual Report for the year ending December 31, 2010.

We evaluate our existing internal control over financial reporting against the standards adopted by 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 or our independent registered public accounting firm may 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 by an independent registered public accounting firm or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

Our directors and executive officers collectively control approximately 50% of our outstanding common stock and if they choose to act together, they can significantly influence our management and operations in a manner that may be in their best interests and not in the best interests of other stockholders.

As of the date of this report, our directors and executive officers, together with their affiliates, collectively own an aggregate of approximately 50% of our outstanding common stock, determined on an as-converted basis. As a result, these stockholders, if they were to act together, will be able to significantly influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of mergers or other significant corporate transactions. You and other stockholders will have minimal influence over these actions. The interests of this group of stockholders may not always coincide with our interests or the interests of other stockholders, and this group may act in a manner that advances their best interests and not necessarily those of other stockholders. This concentration of ownership may also have the effect of delaying or preventing a change in control of our company and might adversely affect the market price of our common stock.

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.

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. 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.

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, 2010

On February 11, 2010, we issued 25,000 shares of our common stock and paid $13,000 to a former employee in connection with the settlement of a complaint originally filed by the former employee in 2006. The issuance of these securities was deemed to be exempt from registration under the Act in reliance on Sections 3(a)(7) and 4(2) of the Act.

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

In 2006, we completed the initial public offering of 3,500,000 shares of our common stock at a price to the public of $6.00 per share and received net proceeds of approximately $17.9 million, after deducting underwriters' discounts and commissions and additional offering-related expenses.

We are using, or expect to use, the net proceeds of the offering principally to fund further development and expansion of our products and product candidates, in particular our nanomaterial and ultrasound-related medical product candidates, and for general working capital purposes. We may also use a portion of the net proceeds for the acquisition of, or investment in, companies, technologies, products or assets that complement our business. We have no present commitments or binding agreements to enter into any acquisitions or investments. Pending these uses, we intend to continue to invest the net proceeds of our initial public offering in short-term, investment-grade interest-bearing securities or guaranteed obligations of the U.S. government.

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

None.

ITEM 3. ***DEFAULTS UPON SENIOR SECURITIES***

None.

ITEM 4. ***RESERVED***

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 17, 2010

By: /s/ DALE E. MESSICK

Dale E. Messick
Chief Financial Officer
(Principal Financial and Accounting Officer and duly authorized Officer)

EXHIBIT INDEX

Exhibit Number	Description
2.1(1)	Findings of Fact, Conclusions of Law, and Order under 11 U.S.C. §§ 1129(a) and (b) and Fed. R. Bankr. P. 3020 Confirming First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Innovations, Inc, debtors and debtors-in-possession, dated January 12, 2010 (Exhibit 2.1)
3.1(3)	Amended and Restated Certificate of Incorporation of the Registrant (Exhibit 3.2)
3.2(2)	Certificate of Designations of the Series A Convertible Preferred Stock (Exhibit 3.1)
3.3(4)	Amended and Restated Bylaws of the Registrant (Exhibit 3.4)
3.4(5)	Amendment to Amended and Restated Bylaws (Exhibit 3.1)
10.1(2)	Securities Purchase and Exchange Agreement, dated January 12, 2010, by and between Luna Innovations Incorporated and Carilion Clinic (Exhibit 10.1)
10.2(2)	Warrant No. 1 to Purchase Common Stock, dated January 13, 2010 and issued to Carilion Clinic (Exhibit 10.2)
10.3(2)	Warrant No. 2 to Purchase Common Stock, dated January 13, 2010 and issued to Carilion Clinic (Exhibit 10.3)
10.4(2)	Amended and Restated Investor Rights Agreement, dated January 13, 2010, by and among Luna Innovations Incorporated, Carilion Clinic, and certain stockholders of Luna Innovations Incorporated (Exhibit 10.4)
10.5	Loan and Security Agreement, dated February 18, 2010, by and between Luna Innovations Incorporated, Luna Technologies, Inc. and Silicon Valley Bank
10.6*	License Agreement, effective January 12, 2010, by and among Luna Innovations Incorporated, Luna Technologies, Inc. and Hansen Medical, Inc.
10.7*	Development and Supply Agreement, effective January 12, 2010, by and among Luna Innovations Incorporated, Luna Technologies, Inc. and Hansen Medical, Inc., as amended on February 17, 2010 and April 2, 2010
10.8*	License Agreement, effective January 12, 2010, by and among Luna Innovations Incorporated, Luna Technologies, Inc. and Intuitive Surgical, Inc.
10.9*	Amendments to Development and Supply Agreement, effective January 12, 2010 and April 27, 2010, by and between Luna Innovations Incorporated and Intuitive Surgical, Inc.
10.10	Secured Promissory Note, dated January 12, 2010, issued to Hansen Medical, Inc.
10.11	Security Agreement, effective as of January 12, 2010, by and among Luna Innovations Incorporated, Luna Technologies, Inc. and Hansen Medical, Inc.
10.12	Warrant to Purchase Common Stock of Luna Innovations Incorporated, dated January 12, 2010, issued to Hansen Medical, Inc.
10.13	Confidential Mutual Release, effective as of January 12, 2010, by and among Luna Innovations Incorporated, Luna Technologies, Inc. and Hansen Medical, Inc.
10.14	Industrial Lease Agreement, dated as of March 21, 2006, by and between Luna Innovations Incorporated and the Economic Development Authority of Montgomery County, Virginia, as amended by a First Amendment effective as of May 11, 2006, a Second Amendment effective as of July 15, 2009 and a Third Amendment effective as of March 23, 2010
10.15	Lease for Riverside Center, dated December 30, 2005, by and between Carilion Medical Center and Luna Innovations Incorporated, as amended by an Amended Lease dated July 20, 2006, a Second Amendment dated on or about October 5, 2007 and a Third Amendment effective as of April 1, 2010
31.1	Certification of the Chief 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 Chief 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 Chief 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 Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(1) Incorporated by reference to the exhibits to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 15, 2010 (Items 1.03, 5.02 and 9.01) (File No. 000-52008). The number in parentheses indicates the corresponding exhibit number in such Form 8-K.
(2) Incorporated by reference to the exhibits to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 15, 2010 (Items 1.01, 3.02, 3.03, 5.03 and 9.01) (File No. 000-52008). The number parentheses indicates the corresponding exhibit number in such Form 8-K.
(3) Incorporated by reference to the exhibit to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 8, 2006 (File No. 000-52008). The number in parentheses indicates the corresponding exhibit number in such Form 8-K.
(4) Incorporated by reference to the exhibit to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on February 10, 2006 (File No. 333-131764). The number in parentheses indicates the corresponding exhibit number in such Form 8-K.
(5) Incorporated by reference to the exhibit to the Registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on May 10, 2010 (File No. 000-52008). The number in parentheses indicates the corresponding exhibit number in such Form 8-K.
* 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.

Exhibit 10.5

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT (this "**Agreement**") dated as of the Effective Date between (i) **SILICON VALLEY BANK**, a California corporation with a loan production office located at One Newton Executive Park, Suite 200, 2221 Washington Street, Newton, Massachusetts 02462 ("**Bank**"), and (ii) **LUNA INNOVATIONS INCORPORATED**, a Delaware corporation and **LUNA TECHNOLOGIES, INC.**, a Delaware corporation, each with offices located at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016 (individually and collectively, jointly and severally, the "**Borrower**"), provides the terms on which Bank shall lend to Borrower and Borrower shall repay Bank. The parties agree as follows:

1 ACCOUNTING AND OTHER TERMS

Accounting terms not defined in this Agreement shall be construed following GAAP. Calculations and determinations must be made following GAAP. Capitalized terms not otherwise defined in this Agreement shall have the meanings set forth in Section 13. All other terms contained in this Agreement, unless otherwise indicated, shall have the meaning provided by the Code to the extent such terms are defined therein.

2 LOAN AND TERMS OF PAYMENT

2.1 Promise to Pay. Borrower hereby unconditionally, jointly and severally, promises to pay Bank the outstanding principal amount of all Credit Extensions and accrued and unpaid interest thereon as and when due in accordance with this Agreement.

2.1.1 Revolving Advances.

(a) Availability. Subject to the terms and conditions of this Agreement and to deduction of Reserves, following the completion of the Initial Audit, Bank shall make Advances not exceeding the Availability Amount. Amounts borrowed under the Revolving Line may be repaid, and prior to the Revolving Line Maturity Date, reborrowed, subject to the applicable terms and conditions precedent herein.

(b) Termination; Repayment. The Revolving Line terminates on the Revolving Line Maturity Date, when the principal amount of all Advances, the unpaid interest thereon, and all other Obligations relating to the Revolving Line shall be immediately due and payable.

2.1.2 Letters of Credit Sublimit.

As part of the Revolving Line and subject to deduction of Reserves, Bank shall issue or have issued Letters of Credit denominated in Dollars or a Foreign Currency for Borrower's account. The aggregate Dollar Equivalent amount utilized for the issuance of Letters of Credit shall at all times reduce the amount otherwise available for Advances under the Revolving Line. The aggregate Dollar Equivalent of the face amount of outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve) may not exceed the lesser of (A) One Million Dollars ($1,000,000), minus (i) the sum of all amounts used for Cash Management Services, and minus (ii) the FX Reduction Amount, or (B) the lesser of Revolving Line or the Borrowing Base, minus (i) the sum of all outstanding principal amounts of any Advances (including any amounts used for Cash Management Services), and minus (ii) the FX Reduction Amount.

(a) If, on the Revolving Line Maturity Date (or the effective date of any termination of this Agreement), there are any outstanding Letters of Credit, then on such date Borrower shall provide to Bank cash collateral in an amount equal to 105% of the Dollar Equivalent of the face amount of all such Letters of Credit plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment), to secure all of the Obligations relating to such Letters of Credit. All Letters of Credit shall be in form and substance acceptable to Bank in its sole discretion and shall be subject to the terms and conditions of Bank's standard Application and Letter of Credit Agreement (the "**Letter of Credit Application**"). Borrower agrees to execute any further documentation in connection with the Letters of Credit as Bank may reasonably request. Borrower further agrees to be bound by the regulations and interpretations of the issuer of any Letters of Credit guarantied by Bank and opened for Borrower's account or by Bank's interpretations of any Letter of Credit issued by Bank for Borrower's account, and Borrower understands and agrees that Bank shall not be liable for any error, negligence, or mistake, whether of omission or commission, in following Borrower's instructions or those contained in the Letters of Credit or any modifications, amendments, or supplements thereto.

(b) The obligation of Borrower to immediately reimburse Bank for drawings made under Letters of Credit shall be absolute, unconditional, and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement, such Letters of Credit, and the Letter of Credit Application.

(c) Borrower may request that Bank issue a Letter of Credit payable in a Foreign Currency. If a demand for payment is made under any such Letter of Credit, Bank shall treat such demand as an Advance to Borrower of the Dollar Equivalent of the amount thereof (plus fees and charges in connection therewith such as wire, cable, SWIFT or similar charges).

(d) To guard against fluctuations in currency exchange rates, upon the issuance of any Letter of Credit payable in a Foreign Currency, Bank shall create a reserve (the "**Letter of Credit Reserve**") under the Revolving Line in an amount equal to ten percent (10%) of the face amount of such Letter of Credit. The amount of the Letter of Credit Reserve may be adjusted by Bank from time to time to account for fluctuations in the exchange rate. The availability of funds under the Revolving Line shall be reduced by the amount of such Letter of Credit Reserve for as long as such Letter of Credit remains outstanding.

2.1.3 Foreign Exchange Sublimit. As part of the Revolving Line and subject to the deduction of Reserves, Borrower may enter into foreign exchange contracts with Bank under which Borrower commits to purchase from or sell to Bank a specific amount of Foreign Currency (each, a "**FX Forward Contract**") on a specified date (the "**Settlement Date**"). FX Forward Contracts shall have a Settlement Date of at least one (1) FX Business Day after the contract date and shall be subject to a reserve of ten percent (10%) of each outstanding FX Forward Contract. The aggregate amount of FX Forward Contracts at any one time may not exceed the lesser of (A) One Million Dollars ($1,000,000), minus (i) the sum of all amounts used for Cash Management Services, and minus (ii) the Dollar Equivalent of the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), or (B) the lesser of Revolving Line or the Borrowing Base, minus (i) the sum of all outstanding principal amounts of any Advances (including any amounts used for Cash Management Services), and minus (ii) the Dollar Equivalent of the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve). The amount otherwise available for Credit Extensions under the Revolving Line shall be reduced by an amount equal to ten percent (10%) of each outstanding FX Forward Contract (the "**FX Reduction Amount**"). Any amounts needed to fully reimburse Bank for any amounts not paid by Borrower in connection with FX Forward Contracts will be treated as Advances under the Revolving Line and will accrue interest at the interest rate applicable to Advances.

2.1.4 Cash Management Services Sublimit. Borrower may use the Revolving Line for Bank's cash management services, which may include merchant services, direct deposit of payroll, business credit card, and check cashing services identified in Bank's various cash management services agreements (collectively, the "**Cash Management Services**"), in an aggregate amount not to exceed the lesser of (A) One Million Dollars ($1,000,000), minus (i) the Dollar Equivalent of the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), and minus (ii) the FX Reduction Amount, or (B) the lesser of Revolving Line or the Borrowing Base, minus (i) the sum of all outstanding principal amounts of any Advances, minus the Dollar Equivalent of the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve), and minus (ii) the FX Reduction Amount. Any amounts Bank pays on behalf of Borrower for any Cash Management Services will be treated as Advances under the Revolving Line and will accrue interest at the interest rate applicable to Advances.

2.2 Overadvances. If, at any time, the sum of (a) the outstanding principal amount of any Advances (including any amounts used for Cash Management Services); plus (b) the face amount of any outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit and any Letter of Credit Reserve); plus (c) the FX Reduction Amount exceeds the lesser of either the Revolving Line or the Borrowing Base (such excess amount being an "**Overadvance**"), Borrower shall immediately pay to Bank in cash such Overadvance. Without limiting Borrower's obligation to repay Bank any amount of the Overadvance, Borrower agrees to pay Bank interest on the outstanding amount of any Overadvance, on demand, at the Default Rate.

2.3 Payment of Interest on the Credit Extensions.

(a) Interest Rate; Advances. Subject to Section 2.3(b), the principal amount outstanding under the Revolving Line shall accrue interest at a floating per annum rate equal to the Prime Rate plus two percentage points (2.00%), which interest shall be payable monthly, in arrears, in accordance with Section 2.3(f) below.

(b) Default Rate. Immediately upon the occurrence and during the continuance of an Event of Default, Obligations shall bear interest at a rate per annum which is five percentage points (5.00%) above the rate that is otherwise applicable thereto (the "**Default Rate**") unless Bank otherwise elects from time to time in its sole discretion to impose a smaller increase. Fees and expenses which are required to be paid by Borrower pursuant to the Loan Documents (including, without limitation, Bank Expenses) but are not paid when due shall bear interest until paid at a rate equal to the highest rate applicable to the Obligations. Payment or acceptance of the increased interest rate provided in this Section 2.3(b) is not a permitted alternative to timely payment and shall not constitute a waiver of any Event of Default or otherwise prejudice or limit any rights or remedies of Bank.

(c) Adjustment to Interest Rate. Changes to the interest rate of any Credit Extension based on changes to the Prime Rate shall be effective on the effective date of any change to the Prime Rate and to the extent of any such change.

(d) Computation; 360-Day Year. In computing interest, the date of the making of any Credit Extension shall be included and the date of payment shall be excluded; provided, however, that if any Credit Extension is repaid on the same day on which it is made, such day shall be included in computing interest on such Credit Extension. Interest shall be computed on the basis of a 360-day year for the actual number of days elapsed.

(e) Debit of Accounts. Bank may debit any of Borrower's deposit accounts, including the Designated Deposit Account, for principal and interest payments or any other amounts Borrower owes Bank when due. These debits shall not constitute a set-off.

(f) Payment; Interest Computation; Float Charge. Interest is payable monthly on the last calendar day of each month. In computing interest on the Obligations, all Payments received after 12:00 noon Eastern time on any day shall be deemed received on the next Business Day. In addition, Bank shall be entitled to charge Borrower a "float" charge in an amount equal to three (3) Business Days interest, at the interest rate applicable to the Advances, on all Payments received by Bank by check. Said float charge is not included in interest for purposes of computing Minimum Monthly Interest (if any) under this Agreement. The float charge for each month shall be payable on the last day of the month. Bank shall not, however, be required to credit Borrower's account for the amount of any item of payment which is unsatisfactory to Bank in its good faith business judgment, and Bank may charge Borrower's Designated Deposit Account for the amount of any item of payment which is returned to Bank unpaid.

2.4 Fees. Borrower shall pay to Bank:

(a) Commitment Fee. A fully earned, non refundable commitment fee of Thirty Seven Thousand Five Hundred Dollars ($37,500) equal to three-quarters of one percent (0.75%) of the Revolving Line, on the Effective Date (Bank acknowledges receipt of a good faith deposit in the amount of $37,500 which will be applied in reduction of the fees and expenses contemplated under this Agreement);

(b) Letter of Credit Fee. Bank's customary fees and expenses for the issuance or renewal of Letters of Credit, upon the issuance of such Letter of Credit, each anniversary of the issuance during the term of such Letter of Credit, and upon the renewal of such Letter of Credit by Bank;

(c) Termination Fee. Subject to the terms of Section 12.1, a termination fee;

(d) Unused Revolving Line Facility Fee. A fee (the "**Unused Revolving Line Facility Fee**"), payable quarterly, in arrears, on a calendar year basis on the last Business Day of each quarter, in an amount equal to one-half of one percent (0.50%) per annum of the average unused portion of the Revolving Line, as determined by Bank. The unused portion of the Revolving Line, for the purposes of this calculation, shall not include amounts reserved for products provided in connection with Cash Management Services and FX Forward Contracts. Borrower shall not be entitled to any credit, rebate or repayment of any Unused Revolving Line Facility Fee previously earned by Bank pursuant to this Section notwithstanding any termination of the Agreement or the suspension or termination of Bank's obligation to make loans and advances hereunder, including during any Streamline Period; and

(e) Bank Expenses. All Bank Expenses (including reasonable attorneys' fees and expenses for documentation and negotiation of this Agreement) incurred through and after the Effective Date, when due.

2.5 Payments; Application of Payments.

(a) All payments (including prepayments) to be made by Borrower under any Loan Document shall be made in immediately available funds in U.S. Dollars, without setoff or counterclaim, before 12:00 noon Eastern time on the date when due. Payments of principal and/or interest received after 12:00 noon Eastern time are considered received at the opening of business on the next Business Day. When a payment is due on a day that is not a Business Day, the payment shall be due the next Business Day, and additional fees or interest, as applicable, shall continue to accrue until paid.

(b) Bank shall apply the whole or any part of collected funds against the Revolving Line or credit such collected funds to a depository account of Borrower with Bank (or an account maintained by an Affiliate of Bank), the order and method of such application to be in the sole discretion of Bank. Borrower shall have no right to specify the order or the accounts to which Bank shall allocate or apply any payments required to be made by Borrower to Bank or otherwise received by Bank under this Agreement when any such allocation or application is not specified elsewhere in this Agreement.

3 CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Credit Extension. Bank's obligation to make the initial Credit Extension is subject to the condition precedent that Bank shall have received, in form and substance satisfactory to Bank, such documents, and completion of such other matters, as Bank may reasonably deem necessary or appropriate, including, without limitation:

(a) duly executed original signatures to the Loan Documents;

(b) duly executed original signatures to the Control Agreements, if any;

(c) each Borrower's Operating Documents and a good standing certificate of each Borrower certified by the Secretary of State of the State of Delaware as of a date no earlier than thirty (30) days prior to the Effective Date, together with certificates of foreign qualification from each applicable jurisdiction dated as of a date no earlier than thirty (30) days prior to the Effective Date;

(d) duly executed original signatures to the Secretary's Certificate with completed Borrowing Resolutions for each Borrower;

(e) the Subordination Agreement by Hansen Medical Inc., in favor of Bank, together with the duly executed original signatures thereto;

(f) the Perfection Certificate of each Borrower, together with the duly executed original signatures thereto;

(g) a landlord's consent in favor of Bank for 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016, by the respective landlord thereof, together with the duly executed original signatures thereto;

(h) a bailee's/warehouseman's waiver executed by each bailee, if any, of Borrower as required by Bank, in favor of Bank;

(i) evidence satisfactory to Bank that the insurance policies required by Section 6.7 hereof are in full force and effect, together with appropriate evidence showing lender loss payable and/or additional insured clauses or endorsements in favor of Bank;

(j) satisfactory review/confirmation by Bank of the Amended Disclosure Statement and the executed Plan of Reorganization (including, without limitation, the Hansen Settlement Documents);

(k) an officer's certificate from a Responsible Officer, certifying the Borrower has substantially consummated the Plan of Reorganization;

(l) evidence satisfactory to Bank of an approved settlement agreement with Hansen Medical Inc.;

(m) the completion of the Initial Audit;

(n) pro-forma balance sheet and income statement of Borrower after giving effect to the bankruptcy settlement with Hansen Medical, Inc., the Litigation Reversal and the Plan of Reorganization; and

(o) payment of the fees and Bank Expenses then due as specified in Section 2.4 hereof.

3.2 Conditions Precedent to all Credit Extensions. Bank's obligations to make each Credit Extension, including the initial Credit Extension, is subject to the following conditions precedent:

(a) except as otherwise provided in Section 3.4, timely receipt of an executed Transaction Report;

(b) the representations and warranties in this Agreement shall be true, accurate, and complete in all material respects on the date of the Transaction Report and on the Funding Date of each Credit Extension; 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, and no Default or Event of Default shall have occurred and be continuing or result from the Credit Extension. Each Credit Extension is Borrower's representation and warranty on that date that the representations and warranties in this Agreement remain true, accurate, and complete in all material respects; 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; and

(c) in Bank's sole discretion, there has not been any material impairment in the general affairs, management, results of operation, financial condition or the prospect of repayment of the Obligations, or any material adverse deviation by Borrower from the most recent business plan of Borrower presented to and accepted by Bank.

3.3 Covenant to Deliver. Borrower agrees to deliver to Bank each item required to be delivered to Bank under this Agreement as a condition precedent to any Credit Extension. Borrower expressly agrees that a Credit Extension made prior to the receipt by Bank of any such item shall not constitute a waiver by Bank of Borrower's obligation to deliver such item, and the making of any Credit Extension in the absence of a required item shall be in Bank's sole discretion.

3.4 Procedures for Borrowing. Advances. Subject to the prior satisfaction of all other applicable conditions to the making of an Advance set forth in this Agreement, to obtain an Advance other than Advances under Sections 2.1.2 or 2.1.4), Borrower shall notify Bank (which notice shall be irrevocable) by electronic mail, facsimile, or telephone by 12:00 noon Eastern time on the Funding Date of the Advance. Together with any such electronic or facsimile notification, Borrower shall deliver to Bank by electronic mail or facsimile a completed Transaction Report executed by a Responsible Officer or his or her designee. Bank may rely on any telephone notice given by a person whom Bank believes is a Responsible Officer or designee. Bank shall credit Advances to the Designated Deposit Account. Bank may make Advances under this Agreement based on instructions from a Responsible Officer or his or her designee or without instructions if the Advances are necessary to meet Obligations which have become due.

4 CREATION OF SECURITY INTEREST

4.1 Grant of Security Interest. Borrower hereby grants Bank, to secure the payment and performance in full of all of the Obligations, a continuing security interest in, and pledges to Bank, the Collateral, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof.

4.2 Priority of Security Interest. Borrower represents, warrants, and covenants that the security interest granted herein is and shall at all times continue to be a first priority perfected security interest in the Collateral (subject only to Permitted Liens that may have superior priority to Bank's Lien under this Agreement). If

Borrower shall acquire a material commercial tort claim, Borrower shall promptly notify Bank in a writing signed by Borrower of the general details thereof and grant to Bank in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance reasonably satisfactory to Bank.

If this Agreement is terminated, Bank's Lien in the Collateral shall continue until the Obligations (other than inchoate indemnity obligations) are repaid in full in cash. Upon payment in full in cash of the Obligations and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall, at Borrower's sole cost and expense, release its Liens in the Collateral and all rights therein shall revert to Borrower.

4.3 Authorization to File Financing Statements. Borrower hereby authorizes Bank to file financing statements, without notice to Borrower, with all appropriate jurisdictions to perfect or protect Bank's interest or rights hereunder, including a notice that any disposition of the Collateral, by either Borrower or any other Person, shall be deemed to violate the rights of Bank under the Code. Such financing statements may indicate the Collateral as "all assets of the Debtor" or words of similar effect, or as being of an equal or lesser scope, or with greater detail, all in Bank's discretion.

5 REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

5.1 Due Organization; Authorization; Power and Authority. Borrower and each of its Subsidiaries are duly existing and in good standing as a Registered Organization in its jurisdiction of formation and each is qualified and licensed to do business and each is in good standing in any jurisdiction in which the conduct of each of its business or its ownership of property requires that it be qualified except where the failure to do so could not reasonably be expected to have a material adverse effect on Borrower's business. In connection with this Agreement, each Borrower has delivered to Bank a completed certificate signed by Borrower, entitled "Perfection Certificate". Borrower represents and warrants to Bank that (a) each Borrower's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof; (b) each Borrower is an organization of the type and is organized in the jurisdiction set forth in the Perfection Certificate; (c) each Perfection Certificate accurately sets forth Borrower's organizational identification number or accurately states that Borrower has none; (d) the Perfection Certificate accurately sets forth Borrower's place of business, or, if more than one, its chief executive office as well as Borrower's mailing address (if different than its chief executive office); (e) each Borrower (and each of its predecessors) has not, in the past five (5) years, changed its jurisdiction of formation, organizational structure or type, or any organizational number assigned by its jurisdiction; and (f) all other information set forth on the Perfection Certificate pertaining to each Borrower and each of its Subsidiaries is accurate and complete (it being understood and agreed that Borrower may from time to time update certain information in the Perfection Certificate after the Effective Date to the extent permitted by one or more specific provisions in this Agreement). If any Borrower is not now a Registered Organization but later becomes one, such Borrower shall promptly notify Bank of such occurrence and provide Bank with Borrower's organizational identification number.

The execution, delivery and performance by Borrower of the Loan Documents to which it is a party have been duly authorized, and do not (i) conflict with any of Borrower's organizational documents, (ii) contravene, conflict with, constitute a default under or violate any material Requirement of Law, (iii) contravene, conflict or violate any applicable order, writ, judgment, injunction, decree, determination or award of any Governmental Authority by which Borrower or any of its Subsidiaries or any of their property or assets may be bound or affected, (iv) require any action by, filing, registration, or qualification with, or Governmental Approval from, any Governmental Authority (except such Governmental Approvals which have already been obtained and are in full force and effect) other than filing by Bank to perfect its security interest in the Collateral or (v) constitute an event of default under any material agreement by which Borrower is bound. Borrower is not in default under any agreement to which it is a party or by which it is bound in which the default could reasonably be expected to have a material adverse effect on Borrower's business.

5.2 Collateral. Borrower has good title to, has rights in, and the power to transfer each item of the Collateral upon which it purports to grant a Lien hereunder, free and clear of any and all Liens except Permitted Liens. Borrower has no deposit accounts other than the deposit accounts with Bank, the deposit accounts, if any described in the Perfection Certificate delivered to Bank in connection herewith, or of which Borrower has given Bank notice and taken such actions as are necessary to give Bank a perfected security interest therein. The Accounts are bona fide, existing obligations of the Account Debtors.

The Collateral is not in the possession of any third party bailee (such as a warehouse) except as otherwise provided in the Perfection Certificate. Other than demo or loaner equipment with an aggregate book value of up to $500,000 that is used in the sales and clinical trial process, none of the components of the Collateral shall be maintained at locations other than as provided in the Perfection Certificate or as permitted pursuant to Section 7.2. In the event that Borrower, after the date hereof, intends to store or otherwise deliver any portion of the Collateral to a bailee, then Borrower will first receive the written consent of Bank and such bailee must execute and deliver a bailee agreement in form and substance satisfactory to Bank in its sole discretion.

All Inventory is in all material respects of good and marketable quality, free from material defects.

Borrower is the sole owner of the Intellectual Property which it owns or purports to own except for (a) licenses granted to its customers in the ordinary course of business, (b) over-the-counter software that is commercially available to the public, and (c) material Intellectual Property licensed to Borrower and noted on the Perfection Certificate. Each Patent which it owns or purports to own and which is material to Borrower's business is valid, and no part of the Intellectual Property which Borrower owns or purports to own and which is material to Borrower's business has been judged invalid or unenforceable, in whole or in part. To the best of Borrower's knowledge, no written claim is pending that any part of the Intellectual Property violates the rights of any third party except to the extent such claim would not have a material adverse effect on Borrower's business.

Except as noted on the Perfection Certificate, Borrower is not a party to, nor is it bound by, any Restricted License.

5.3 Accounts Receivable; Inventory. For any Eligible Account in any Borrowing Base Certificate, all statements made and all unpaid balances appearing in all invoices, instruments and other documents evidencing such Eligible Accounts are and shall be true and correct and all such invoices, instruments and other documents, and all of Borrower's Books are genuine and in all respects what they purport to be. Whether or not an Event of Default has occurred and is continuing, Bank may notify any Account Debtor owing Borrower money of Bank's security interest in such funds and verify the amount of such Eligible Account. All sales and other transactions underlying or giving rise to each Eligible Account shall comply in all material respects with all applicable laws and governmental rules and regulations. Borrower has no knowledge of any actual or imminent Insolvency Proceeding of any Account Debtor whose accounts are Eligible Accounts in any Borrowing Base Certificate. To the best of Borrower's knowledge, all signatures and endorsements on all documents, instruments, and agreements relating to all Eligible Accounts are genuine, and all such documents, instruments and agreements are legally enforceable in accordance with their terms.

5.4 Litigation. There are no actions or proceedings pending or, to the knowledge of the Responsible Officers, threatened in writing by or against Borrower or any of its Subsidiaries involving more than, individually Fifty Thousand Dollars ($50,000), or in the aggregate Two Hundred Fifty Thousand Dollars ($250,000).

5.5 Financial Condition. All consolidated financial statements for Borrower and any of its Subsidiaries delivered to Bank fairly present in all material respects Borrower's consolidated financial condition and Borrower's consolidated results of operations. There has not been any material deterioration in Borrower's consolidated financial condition since the date of the most recent financial statements submitted to Bank.

5.6 Solvency. The fair salable value of Borrower's assets (including goodwill minus disposition costs) exceeds the fair value of its liabilities; Borrower is not left with unreasonably small capital after the transactions in this Agreement; and Borrower is able to pay its debts (including trade debts) as they mature.

5.7 Regulatory Compliance. Borrower is not an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Borrower is not engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Borrower has not violated any laws, ordinances or rules, the violation of which could reasonably be expected to have a material adverse effect on its business. None of Borrower's or any of its Subsidiaries' properties or assets has been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than legally. Borrower and each of its Subsidiaries have obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Government Authorities that are necessary to continue their respective businesses as currently conducted.

5.8 Subsidiaries; Investments. Borrower does not own any stock, partnership interest or other equity securities except for Permitted Investments.

5.9 Tax Returns and Payments; Pension Contributions. Borrower 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. Borrower may defer payment of any contested taxes, provided that Borrower (a) in good faith contests its obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (b) notifies Bank in writing of the commencement of, and any material development in, the proceedings, (c) posts bonds or takes any other steps required to prevent the governmental authority levying such contested taxes from obtaining a Lien upon any of the Collateral that is other than a "Permitted Lien". Borrower is unaware of any claims or adjustments, in excess of $20,000, proposed for any of Borrower's prior tax years which could result in additional taxes becoming due and payable by Borrower. Borrower has paid all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not withdrawn from participation in, and has not permitted partial or complete termination of, or permitted the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

5.10 Use of Proceeds. Borrower shall use the proceeds of the Credit Extensions solely as working capital to fund its general business requirements and not for personal, family, household or agricultural purposes.

5.11 Full Disclosure. No written representation, warranty or other statement of Borrower in any certificate or written statement given to Bank, as of the date such representation, warranty, or other statement was made, taken together with all such written certificates and written statements given to Bank, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained in the certificates or statements not misleading (it being recognized by Bank that the projections and forecasts provided by Borrower in good faith and based upon reasonable assumptions are not viewed as facts and that actual results during the period or periods covered by such projections and forecasts may differ from the projected or forecasted results).

5.12 Definition of "Knowledge." For purposes of the Loan Documents, whenever a representation or warranty is made to Borrower's knowledge or awareness, to the "best of" Borrower's knowledge, or with a similar qualification, knowledge or awareness means the actual knowledge, after reasonable investigation, of the Responsible Officers.

5.13 Designated Senior Indebtedness. The Loan Documents and all of the Obligations shall be deemed "Designated Senior Indebtedness" or a similar concept thereof for purposes of any Indebtedness of the Borrower.

6 AFFIRMATIVE COVENANTS

Borrower shall do all of the following:

6.1 Government Compliance. Maintain its and all its Subsidiaries' legal existence and good standing in their respective jurisdictions of formation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a material adverse effect on Borrower's business or operations. Borrower shall comply, and have each Subsidiary comply, with all laws, ordinances and regulations to which it is subject, the noncompliance with which could have a material adverse effect on Borrower's business.

6.2 Financial Statements, Reports, Certificates.

(a) Borrower shall provide Bank with the following:

(i) (A) On the 15th day (or the immediately succeeding Business Day if the 15th day is not a Business Day) and on the last Business Day of each month, and (B) upon each request for a Credit Extension, a Transaction Report;

(ii) within fifteen (15) days, or the next succeeding Business Day if the 15th day is not a Business Day, after the end of each month, (A) monthly accounts receivable agings, aged by invoice date, (B) monthly accounts payable agings, aged by invoice date, and outstanding or held check registers, if any, and (C) monthly reconciliations of accounts receivable agings (aged by invoice date), transaction reports, Deferred Revenue/billings in excess of cost report and general ledger;

(iii) as soon as available, and in any event within thirty (30) days after the end of each month, monthly unaudited consolidated and consolidating financial statements;

(iv) within thirty (30) days after the end of each month a monthly Compliance Certificate signed by a Responsible Officer, certifying that as of the end of such month, Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Bank shall reasonably request, including, without limitation, a statement that at the end of such month there were no held checks;

(v) within thirty (30) days of approval by Borrower's board of directors (or sooner if reasonably requested by Bank) and as amended and approved by Borrower's board of directors, annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower and financial projections for the following fiscal year (on a quarterly basis) as approved by Borrower's board of directors, together with any related business forecasts used in the preparation of such annual financial projections;

(vi) as soon as available, and in any event within one hundred twenty (120) days following the end of Borrower's fiscal year, annual consolidated financial statements certified by, and with an unqualified opinion of, independent certified public accountants acceptable to Bank; this requirement will be waived if such audited annual consolidated financial are delivered in connection with clause (b) below;

(vii) within five (5) days of delivery, copies of all statements, reports and notices made available to Borrower's security holders or to any holders of Subordinated Debt;

(viii) a prompt report of any legal actions pending or threatened in writing against Borrower or any of its Subsidiaries that could result in damages or costs to Borrower or any of its Subsidiaries of, individually, Fifty Thousand Dollars ($50,000) or more, or in the aggregate Two Hundred Fifty Thousand Dollars ($250,000);

Notwithstanding the foregoing, during a Streamline Period, provided no Event of Default has occurred and is continuing, Borrower shall be required to provide Bank with the reports and schedules required pursuant to clause (a)(i)(A) above monthly, within fifteen (15) days after the end of each month.

(b) Within five (5) days after filing, all reports on Form 10-K, 10-Q and 8-K filed with the SEC or a link thereto on Borrower's or another website on the Internet.

(c) Prompt written notice of (i) any material change in the composition of the Intellectual Property, (ii) the registration of any Copyright (including any subsequent ownership right of Borrower in or to any Copyright), Patent or Trademark not previously disclosed to Bank, or (iii) Borrower's knowledge of an event that materially adversely affects the value of the Intellectual Property.

6.3 Accounts Receivable.

(a) Schedules and Documents Relating to Accounts. Borrower shall deliver to Bank transaction reports and schedules of collections, as provided in Section 6.2, on Bank's standard forms; provided, however, that Borrower's failure to execute and deliver the same shall not affect or limit Bank's Lien and other rights in all of Borrower's Accounts, nor shall Bank's failure to advance or lend against a specific Account affect or limit Bank's Lien and other rights therein. If requested by Bank, Borrower shall furnish Bank with copies (or, at Bank's request, originals) of all contracts, orders, invoices, and other similar documents, and all shipping instructions, delivery receipts, bills of lading, and other evidence of delivery, for any goods the sale or disposition of which gave rise to such Accounts. In addition, Borrower shall deliver to Bank, on its request, the originals of all instruments, chattel paper, security agreements, guarantees and other documents and property evidencing or securing any Accounts, in the same form as received, with all necessary endorsements, and copies of all credit memos.

(b) Disputes. Borrower shall promptly notify Bank of all disputes or claims relating to Accounts. Borrower may forgive (completely or partially), compromise, or settle any Account for less than payment in full, or agree to do any of the foregoing so long as (i) Borrower does so in good faith, in a commercially reasonable manner, in the ordinary course of business, in arm's-length transactions, and reports the same to Bank in the regular reports provided to Bank; (ii) no Default or Event of Default has occurred and is continuing; and (iii) after taking into account all such discounts, settlements and forgiveness, the total outstanding Advances will not exceed the Availability Amount.

(c) Collection of Accounts. Borrower shall have the right to collect all Accounts, unless and until a Default or an Event of Default has occurred and is continuing. All payments on, and proceeds of, Accounts shall be deposited directly by the applicable Account Debtor into a lockbox account, or such other "blocked account" as Bank may specify, pursuant to a blocked account agreement in form and substance satisfactory to Bank in its sole discretion. Whether or not an Event of Default has occurred and is continuing, Borrower shall hold all payments on, and proceeds of, Accounts in trust for Bank, and Borrower shall promptly deliver all such payments and proceeds to Bank in their original form, duly endorsed, to be applied to be applied to the Obligations (i) prior to an Event of Default, pursuant to the terms of Section 2.5(b) hereof, and (ii) after the occurrence and during the continuance of an Event of Default, pursuant to the terms of Section 9.4 hereof; provided, however, that during a Streamline Period, such payments and proceeds shall be transferred by Bank to an account of Borrower maintained at Bank.

(d) Returns. Provided no Event of Default has occurred and is continuing, if any Account Debtor returns any Inventory to Borrower, Borrower shall promptly (i) determine the reason for such return, (ii) issue a credit memorandum to the Account Debtor in the appropriate amount, and (iii) provide a copy of such credit memorandum to Bank, upon request from Bank. In the event any attempted return occurs after the occurrence and during the continuance of any Event of Default, Borrower shall hold the returned Inventory in trust for Bank, and immediately notify Bank of the return of the Inventory.

(e) Verification. Bank may, from time to time, verify directly with the respective Account Debtors the validity, amount and other matters relating to the Accounts, either in the name of Borrower or Bank or such other name as Bank may choose.

(f) No Liability. Bank shall not be responsible or liable for any shortage or discrepancy in, damage to, or loss or destruction of, any goods, the sale or other disposition of which gives rise to an Account, or for any error, act, omission, or delay of any kind occurring in the settlement, failure to settle, collection or failure to collect any Account, or for settling any Account in good faith for less than the full amount thereof, nor shall Bank be deemed to be responsible for any of Borrower's obligations under any contract or agreement giving rise to an Account. Nothing herein shall, however, relieve Bank from liability for its own gross negligence or willful misconduct.

6.4 Remittance of Proceeds. Except as otherwise provided in Section 6.3(c), deliver, in kind, all proceeds arising from the disposition of any Collateral to Bank in the original form in which received by Borrower not later than the following Business Day after receipt by Borrower, to be applied to the Obligations pursuant to the terms of Section 9.4 hereof; provided that, if no Default or Event of Default has occurred and is continuing, Borrower shall not be obligated to remit to Bank the proceeds of the sale of worn out or obsolete Equipment disposed of by Borrower in good faith in an arm's length transaction for an aggregate purchase price of Twenty Five Thousand Dollars ($25,000) or less (for all such transactions in any fiscal year). Borrower agrees that it will not commingle proceeds of Collateral with any of Borrower's other funds or property, but will hold such proceeds separate and apart from such other funds and property and in an express trust for Bank. Nothing in this Section limits the restrictions on disposition of Collateral set forth elsewhere in this Agreement.

6.5 Taxes; Pensions; Withholding. Timely file, and require each of its Subsidiaries to timely file, all required tax returns and reports and timely pay, and require each of its Subsidiaries to timely pay, all foreign, federal, state and local taxes, assessments, deposits and contributions owed by Borrower and each of its Subsidiaries, except for deferred payment of any taxes contested pursuant to the terms of Section 5.9 hereof, and shall deliver to Bank, on demand, appropriate certificates attesting to such payments, and pay all amounts necessary to fund all present pension, profit sharing and deferred compensation plans in accordance with their terms.

6.6 Access to Collateral; Books and Records. After completion of the Initial Audit, at reasonable times, on one (1) Business Day's notice (provided no notice is required if an Event of Default has occurred and is continuing), Bank, or its agents, shall have the right, up to two times per year (or more frequently as Bank shall determine necessary, in its sole discretion), to inspect the Collateral and the right to audit and copy Borrower's Books. The foregoing inspections and audits (including, without limitation, the Initial Audit) shall be at Borrower's expense, and the charge therefor shall be $850 per person per day (or such higher amount as shall represent Bank's then-current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Bank schedule an audit more than ten (10) days in advance, and Borrower cancels or seeks to reschedule the audit with less than ten (10) days written notice to Bank, then (without limiting any of Bank's rights or remedies), Borrower shall pay Bank a fee of $1,000 plus any out-of-pocket expenses incurred by Bank to compensate Bank for the anticipated costs and expenses of the cancellation or rescheduling.

6.7 Insurance. Keep its business and the Collateral insured for risks and in amounts standard for companies in Borrower's industry and location and as Bank may reasonably request. Insurance policies shall be in a form, with companies, and in amounts that are satisfactory to Bank. All property policies shall have a lender's loss payable endorsement showing Bank as an additional lender loss payee and waive subrogation against Bank and shall provide that the insurer must give Bank at least twenty (20) days notice before canceling, amending, or declining to renew its policy. All liability policies shall show, or have endorsements showing, Bank as an additional insured, and all such policies (or the loss payable and additional insured endorsements) shall provide that the insurer shall give Bank at least twenty (20) days notice before canceling, amending, or declining to renew its policy. At Bank's request, Borrower shall deliver certified copies of policies and evidence of all premium payments. Proceeds payable under any policy shall, at Bank's option, be payable to Bank on account of the Obligations. Notwithstanding the foregoing, (a) so long as no Event of Default has occurred and is continuing, Borrower shall have the option of applying the proceeds of any casualty policy up to One Hundred Seventy Five Thousand Dollars ($175,000) with respect to any loss, but not exceeding Two Hundred Fifty Thousand Dollars ($250,000) in the aggregate for all losses under all casualty policies in any one year, toward the replacement or repair of destroyed or damaged property; provided that any such replaced or repaired property (i) shall be of equal or like value as the replaced or repaired Collateral and (ii) shall be deemed Collateral in which Bank has been granted a first priority security interest, and (b) after the occurrence and during the continuance of an Event of Default, all proceeds payable under such casualty policy shall, at the option of Bank, be payable to Bank on account of the Obligations. If Borrower fails to obtain insurance as required under this Section 6.7 or to pay any amount or furnish any required proof of payment to third persons and Bank, Bank may make all or part of such payment or obtain such insurance policies required in this Section 6.7, and take any action under the policies Bank deems prudent.

6.8 Operating Accounts.

(a) Maintain its and its Subsidiaries', if any, primary depository, operating accounts and securities accounts with Bank and Bank's affiliates with all excess funds maintained at or invested through Bank or an affiliate of Bank, which accounts shall represent at least (i) 95% of the dollar value or (ii) all but $250,000 of Borrower's and its Subsidiaries' accounts at all financial institutions.

(b) For each Collateral Account that Borrower at any time maintains, Borrower shall cause the applicable bank or financial institution (other than Bank) at or with which any Collateral Account is maintained to execute and deliver a Control Agreement or other appropriate instrument with respect to such Collateral Account to perfect Bank's Lien in such Collateral Account in accordance with the terms hereunder which Control Agreement may not be terminated without the prior written consent of Bank. The provisions of the previous sentence shall not apply to deposit accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrower's employees and identified to Bank by Borrower as such.

6.9 Financial Covenants.

Maintain at all times, to be certified as of the last day of each month, unless otherwise noted, on a consolidated basis with respect to Borrower and its Subsidiaries:

(a) Adjusted Quick Ratio. A ratio of (i) Quick Assets to (ii) Current Liabilities (net of the Litigation Accrual for purposes of the December 31, 2009 test) minus the current portion of Deferred Revenue of at least 1.25 to 1.00.

(b) Adjusted EBITDA. Maintain, measured as of the end of each fiscal quarter during the following periods on a trailing three month basis, Adjusted EBITDA of at least the following:

Trailing Three Month Period Ended	Minimum Adjusted EBITDA
December 31, 2009	$ (1,000,000)
March 31, 2010	$ (250,000)
June 30, 2010	$ 1.00
September 30, 2010	$ 250,000
December 31, 2010, and each fiscal quarter ending thereafter	$ 500,000

6.10 Protection and Registration of Intellectual Property Rights.

(a) (i) Protect, defend and maintain the validity and enforceability of its Intellectual Property; (ii) promptly advise Bank in writing of material infringements of its Intellectual Property; and (iii) not allow any Intellectual Property material to Borrower's business to be abandoned, forfeited or dedicated to the public without Bank's written consent.

(b) If Borrower (i) obtains any Patent, registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, or (ii) applies for any Patent or the registration of any Trademark, then Borrower shall immediately provide written notice thereof to Bank and shall execute such intellectual property security agreements and other documents and take such other actions as Bank shall request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Bank in such property. If Borrower decides to register any Copyrights or mask works in the United States Copyright Office, Borrower shall: (x) provide Bank with at least fifteen (15) days prior written notice of Borrower's intent to register such Copyrights or mask works together with a copy of the application it intends to file with the United States Copyright Office (excluding exhibits thereto); (y) execute an intellectual property security agreement and such other documents and take such other actions as Bank may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Bank in the Copyrights or mask works intended to be registered with the United States Copyright Office; and (z) record such intellectual property security agreement with the United States Copyright Office contemporaneously with filing the Copyright or mask work application(s) with the United States Copyright Office. Borrower shall promptly provide to Bank copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement necessary for Bank to perfect and maintain a first priority security interest in such property.

(c) Provide written notice to Bank within ten (10) days of entering or becoming bound by any Restricted License (other than over-the-counter software that is commercially available to the public). Borrower shall take such steps as Bank requests to obtain the consent of, or waiver by, any person whose consent or waiver is necessary for (i) any Restricted License to be deemed "Collateral" and for Bank to have a security interest in it that might otherwise be restricted or prohibited by law or by the terms of any such Restricted License, whether now existing or entered into in the future, and (ii) Bank to have the ability in the event of a liquidation of any Collateral to dispose of such Collateral in accordance with Bank's rights and remedies under this Agreement and the other Loan Documents.

6.11 Litigation Cooperation. From the date hereof and continuing through the termination of this Agreement, make available to Bank, without expense to Bank, Borrower and its officers, employees and agents and Borrower's Books, to the extent that Bank may deem them reasonably necessary to prosecute or defend any third-party suit or proceeding instituted by or against Bank with respect to any Collateral or relating to Borrower.

6.12 Creation/Acquisition of Subsidiaries. Notwithstanding and without limiting the negative covenant contained in Section 7.3 hereof, in the event Borrower or any Subsidiary creates or acquires any Subsidiary, Borrower and such Subsidiary shall promptly notify Bank of the creation or acquisition of such new Subsidiary and, at Bank's request, in its sole discretion, take all such action as may be reasonably required by Bank

to cause each such Subsidiary to, in Bank's sole discretion, become a co-Borrower or Guarantor under the Loan Documents and grant a continuing pledge and security interest in and to the assets of such Subsidiary (substantially as described on Exhibit A hereto); and Borrower shall grant and pledge to Bank a perfected security interest in the stock, units or other evidence of ownership of each Subsidiary.

6.13 Further Assurances. Execute any further instruments and take further action as Bank reasonably requests to perfect or continue Bank's Lien in the Collateral or to effect the purposes of this Agreement. Deliver to Bank, within five (5) days after the same are sent or received, copies of all correspondence, reports, documents and other filings with any Governmental Authority regarding compliance with or maintenance of Governmental Approvals or Requirements of Law or that could reasonably be expected to have a material effect on any of the Governmental Approvals or otherwise on the operations of Borrower or any of its Subsidiaries.

7 NEGATIVE COVENANTS

Borrower shall not do any of the following without Bank's prior written consent:

7.1 Dispositions. Convey, sell, lease, transfer, assign, or otherwise dispose of (collectively, "**Transfer**"), or permit any of its Subsidiaries to Transfer, all or any material part of its business or property, except for Transfers (a) of Inventory in the ordinary course of business; (b) of worn out or obsolete Equipment; and (c) in connection with Permitted Liens and Permitted Investments.

7.2 Changes in Business, Management, Ownership Control, or Business Locations. (a) Engage in or permit any of its Subsidiaries, if any, to engage in any business other than the businesses currently engaged in by Borrower and such Subsidiary, as applicable, or reasonably related thereto; (b) liquidate or dissolve; or (c) (i) any two of the following four officers: Chief Executive Officer, Chief Operating Officer, Chief Financial Officer and General Counsel, unless Borrower replaces such officers with individuals qualified in Bank's reasonable discretion; or (ii) enter into any transaction or series of related transactions in which the stockholders of Borrower who were not stockholders immediately prior to the first such transaction own more than forty percent (40%) of the voting stock of Borrower immediately after giving effect to such transaction or related series of such transactions (other than by the sale of Borrower's equity securities in a public offering or to venture capital investors so long as Borrower identifies to Bank the venture capital investors prior to the closing of the transaction and provides to Bank a description of the material terms of the transaction).

Borrower shall not, without at least thirty (30) days prior written notice to Bank: (1) add any new offices or business locations, including warehouses (unless such new offices or business locations contain less than Fifty Thousand Dollars ($50,000) in Borrower's assets or property) or deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Ten Thousand Dollars ($10,000) to a bailee at a location other than to a bailee and at a location already disclosed in the Perfection Certificate, (2) change its jurisdiction of organization, (3) change its organizational structure or type, (4) change its legal name, or (5) change any organizational number (if any) assigned by its jurisdiction of organization. If Borrower intends to deliver any portion of the Collateral valued, individually or in the aggregate, in excess of Ten Thousand Dollars ($10,000) to a bailee, and Bank and such bailee are not already parties to a bailee agreement governing both the Collateral and the location to which Borrower intends to deliver the Collateral, then Borrower will first receive the written consent of Bank, and such bailee shall execute and deliver a bailee agreement in form and substance satisfactory to Bank in its sole discretion.

7.3 Mergers or Acquisitions. Merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with any other Person, or acquire, or permit any of its Subsidiaries to acquire, all or substantially all of the capital stock or property of another Person. A Subsidiary may merge or consolidate into another Subsidiary or into Borrower.

7.4 Indebtedness. Create, incur, assume, or be liable for any Indebtedness, or permit any Subsidiary to do so, other than Permitted Indebtedness.

7.5 Encumbrance. Create, incur, allow, or suffer any Lien on any of the Collateral, or assign or convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries to do so, except for Permitted Liens, permit any Collateral not to be subject to the first priority security interest granted herein, or enter into any agreement, document, instrument or other arrangement (except with or in favor of Bank) with any Person which directly or indirectly prohibits or has the effect of prohibiting Borrower or any Subsidiary from assigning, mortgaging, pledging, granting a security interest in or upon, or encumbering any of Borrower's or any Subsidiary's Intellectual Property, except as is otherwise permitted in Section 7.1 hereof and the definition of "Permitted Liens" herein.

7.6 Maintenance of Collateral Accounts. Maintain any Collateral Account except pursuant to the terms of Section 6.8(b) hereof.

7.7 Distributions; Investments. (a) Pay any cash dividends or make any distribution or payment or redeem, retire or purchase any capital stock; or (b) directly or indirectly make any Investment (including, without limitation, any additional Investment in any Subsidiary) other than Permitted Investments, or permit any of its Subsidiaries to do so.

7.8 Transactions with Affiliates. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of Borrower, except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a non-affiliated Person, provided however, that Borrower shall be permitted to extend its lease with Carilion Clinic.

7.9 Subordinated Debt. (a) Make or permit any payment on any Subordinated Debt, except under the terms of any Subordination Agreement, intercreditor, or other similar agreement to which such Subordinated Debt is subject, or (b) amend any provision in any document relating to the Subordinated Debt which would increase the amount thereof or adversely affect the subordination thereof to Obligations owed to Bank.

7.10 Compliance. Become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation U of the Board of Governors of the Federal Reserve System), or use the proceeds of any Credit Extension for that purpose; fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or non-exempt Prohibited Transaction, as defined in ERISA, to occur; fail to comply with the Federal Fair Labor Standards Act or violate any other law or regulation, if the violation could reasonably be expected to have a material adverse effect on Borrower's business, or permit any of its Subsidiaries to do so; withdraw or permit any Subsidiary to withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any present pension, profit sharing and deferred compensation plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

7.11 Subsidiary Limitations. Permit any Subsidiary that is not a Borrower to maintain assets in an aggregate amount for all such Subsidiaries in excess of One Hundred Thousand Dollars ($100,000) at any time.

8 EVENTS OF DEFAULT

Any one of the following shall constitute an event of default (an "Event of Default") under this Agreement:

8.1 Payment Default. Borrower fails to (a) make any payment of principal or interest on any Credit Extension on its due date, or (b) pay any other Obligations within three (3) Business Days after such Obligations are due and payable (which three (3) Business Day cure period shall not apply to payments due on the Revolving Line Maturity Date). During the cure period, the failure to make or pay any payment specified under clause (a) or (b) hereunder is not an Event of Default (but no Credit Extension will be made during the cure period);

8.2 Covenant Default.

(a) Borrower fails or neglects to perform any obligation in Sections 6.2, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, or 6.11, or violates any covenant in Section 7; or

(b) Borrower fails or neglects to perform, keep, or observe any other term, provision, condition, covenant or agreement contained in this Agreement or any Loan Documents, and as to any default (other than those specified in this Section 8) under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure the default within ten (10) days after the occurrence thereof; provided, however, that if the default cannot by its nature be cured within the ten (10) day period or cannot after diligent attempts by Borrower be

cured within such ten (10) day period, and such default is likely to be cured within a reasonable time, then Borrower shall have an additional period (which shall not in any case exceed thirty (30) days) to attempt to cure such default, and within such reasonable time period the failure to cure the default shall not be deemed an Event of Default (but no Credit Extensions shall be made during such cure period). Cure periods provided under this section shall not apply, among other things, to financial covenants or any other covenants set forth in clause (a) above;

8.3 Material Adverse Change. A Material Adverse Change occurs;

8.4 Attachment; Levy; Restraint on Business.

(a) (i) The service of process seeking to attach, by trustee or similar process, any funds of Borrower or of any entity under the control of Borrower (including a Subsidiary) on deposit or otherwise maintained with Bank or any Bank Affiliate, or (ii) a notice of lien or levy is filed against any of Borrower's assets by any government agency, and the same under subclauses (i) and (ii) hereof are not, within ten (10) days after the occurrence thereof, discharged or stayed (whether through the posting of a bond or otherwise); provided, however, no Credit Extensions shall be made during any ten (10) day cure period; or

(b) (i) any material portion of Borrower's assets is attached, seized, levied on, or comes into possession of a trustee or receiver, or (ii) any court order enjoins, restrains, or prevents Borrower from conducting any material part of its business;

8.5 Insolvency. (a) Borrower is unable to pay its debts (including trade debts) as they become due or otherwise becomes insolvent; (b) Borrower begins an Insolvency Proceeding; or (c) an Insolvency Proceeding is begun against Borrower and not dismissed or stayed within thirty (30) days (but no Credit Extensions shall be made while of any of the conditions described in clause (a) exist and/or until any Insolvency Proceeding is dismissed);

8.6 Other Agreements. There is, under any agreement to which Borrower or any Guarantor is a party with a third party or parties, (a) any default resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount individually or in the aggregate in excess of Two Hundred Fifty Thousand Dollars ($250,000); or (b) any default by Borrower, the result of which could have a material adverse effect on Borrower's business;

8.7 Judgments. One or more final judgments, orders, or decrees for the payment of money in an amount, individually or in the aggregate, of at least Two Hundred Fifty Thousand Dollars ($250,000) (not covered by independent third-party insurance as to which liability has been accepted by such insurance carrier) shall be rendered against Borrower and the same are not, within ten (10) days after the entry thereof, discharged or execution thereof stayed or bonded pending appeal, or such judgments are not discharged prior to the expiration of any such stay (provided that no Credit Extensions will be made prior to the discharge, stay, or bonding of such judgment, order, or decree);

8.8 Misrepresentations. Borrower or any Person acting for Borrower makes any representation, warranty, or other statement now or later in this Agreement, any Loan Document or in any writing delivered to Bank or to induce Bank to enter this Agreement or any Loan Document, and such representation, warranty, or other statement is incorrect in any material respect when made;

8.9 Subordinated Debt. An event of default occurs and is continuing under and as defined in any document, instrument, or agreement evidencing any subordinated debt between any Borrower and any creditor of any Borrower that signed a subordination or intercreditor agreement with Bank or is subject to any other similar subordination agreement with Bank, or any creditor that has signed such an agreement with Bank (or is subject to such agreement) breaches any terms of such agreement; or

8.10 Governmental Approvals. Any Governmental Approval shall have been (a) revoked, rescinded, suspended, modified in an adverse manner or not renewed in the ordinary course for a full term or (b) subject to any decision by a Governmental Authority that designates a hearing with respect to any applications for renewal of any of such Governmental Approval or that could result in the Governmental Authority taking any of the actions described in clause (a) above, and such decision or such revocation, rescission, suspension, modification or non-renewal (i) has, or could reasonably be expected to have, a Material Adverse Change, or (ii) adversely affects the legal qualifications of Borrower or any of its Subsidiaries to hold such Governmental Approval in any applicable jurisdiction and such revocation, rescission, suspension, modification or non-renewal could reasonably be expected to affect the status of or legal qualifications of Borrower or any of its Subsidiaries to hold any Governmental Approval in any other jurisdiction.

8.11 Hansen Medical. There is, under any of the Hansen Settlement Documents, any default resulting in a right by Hansen Medical, whether or not exercised, to accelerate the maturity of any Indebtedness or otherwise exercise any remedy that could have a material adverse effect on the Borrower or any Guarantor.

9 BANK'S RIGHTS AND REMEDIES

9.1 Rights and Remedies. While an Event of Default occurs and continues Bank may, without notice or demand, do any or all of the following:

(a) declare all Obligations immediately due and payable (but if an Event of Default described in Section 8.5 occurs all Obligations are immediately due and payable without any action by Bank);

(b) stop advancing money or extending credit for Borrower's benefit under this Agreement or under any other agreement between Borrower and Bank;

(c) demand that Borrower (i) deposit cash with Bank in an amount equal to 105% of the Dollar Equivalent of the aggregate face amount of all Letters of Credit remaining undrawn plus all interest, fees, and costs due or to become due in connection therewith (as estimated by Bank in its good faith business judgment), to secure all of the Obligations relating to such Letters of Credit, as collateral security for the repayment of any future drawings under such Letters of Credit, and Borrower shall forthwith deposit and pay such amounts, and (ii) pay in advance all letter of credit fees scheduled to be paid or payable over the remaining term of any Letters of Credit**;** provided, however, if an Event of Default described in Section 8.5 occurs, the obligation of Borrower to cash collateralize all Letters of Credit remaining undrawn shall automatically become effective without any action by Bank;

(d) terminate any FX Forward Contracts;

(e) settle or adjust disputes and claims directly with Account Debtors for amounts on terms and in any order that Bank considers advisable, notify any Person owing Borrower money of Bank's security interest in such funds, and verify the amount of such account;

(f) make any payments and do any acts it considers necessary or reasonable to protect the Collateral and/or its security interest in the Collateral. Borrower shall assemble the Collateral if Bank requests and make it available as Bank designates. Bank may enter premises where the Collateral is located, take and maintain possession of any part of the Collateral, and pay, purchase, contest, or compromise any Lien which appears to be prior or superior to its security interest and pay all expenses incurred. Borrower grants Bank a license to enter and occupy any of its premises, without charge, to exercise any of Bank's rights or remedies;

(g) apply to the Obligations any (i) balances and deposits of Borrower it holds, or (ii) any amount held by Bank owing to or for the credit or the account of Borrower;

(h) ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell the Collateral. Bank is hereby granted a non-exclusive, royalty-free license or other right to use, without charge, Borrower's labels, Patents, Copyrights, mask works, rights of use of any name, trade secrets, trade names, Trademarks, and advertising matter, or any similar property as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Bank's exercise of its rights under this Section, Borrower's rights under all licenses and all franchise agreements inure to Bank's benefit;

(i) place a "hold" on any account maintained with Bank and/or deliver a notice of exclusive control, any entitlement order, or other directions or instructions pursuant to any Control Agreement or similar agreements providing control of any Collateral;

(j) demand and receive possession of Borrower's Books; and

(k) exercise all rights and remedies available to Bank under the Loan Documents or at law or equity, including all remedies provided under the Code (including disposal of the Collateral pursuant to the terms thereof).

9.2 Power of Attorney. Borrower hereby irrevocably appoints Bank as its lawful attorney-in-fact, exercisable upon the occurrence and during the continuance of an Event of Default, to: (a) endorse Borrower's name on any checks or other forms of payment or security; (b) sign Borrower's name on any invoice or bill of lading for any Account or drafts against Account Debtors; (c) settle and adjust disputes and claims about the Accounts directly with Account Debtors, for amounts and on terms Bank determines reasonable; (d) make, settle, and adjust all claims under Borrower's insurance policies; (e) pay, contest or settle any Lien, charge, encumbrance, security interest, and adverse claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; and (f) transfer the Collateral into the name of Bank or a third party as the Code permits. Borrower hereby appoints Bank as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Bank's security interest in the Collateral regardless of whether an Event of Default has occurred until all Obligations have been satisfied in full and Bank is under no further obligation to make Credit Extensions hereunder. Bank's foregoing appointment as Borrower's attorney in fact, and all of Bank's rights and powers, coupled with an interest, are irrevocable until all Obligations have been fully repaid and performed and Bank's obligation to provide Credit Extensions terminates.

9.3 Protective Payments. If Borrower fails to obtain the insurance called for by Section 6.7 or fails to pay any premium thereon or fails to pay any other amount which Borrower is obligated to pay under this Agreement or any other Loan Document, Bank may obtain such insurance or make such payment, and all amounts so paid by Bank are Bank Expenses and immediately due and payable, bearing interest at the then highest rate applicable to the Obligations, and secured by the Collateral. Bank will make reasonable efforts to provide Borrower with notice of Bank obtaining such insurance at the time it is obtained or within a reasonable time thereafter. No payments by Bank are deemed an agreement to make similar payments in the future or Bank's waiver of any Event of Default.

9.4 Application of Payments and Proceeds. Unless an Event of Default has occurred and is continuing, Bank may apply any funds in its possession, whether from Borrower account balances, payments, or proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, first, to Bank Expenses, including without limitation, the reasonable costs, expenses, liabilities, obligations and attorneys' fees incurred by Bank in the exercise of its rights under this Agreement; second, to the interest due upon any of the Obligations; and third, to the principal of the Obligations and any applicable fees and other charges, in such order as Bank shall determine in its sole discretion. Any surplus shall be paid to Borrower or other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If an Event of Default has occurred and is continuing, Bank may apply any funds in its possession, whether from Borrower account balances, payments, proceeds realized as the result of any collection of Accounts or other disposition of the Collateral, or otherwise, to the Obligations in such order as Bank shall determine in its sole discretion. Any surplus shall be paid to Borrower or to other Persons legally entitled thereto; Borrower shall remain liable to Bank for any deficiency. If Bank, in its good faith business judgment, directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Bank shall have the option, exercisable at any time, of either reducing the Obligations by the principal amount of the purchase price or deferring the reduction of the Obligations until the actual receipt by Bank of cash therefor.

9.5 Bank's Liability for Collateral. So long as Bank complies with reasonable banking practices regarding the safekeeping of the Collateral in the possession or under the control of Bank, Bank shall not be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage to the Collateral; (c) any diminution in the value of the Collateral; or (d) any act or default of any carrier, warehouseman, bailee, or other Person. Borrower bears all risk of loss, damage or destruction of the Collateral.

9.6 No Waiver; Remedies Cumulative. Bank's failure, at any time or times, to require strict performance by Borrower of any provision of this Agreement or any other Loan Document shall not waive, affect, or diminish any right of Bank thereafter to demand strict performance and compliance herewith or therewith. No waiver hereunder shall be effective unless signed by the party granting the waiver and then is only effective for the specific instance and purpose for which it is given. Bank's rights and remedies under this Agreement and the other Loan Documents are cumulative. Bank has all rights and remedies provided under the Code, by law, or in equity. Bank's exercise of one right or remedy is not an election and shall not preclude Bank from exercising any other remedy under this Agreement or other remedy available at law or in equity, and Bank's waiver of any Event of Default is not a continuing waiver. Bank's delay in exercising any remedy is not a waiver, election, or acquiescence.

9.7 Demand Waiver. Borrower waives demand, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees held by Bank on which Borrower is liable.

10 NOTICES

All notices, consents, requests, approvals, demands, or other communication (collectively, "Communication"), other than Advance requests made pursuant to Section 3.4, by any party to this Agreement or any other Loan Document must be in writing and be delivered or sent by facsimile at the addresses or facsimile numbers listed below. Bank or Borrower may change its notice address by giving the other party written notice thereof. Each such Communication shall be deemed to have been validly served, given, or delivered: (a) upon the earlier of actual receipt and three (3) Business Days after deposit in the U.S. mail, registered or certified mail, return receipt requested, with proper postage prepaid; (b) upon transmission, when sent by facsimile transmission (with such facsimile promptly confirmed by delivery of a copy by personal delivery or United States mail as otherwise provided in this Section 10); (c) one (1) Business Day after deposit with a reputable overnight courier with all charges prepaid; or (d) when delivered, if hand-delivered by messenger, all of which shall be addressed to the party to be notified and sent to the address or facsimile number indicated below. Advance requests made pursuant to Section 3.4 must be in writing and may be in the form of electronic mail, delivered to Bank by Borrower at the e-mail address of Bank provided below and shall be deemed to have been validly served, given, or delivered when sent (with such electronic mail promptly confirmed by delivery of a copy by personal delivery or United States mail as otherwise provided in this Section 10). Bank or Borrower may change its address, facsimile number, or electronic mail address by giving the other party written notice thereof in accordance with the terms of this Section 10.

If to Borrower:	Luna Innovations Incorporated Luna Technologies, Inc. c/o Luna Innovations Incorporated 1 Riverside Circle, Suite 400 Roanoke, Virginia 24016 Attn: Scott Graeff Fax: (540) 769-8401 Email: graeffs@lunainnovations.com
If to Bank:	Silicon Valley Bank One Newton Executive Park, Suite 200 2221 Washington Street Newton, Massachusetts 02462 Attn: Mr. Ryan Ravenscroft Fax: (617) 527-0177 Email: rravenscroft@svb.com
with a copy to:	Riemer & Braunstein LLP Three Center Plaza Boston, Massachusetts 02108 Attn: Charles W. Stavros, Esquire Fax: (617) 880-3456 Email: cstavros@riemerlaw.com

11 CHOICE OF LAW, VENUE, JURY TRIAL WAIVER AND JUDICIAL REFERENCE

Massachusetts law governs the Loan Documents without regard to principles of conflicts of law. Borrower and Bank each submit to the exclusive jurisdiction of the State and Federal courts in Massachusetts; provided, however, that nothing in this Agreement shall be deemed to operate to preclude Bank from bringing suit or taking other legal action in any other jurisdiction to realize on the Collateral or any other security for the Obligations, or to enforce a judgment or other court order in favor of Bank. Borrower expressly submits and

consents in advance to such jurisdiction in any action or suit commenced in any such court, and Borrower hereby waives any objection that it may have based upon lack of personal jurisdiction, improper venue, or forum non conveniens and hereby consents to the granting of such legal or equitable relief as is deemed appropriate by such court. Borrower hereby waives personal service of the summons, complaints, and other process issued in such action or suit and agrees that service of such summons, complaints, and other process may be made by registered or certified mail addressed to Borrower at the address set forth in Section 10 of this Agreement and that service so made shall be deemed completed upon the earlier to occur of Borrower's actual receipt thereof or three (3) days after deposit in the U.S. mails, proper postage prepaid. NOTWITHSTANDING ANYTHING TO THE CONTRARY SET FORTH HEREINABOVE, BANK SHALL SPECIFICALLY HAVE THE RIGHT TO BRING ANY ACTION OR PROCEEDING AGAINST BORROWER OR ITS PROPERTY IN THE COURTS OF ANY OTHER JURISDICTION WHICH BANK DEEMS NECESSARY OR APPROPRIATE IN ORDER TO REALIZE ON THE COLLATERAL OR TO OTHERWISE ENFORCE BANK'S RIGHTS AGAINST BORROWER OR ITS PROPERTY.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, BORROWER AND BANK EACH WAIVE THEIR RIGHT TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION ARISING OUT OF OR BASED UPON THIS AGREEMENT, THE LOAN DOCUMENTS OR ANY CONTEMPLATED TRANSACTION, INCLUDING CONTRACT, TORT, BREACH OF DUTY AND ALL OTHER CLAIMS. THIS WAIVER IS A MATERIAL INDUCEMENT FOR BOTH PARTIES TO ENTER INTO THIS AGREEMENT. EACH PARTY HAS REVIEWED THIS WAIVER WITH ITS COUNSEL.

12 GENERAL PROVISIONS

12.1 Termination Prior to Maturity Date. This Agreement may be terminated prior to the Revolving Line Maturity Date by Borrower, effective three (3) Business Days after written notice of termination is given to Bank or if Bank's obligation to fund Credit Extensions terminates pursuant to the terms of Section 2.1.1(b). Notwithstanding any such termination, Bank's lien and security interest in the Collateral shall continue until Borrower fully satisfies its Obligations. If such termination is at Borrower's election, Borrower shall pay to Bank, in addition to the payment of any other expenses or fees then-owing, a termination fee in an amount equal to Fifty Thousand Dollars ($50,000) (one percent (1.00%) of $5,000,000), provided that no termination fee shall be charged if the credit facility hereunder is replaced with a new facility from another division of Silicon Valley Bank. Upon payment in full of the Obligations and at such time as Bank's obligation to make Credit Extensions has terminated, Bank shall release its liens and security interests in the Collateral and all rights therein shall revert to Borrower.

12.2 Successors and Assigns. This Agreement binds and is for the benefit of the successors and permitted assigns of each party. Borrower may not assign this Agreement or any rights or obligations under it without Bank's prior written consent (which may be granted or withheld in Bank's discretion). Bank has the right, without the consent of or notice to Borrower, to sell, transfer, assign, negotiate, or grant participation in all or any part of, or any interest in, Bank's obligations, rights, and benefits under this Agreement and the other Loan Documents.

12.3 Indemnification. Borrower agrees to indemnify, defend and hold Bank and its directors, officers, employees, agents, attorneys, or any other Person affiliated with or representing **Bank** (each, an "Indemnified Person") harmless against: (a) all obligations, demands, claims, and liabilities (collectively, "**Claims**") claimed or asserted by any other party in connection with the transactions contemplated by the Loan Documents; and (b) all losses or expenses (including Bank Expenses) in any way suffered, incurred, or paid by such Indemnified Person as a result of, following from, consequential to, or arising from transactions between Bank and Borrower (including reasonable attorneys' fees and expenses), except for Claims and/or losses directly caused by such Indemnified Person's gross negligence or willful misconduct.

12.4 Time of Essence. Time is of the essence for the performance of all Obligations in this Agreement.

12.5 Correction of Loan Documents. Bank may correct patent errors and fill in any blanks in the Loan Documents consistent with the agreement of the parties.

12.6 Severability of Provisions. Each provision of this Agreement is severable from every other provision in determining the enforceability of any provision.

12.7 Amendments in Writing; Waiver; Integration. No purported amendment or modification of any Loan Document, or waiver, discharge or termination of any obligation under any Loan Document, shall be enforceable or admissible unless, and only to the extent, expressly set forth in a writing signed by the party against which enforcement or admission is sought. Without limiting the generality of the foregoing, no oral promise or statement, nor any action, inaction, delay, failure to require performance or course of conduct shall operate as, or evidence, an amendment, supplement or waiver or have any other effect on any Loan Document. Any waiver granted shall be limited to the specific circumstance expressly described in it, and shall not apply to any subsequent or other circumstance, whether similar or dissimilar, or give rise to, or evidence, any obligation or commitment to grant any further waiver. The Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of the Loan Documents merge into the Loan Documents.

12.8 Counterparts. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Agreement.

12.9 Survival. All covenants, representations and warranties made in this Agreement continue in full force until this Agreement has terminated pursuant to its terms and all Obligations (other than inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) have been paid in full and satisfied. The obligation of Borrower in Section 12.3 to indemnify Bank shall survive until the statute of limitations with respect to such claim or cause of action shall have run.

12.10 Confidentiality. In handling any confidential information, Bank shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (a) to Bank's Subsidiaries or Affiliates; (b) to prospective transferees or purchasers of any interest in the Credit Extensions (provided, however, Bank shall use commercially reasonable efforts to obtain any prospective transferee's or purchaser's agreement to the terms of this provision); (c) as required by law, regulation, subpoena, or other order; (d) to Bank's regulators or as otherwise required in connection with Bank's examination or audit; (e) as Bank considers appropriate in exercising remedies under the Loan Documents; and (f) to third-party service providers of Bank so long as such service providers have executed a confidentiality agreement with Bank with terms no less restrictive than those contained herein. Confidential information does not include information that is either: (i) in the public domain or in Bank's possession when disclosed to Bank under no duty of confidentiality to Borrower, or becomes part of the public domain after disclosure to Bank; or (ii) disclosed to Bank by a third party under no duty of confidentiality to Borrower.

Bank may use confidential information for the development of databases, reporting purposes, and market analysis so long as such confidential information is aggregated and anonymized prior to distribution unless otherwise expressly permitted by Borrower. The provisions of the immediately preceding sentence shall survive the termination of this Agreement.

12.11 Attorneys' Fees, Costs and Expenses. In any action or proceeding between Borrower and Bank arising out of or relating to the Loan Documents, Bank shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, in addition to any other relief to which it may be entitled.

12.12 Right of Set Off. Borrower hereby grants to Bank, a lien, security interest and right of set off as security for all Obligations to Bank, whether now existing or hereafter arising upon and against all deposits, credits, collateral and property, now or hereafter in the possession, custody, safekeeping or control of Bank or any entity under the control of Bank (including a Bank subsidiary) or in transit to any of them. At any time after the occurrence and during the continuance of an Event of Default, without demand or notice, Bank may set off the same or any part thereof and apply the same to any liability or obligation of Borrower even though unmatured and regardless of the adequacy of any other collateral securing the Obligations. ANY AND ALL RIGHTS TO REQUIRE BANK TO EXERCISE ITS RIGHTS OR REMEDIES WITH RESPECT TO ANY OTHER COLLATERAL WHICH SECURES THE OBLIGATIONS, PRIOR TO EXERCISING ITS RIGHT OF SETOFF WITH RESPECT TO SUCH DEPOSITS, CREDITS OR OTHER PROPERTY OF BORROWER ARE HEREBY KNOWINGLY, VOLUNTARILY AND IRREVOCABLY WAIVED.

12.13 Electronic Execution of Documents. The words "execution," "signed," "signature" and words of like import in any Loan Document shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity and enforceability as a manually executed signature or the use of a paper-based recordkeeping systems, as the case may be, to the extent and as provided for in any applicable law, including, without limitation, any state law based on the Uniform Electronic Transactions Act.

12.14 Captions. The headings used in this Agreement are for convenience only and shall not affect the interpretation of this Agreement.

12.15 Construction of Agreement. The parties mutually acknowledge that they and their attorneys have participated in the preparation and negotiation of this Agreement. In cases of uncertainty this Agreement shall be construed without regard to which of the parties caused the uncertainty to exist.

12.16 Relationship. The relationship of the parties to this Agreement is determined solely by the provisions of this Agreement. The parties do not intend to create any agency, partnership, joint venture, trust, fiduciary or other relationship with duties or incidents different from those of parties to an arm's-length contract.

12.17 Third Parties. Nothing in this Agreement, whether express or implied, is intended to: (a) confer any benefits, rights or remedies under or by reason of this Agreement on any persons other than the express parties to it and their respective permitted successors and assigns; (b) relieve or discharge the obligation or liability of any person not an express party to this Agreement; or (c) give any person not an express party to this Agreement any right of subrogation or action against any party to this Agreement.

12.18 Borrower Liability. Either Borrower may, acting singly, request Credit Extensions hereunder. Each Borrower hereby appoints the other as agent for the other for all purposes hereunder, including with respect to requesting Credit Extensions hereunder. Each Borrower hereunder shall be jointly and severally obligated to repay all Credit Extensions made hereunder, regardless of which Borrower actually receives said Credit Extension, as if each Borrower hereunder directly received all Credit Extensions. Each Borrower waives (a) any suretyship defenses available to it under the Code or any other applicable law, and (b) any right to require Bank to: (i) proceed against any Borrower or any other person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. Bank may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right to foreclose by judicial or non-judicial sale) without affecting any Borrower's liability. Notwithstanding any other provision of this Agreement or other related document, each Borrower irrevocably waives all rights that it may have at law or in equity (including, without limitation, any law subrogating Borrower to the rights of Bank under this Agreement) to seek contribution, indemnification or any other form of reimbursement from any other Borrower, or any other Person now or hereafter primarily or secondarily liable for any of the Obligations, for any payment made by Borrower with respect to the Obligations in connection with this Agreement or otherwise and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by Borrower with respect to the Obligations in connection with this Agreement or otherwise. Any agreement providing for indemnification, reimbursement or any other arrangement prohibited under this Section shall be null and void. If any payment is made to a Borrower in contravention of this Section, such Borrower shall hold such payment in trust for Bank and such payment shall be promptly delivered to Bank for application to the Obligations, whether matured or unmatured.

13 DEFINITIONS

13.1 Definitions. As used in the Loan Documents, the word "shall" is mandatory, the word "may" is permissive, the word "or" is not exclusive, the words "includes" and "including" are not limiting, the singular includes the plural, and numbers denoting amounts that are set off in brackets are negative. As used in this Agreement, the following capitalized terms have the following meanings:

"**Account**" is any "account" as defined in the Code with such additions to such term as may hereafter be made, and includes, without limitation, all accounts receivable and other sums owing to Borrower.

"**Account Debtor**" is any "account debtor" as defined in the Code with such additions to such term as may hereafter be made.

"**Adjusted EBITDA**" shall mean (a) Net Income, plus (b) Interest Expense, plus (c) to the extent deducted in the calculation of Net Income, depreciation expense and amortization expense, plus (d) income tax expense, plus (e) to the extent deducted in the calculation of Net Income, non-cash stock compensation expense, less (f) to the extent included in the calculation of Net Income, the reversal of any portion of the Litigation Accrual.

"**Advance**" or "**Advances**" means an advance (or advances) under the Revolving Line.

"**Affiliate**" is, with respect to any Person, each other Person that owns or controls directly or indirectly the Person, any Person that controls or is controlled by or is under common control with the Person, and each of that Person's senior executive officers, directors, partners and, for any Person that is a limited liability company, that Person's managers and members.

"**Agreement**" is defined in the preamble hereof.

"**Availability Amount**" is (a) the lesser of (i) the Revolving Line or (ii) the amount available under the Borrowing Base minus (b) the Dollar Equivalent amount of all outstanding Letters of Credit (including drawn but unreimbursed Letters of Credit plus an amount equal to the Letter of Credit Reserve), minus (c) the FX Reduction Amount, minus (d) any amounts used for Cash Management Services, and minus (e) the outstanding principal balance of any Advances.

"**Bank**" is defined in the preamble hereof.

"**Bank Expenses**" are all audit fees and expenses, costs, and expenses (including reasonable attorneys' fees and expenses) for preparing, amending, negotiating, administering, defending and enforcing the Loan Documents (including, without limitation, those incurred in connection with appeals or Insolvency Proceedings) or otherwise incurred with respect to Borrower.

"**Borrower**" is defined in the preamble hereof.

"**Borrower's Books**" are all Borrower's books and records including ledgers, federal and state tax returns, records regarding Borrower's assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"**Borrowing Base**" is (a) eighty percent (80%) of Eligible Accounts, as determined by Bank from Borrower's most recent Borrowing Base Certificate; provided, however, that Bank may decrease the foregoing percentage in its good faith business judgment based on events, conditions, contingencies, or risks which, as determined by Bank, may adversely affect the Collateral.

"**Borrowing Base Certificate**" is that certain certificate included within each Transaction Report.

"**Borrowing Resolutions**" are, with respect to any Person, those resolutions adopted by such Person's Board of Directors or other appropriate body and delivered by such Person to Bank approving the Loan Documents to which such Person is a party and the transactions contemplated thereby, together with a certificate executed by its secretary on behalf of such Person certifying that (a) such Person has the authority to execute, deliver, and perform its obligations under each of the Loan Documents to which it is a party, (b) that attached as Exhibit A to such certificate is a true, correct, and complete copy of the resolutions then in full force and effect authorizing and ratifying the execution, delivery, and performance by such Person of the Loan Documents to which it is a party, (c) the name(s) of the Person(s) authorized to execute the Loan Documents on behalf of such Person, together with a sample of the true signature(s) of such Person(s), and (d) that Bank may conclusively rely on such certificate unless and until such Person shall have delivered to Bank a further certificate canceling or amending such prior certificate.

"**Business Day**" is any day that is not a Saturday, Sunday or a day on which Bank is closed.

"**Cash Equivalents**" means (a) marketable direct obligations issued or unconditionally guaranteed by the United States or any agency or any State thereof having maturities of not more than one (1) year from the date of acquisition; (b) commercial paper maturing no more than one (1) year after its creation and having the highest rating from either Standard & Poor's Ratings Group or Moody's Investors Service, Inc., (c) Bank's certificates of deposit issued maturing no more than one (1) year after issue; and (d) money market funds at least ninety-five percent (95%) of the assets of which constitute Cash Equivalents of the kinds described in clauses (a) through (c) of this definition.

"**Cash Management Services**" is defined in Section 2.1.4.

"**Code**" is the Uniform Commercial Code, as the same may, from time to time, be enacted and in effect in the Commonwealth of Massachusetts; provided, that, to the extent that the Code is used to define any term herein or in any Loan Document and such term is defined differently in different Articles or Divisions of the Code, the definition of such term contained in Article or Division 9 shall govern; provided further, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection, or priority of, or remedies with respect to, Bank's Lien on any Collateral is governed by the Uniform Commercial Code in effect in a jurisdiction other than the Commonwealth of Massachusetts, the term "**Code**" shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority, or remedies and for purposes of definitions relating to such provisions.

"**Collateral**" is any and all properties, rights and assets of Borrower described on Exhibit A.

"**Collateral Account**" is any Deposit Account, Securities Account, or Commodity Account.

"**Commodity Account**" is any "commodity account" as defined in the Code with such additions to such term as may hereafter be made.

"**Communication**" is defined in Section 10.

"**Compliance Certificate**" is that certain certificate in the form attached hereto as Exhibit B.

"**Contingent Obligation**" is, for any Person, any direct or indirect liability, contingent or not, of that Person for (a) any indebtedness, lease, dividend, letter of credit or other obligation of another such as an obligation, in each case directly or indirectly guaranteed, endorsed, co made, discounted or sold with recourse by that Person, or for which that Person is directly or indirectly liable; (b) any obligations for undrawn letters of credit for the account of that Person; and (c) all obligations from any interest rate, currency or commodity swap agreement, interest rate cap or collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; but "Contingent Obligation" does not include endorsements in the ordinary course of business. The amount of a Contingent Obligation is the stated or determined amount of the primary obligation for which the Contingent Obligation is made or, if not determinable, the maximum reasonably anticipated liability for it determined by the Person in good faith; but the amount may not exceed the maximum of the obligations under any guarantee or other support arrangement.

"**Control Agreement**" is any control agreement entered into among the depository institution at which Borrower maintains a Deposit Account or the securities intermediary or commodity intermediary at which Borrower maintains a Securities Account or a Commodity Account, Borrower, and Bank pursuant to which Bank obtains control (within the meaning of the Code) over such Deposit Account, Securities Account, or Commodity Account.

"**Copyrights**" are any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret.

"**Credit Extension**" is any Advance, Letter of Credit, FX Forward Contract, amount utilized for Cash Management Services, or any other extension of credit by Bank for Borrower's benefit.

"**Current Liabilities**" are all obligations and liabilities of Borrower to Bank, plus, without duplication, the aggregate amount of Borrower's Total Liabilities that mature within one (1) year.

"**Default**" means any event which with notice or passage of time or both, would constitute an Event of Default.

"**Default Rate**" is defined in Section 2.3(b).

"**Deferred Revenue**" is all amounts received or invoiced in advance of performance under contracts and not yet recognized as revenue.

"**Deposit Account**" is any "deposit account" as defined in the Code with such additions to such term as may hereafter be made.

"**Designated Deposit Account**" is Borrower's deposit account, account number 3300288246, maintained with Bank.

"**Dollars**," "**dollars**" or use of the sign "$" means only lawful money of the United States and not any other currency, regardless of whether that currency uses the "$" sign to denote its currency or may be readily converted into lawful money of the United States.

"**Dollar Equivalent**" is, at any time, (a) with respect to any amount denominated in Dollars, such amount, and (b) with respect to any amount denominated in a Foreign Currency, the equivalent amount therefor in Dollars as determined by Bank at such time on the basis of the then-prevailing rate of exchange in San Francisco, California, for sales of the Foreign Currency for transfer to the country issuing such Foreign Currency.

"**Effective Date**" is the date Bank executes this Agreement and as indicated on the signature page hereof.

"**Eligible Accounts**" are Accounts which arise in the ordinary course of Borrower's business that meet all Borrower's representations and warranties in Section 5.3. Bank reserves the right at any time and from time to time after the Effective Date upon notice to Borrower, to adjust any of the criteria set forth below and to establish new criteria in its good faith business judgment. Without limiting the fact that the determination of which Accounts are eligible for borrowing is a matter of Bank's good faith judgment, the following ("Minimum Eligibility Requirements") are the minimum requirements for an Account to be an Eligible Account. Unless Bank agrees otherwise in writing, Eligible Accounts shall not include:

(a) Accounts for which the Account Debtor has not been invoiced or where goods or services have not yet been rendered to the Account Debtor (sometimes called memo billings or pre-billings);

(b) Accounts that the Account Debtor has not paid within ninety (90) days of invoice date, regardless of invoice payment period terms;

(c) Accounts owing from an Account Debtor, fifty percent (50%) or more of whose Accounts have not been paid within ninety (90) days of invoice date;

(d) Accounts billed and/or payable outside the United States;

(e) Accounts with credit balances over ninety (90) days from invoice date;

(f) Accounts owing from an Account Debtor, including Affiliates, whose total obligations to Borrower exceed twenty-five percent (25%) of all Accounts, for the amounts that exceed that percentage, unless Bank approves in writing; provided, however, that for purposes of this clause (f) the account debtor with respect to each Governmental Account shall be the applicable Governmental Agency and not the United States government generally; and provided, further, that for purposes of this clause (f) Governmental Agencies shall not be deemed to be Affiliates of one another or of the United States government;

(g) Accounts subject to contractual arrangements between Borrower and an Account Debtor where payments shall be scheduled or due according to completion or fulfillment requirements to the extent the Account Debtor has a right of offset for damages suffered as a result of Borrower's failure to perform in accordance with the contract (sometimes called contracts accounts receivable, progress billings, milestone billings, or fulfillment contracts);

(h) Accounts owing from an Account Debtor the amount of which may be subject to withholding based on the Account Debtor's satisfaction of Borrower's complete performance (but only to the extent of the amount withheld; sometimes called retainage billings);

(i) Accounts owing from an Account Debtor which does not have its principal place of business in the United States except for Eligible Foreign Accounts;

(j) Accounts owing from the United States or any department, agency, or instrumentality thereof except for Accounts of the United States if Borrower has assigned its payment rights to Bank and the assignment has been acknowledged under the Federal Assignment of Claims Act of 1940, as amended;

(k) Accounts owing from an Account Debtor to the extent that Borrower is indebted or obligated in any manner to the Account Debtor (as creditor, lessor, supplier or otherwise - sometimes called "contra" accounts, accounts payable, customer deposits or credit accounts), with the exception of customary credits, adjustments and/or discounts given to an Account Debtor by Borrower in the ordinary course of its business;

(l) Accounts for demonstration or promotional equipment, or in which goods are consigned, or sold on a "sale guaranteed", "sale or return", "sale on approval", "bill and hold", or other terms if Account Debtor's payment may be conditional;

(m) Accounts that represent non-trade receivables or that are derived by means other than in the ordinary course of Borrower's business;

(n) Accounts for which the Account Debtor is Borrower's Affiliate, officer, employee, or agent;

(o) Accounts in which the Account Debtor disputes liability or makes any claim (but only up to the disputed or claimed amount), or if the Account Debtor is subject to an Insolvency Proceeding, or becomes insolvent, or goes out of business;

(p) Accounts owing from an Account Debtor with respect to which Borrower has received Deferred Revenue (but only to the extent of such Deferred Revenue);

(q) Accounts subject to chargebacks or other payment deductions taken by an Account Debtor;

(r) Accounts for which Bank in its good faith business judgment determines collection to be doubtful;

(s) Accounts for which the Account Debtor is Hansen Medical; and

(t) other Accounts Bank deems ineligible in the exercise of its good faith business judgment.

"**Eligible Foreign Accounts**" are Accounts for which the Account Debtor does not have its principal place of business in the United States but are otherwise Eligible Accounts that Bank pre-approves in writing, on a case-by-case basis.

"**Equipment**" is all "**equipment**" as defined in the Code with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

"**ERISA**" is the Employee Retirement Income Security Act of 1974, and its regulations.

"**Event of Default**" is defined in Section 8.

"**Foreign Currency**" means lawful money of a country other than the United States.

"**Funding Date**" is any date on which a Credit Extension is made to or for the account of Borrower which shall be a Business Day.

"**FX Business Day**" is any day when (a) Bank's Foreign Exchange Department is conducting its normal business and (b) the Foreign Currency being purchased or sold by Borrower is available to Bank from the entity from which Bank shall buy or sell such Foreign Currency.

"**FX Forward Contract**" is defined in Section 2.1.3.

"**FX Reduction Amount**" is defined in Section 2.1.3.

"**GAAP**" is generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and

pronouncements of the Financial Accounting Standards Board or in such other statements by such other Person as may be approved by a significant segment of the accounting profession, which are applicable to the circumstances as of the date of determination.

"**General Intangibles**" is all "general intangibles" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation, all Intellectual Property, claims, income and other tax refunds, security and other deposits, payment intangibles, contract rights, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

"**Governmental Approval**" is any consent, authorization, approval, order, license, franchise, permit, certificate, accreditation, registration, filing or notice, of, issued by, from or to, or other act by or in respect of, any Governmental Authority.

"**Governmental Authority**" is any nation or government, any state or other political subdivision thereof, any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government, any securities exchange and any self-regulatory organization.

"**Guarantor**" is any present or future guarantor of the Obligations.

"**Hansen Medical**" is Hansen Medical, Inc., a Delaware corporation, and each of its Subsidiaries and Affiliates.

"**Hansen Secured Promissory Note**" means the Hansen Settlement Document of that title.

"**Hansen Settlement Documents**" means the Hansen Settlement Documents as defined in the Plan of Reorganization.

"**Hansen Subordinated Loan Documents**" means the Security Agreement, Patent and Trademark Security Agreement, and the Hanson Secured Promissory Note, each as described in the Hansen Settlement Documents, as the same may from time to time be amended, modified, supplemented, extended, renewed, restated or replaced

"**Indebtedness**" is (a) indebtedness for borrowed money or the deferred price of property or services, such as reimbursement and other obligations for surety bonds and letters of credit, (b) obligations evidenced by notes, bonds, debentures or similar instruments, (c) capital lease obligations, and (d) Contingent Obligations.

"**Indemnified Person**" is defined in Section 12.3.

"**Initial Audit**" is Bank's inspection of Borrower's Accounts, the Collateral, and Borrower's Books, with results satisfactory to Bank in its sole and absolute discretion.

"**Insolvency Proceeding**" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"**Intellectual Property**" means all of Borrower's right, title, and interest in and to the following:

(a) its Copyrights, Trademarks and Patents;

(b) any and all trade secrets and trade secret rights, including, without limitation, any rights to unpatented inventions, know-how, operating manuals;

(c) any and all source code;

(d) any and all design rights which may be available to a Borrower;

(e) any and all claims for damages by way of past, present and future infringement of any of the foregoing, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the Intellectual Property rights identified above; and

(f) all amendments, renewals and extensions of any of the Copyrights, Trademarks or Patents.

"**Interest Expense**" means for any fiscal period, interest expense (whether cash or non-cash) determined in accordance with GAAP for the relevant period ending on such date, including, in any event, interest expense with respect to any Credit Extension and other Indebtedness of Borrower and its Subsidiaries, if any, including, without limitation or duplication, all commissions, discounts, or related amortization and other fees and charges with respect to letters of credit and bankers' acceptance financing and the net costs associated with interest rate swap, cap, and similar arrangements, and the interest portion of any deferred payment obligation (including leases of all types).

"**Inventory**" is all "inventory" as defined in the Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

"**Investment**" is any beneficial ownership interest in any Person (including stock, partnership interest or other securities), and any loan, advance or capital contribution to any Person.

"**IP Agreement**" is each Intellectual Property Security Agreement executed and delivered by Borrower to Bank dated as of the date hereof, as may be amended from time to time.

"**Letter of Credit**" means a standby letter of credit issued by Bank or another institution based upon an application, guarantee, indemnity or similar agreement on the part of Bank as set forth in Section 2.1.2.

"**Letter of Credit Application**" is defined in Section 2.1.2(a).

"**Letter of Credit Reserve**" has the meaning set forth in Section 2.1.2(d).

"**Lien**" is a claim, mortgage, deed of trust, levy, charge, pledge, security interest or other encumbrance of any kind, whether voluntarily incurred or arising by operation of law or otherwise against any property.

"**Litigation Accrual**" is a onetime amount accrued and reported by Borrower under GAAP for the first quarter of 2009 between Borrower and Hansen Medical, Inc. in the approximate amount of $36,100,000.

"**Loan Documents**" are, collectively, this Agreement, the Perfection Certificate, the IP Agreements, the Subordination Agreement, the Post-closing Letter, any note, or notes or guaranties executed by Borrower or any Guarantor, and any other present or future agreement between Borrower any Guarantor and/or for the benefit of Bank in connection with this Agreement, all as amended, restated, or otherwise modified.

"**Material Adverse Change**" is (a) a material impairment in the perfection or priority of Bank's Lien in the Collateral or in the value of such Collateral; (b) a material adverse change in the business, operations, or condition (financial or otherwise) of Borrower; (c) a material impairment of the prospect of repayment of any portion of the Obligations or (d) Bank determines, based upon information available to it and in its reasonable judgment, that there is a reasonable likelihood that Borrower shall fail to comply with one or more of the financial covenants in Section 6 during the next succeeding financial reporting period.

"**Minimum Eligibility Requirements**" is defined in the defined term "Eligible Accounts".

"**Net Income**" means, as calculated on a consolidated basis for Borrower and its Subsidiaries, if any, for any period as at any date of determination, the net profit (or loss), exclusive of any extraordinary gains, after provision for taxes, of Borrower and its Subsidiaries for such period taken as a single accounting period.

"**Obligations**" are Borrower's obligation to pay when due any debts, principal, interest, Bank Expenses and other amounts Borrower owes Bank now or later, whether under this Agreement, the Loan Documents, or otherwise, including, without limitation, all obligations relating to letters of credit (including reimbursement obligations for drawn and undrawn letters of credit), cash management services, and foreign exchange contracts, if any, and including interest accruing after Insolvency Proceedings begin and debts, liabilities, or obligations of Borrower assigned to Bank, and to perform Borrower's duties under the Loan Documents.

"**Operating Documents**" are, for any Person, such Person's formation documents, as certified with the Secretary of State of such Person's state of formation on a date that is no earlier than 30 days prior to the Effective Date, and, (a) if such Person is a corporation, its bylaws in current form, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"**Patents**" means all patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same.

"**Payment**" means all checks, wire transfers and other items of payment received by Bank (including proceeds of Accounts and payment of all the Obligations in full) for credit to Borrower's outstanding Credit Extensions or, if the balance of the Credit Extensions has been reduced to zero, for credit to its Deposit Accounts.

"**Perfection Certificate**" is defined in Section 5.1.

"**Permitted Indebtedness**" is:

(a) Borrower's Indebtedness to Bank under this Agreement and the other Loan Documents;

(b) Indebtedness existing on the Effective Date and shown on the Perfection Certificate;

(c) Subordinated Debt, including, without limitation, Subordinated Debt evidenced by the Hansen Secured Promissory Note;

(d) unsecured Indebtedness to trade creditors incurred in the ordinary course of business; and

(e) extensions, refinancings, modifications, amendments and restatements of any items of Permitted Indebtedness (a) through (d) above, provided that the principal amount thereof is not increased or the terms thereof are not modified to impose more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"**Permitted Investments**" are:

(a) Investments shown on the Perfection Certificate and existing on the Effective Date;

(b) Cash Equivalents;

(c) Investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of Borrower's business;

(d) Investments consisting of (i) travel advances and employee relocation loans and other employee loans and advances in the ordinary course of business, and (ii) loans to employees, officers or directors relating to the purchase of equity securities of Borrower or its Subsidiaries pursuant to employee stock purchase plans or agreements approved by Borrower's board of directors;

(e) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business; and

(f) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business; provided that this paragraph (f) shall not apply to Investments of Borrower in any Subsidiary;

"**Permitted Liens**" are:

(a) Liens existing on the Effective Date and shown on the Perfection Certificate or arising under this Agreement and the other Loan Documents;

(b) Liens for taxes, fees, assessments or other government charges or levies, either (i) not due and payable or (ii) being contested in good faith and for which Borrower maintains adequate reserves on its Books, that no notice of any such Lien has been filed or recorded under the Internal Revenue Code of 1986, as amended, and the Treasury Regulations adopted thereunder;

(c) purchase money Liens (i) on Equipment acquired or held by Borrower incurred for financing the acquisition of the Equipment securing no more than Two Hundred Fifty Thousand Dollars ($250,000) in the aggregate amount outstanding, or (ii) existing on Equipment when acquired, if the Lien is confined to the property and improvements and the proceeds of the Equipment;

(d) Liens of carriers, warehousemen, suppliers, or other Persons that are possessory in nature arising in the ordinary course of business so long as such Liens attach only to Inventory, securing liabilities in the aggregate amount not to exceed Two Hundred Fifty Thousand Dollars ($250,000) and which are not delinquent or remain payable without penalty or which are being contested in good faith and by appropriate proceedings which proceedings have the effect of preventing the forfeiture or sale of the property subject thereto;

(e) Liens to secure payment of workers' compensation, employment insurance, old-age pensions, social security and other like obligations incurred in the ordinary course of business (other than Liens imposed by ERISA);

(f) Liens incurred in the extension, renewal or refinancing of the indebtedness secured by Liens described in (a) through (c), but any extension, renewal or replacement Lien must be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness may not increase;

(g) leases or subleases of real property granted in the ordinary course of business, and leases, subleases, non-exclusive licenses or sublicenses of property (other than real property or Intellectual Property) granted in the ordinary course of Borrower's business, if the leases, subleases, licenses and sublicenses do not prohibit granting Bank a security interest;

(h) non-exclusive license of Intellectual Property granted to third parties in the ordinary course of business;

(i) Liens arising from judgments, decrees or attachments in circumstances not constituting an Event of Default under Section 8.4 or 8.7;

(j) Liens in favor of other financial institutions arising in connection with Borrower's deposit and/or securities accounts held at such institutions, provided that Bank has a perfected security interest in the amounts held in such deposit and/or securities accounts; and

(k) Liens securing the Hansen Secured Promissory Note.

"**Person**" is any individual, sole proprietorship, partnership, limited liability company, joint venture, company, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or government agency.

"**Plan of Reorganization**" is the executed First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc., as confirmed by the United States Bankruptcy Court for the Western District of Virginia in Chapter 11 Case Nos. 09-71811 (WFS), jointly administered in a certain Findings of Fact, Conclusions of Law, and Order under 11 USC Section 1129(a) and (b) and Fed. R. Bankr. P. 3020 Confirming First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Innovations, Inc., Debtors and Debtors-In-possession, dated as of January 12, 2010.

"**Post-closing Letter**" is that certain Post Closing Letter executed by Borrower and acknowledged and agreed to by Bank, dated as of the date hereof.

"**Prime Rate**" is the greater of (i) four percent (4.00%) per annum and (ii) Bank's most recently announced "prime rate," even if it is not Bank's lowest rate.

"**Quick Assets**" is, on any date of measurement, Borrower's unrestricted cash maintained at Bank plus Borrower's Cash Equivalents maintained at Bank plus Borrower's net billed accounts receivable.

"**Registered Organization**" is any "registered organization" as defined in the Code with such additions to such term as may hereafter be made.

"**Requirement of Law**" is as to any Person, the organizational or governing documents of such Person, and any law (statutory or common), treaty, rule or regulation or determination of an arbitrator or a court or other Governmental Authority, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"**Reserves**" means, as of any date of determination, such amounts as Bank may from time to time establish and revise in good faith reducing the amount of Advances, Letters of Credit and other financial accommodations which would otherwise be available to Borrower under the lending formulas: (a) to reflect events, conditions, contingencies or risks which, as determined by Bank in good faith, do or may affect (i) the Collateral or any other property which is security for the Obligations or its value (including without limitation any increase in delinquencies of Accounts), (ii) the assets or business of Borrower or any guarantor, or (iii) the security interests and other rights of Bank in the Collateral (including the enforceability, perfection and priority thereof); or (b) to reflect Bank's good faith belief that any collateral report or financial information furnished by or on behalf of Borrower or any guarantor to Bank is or may have been incomplete, inaccurate or misleading in any material respect; or (c) in respect of any state of facts which Bank determines in good faith constitutes an Event of Default or may, with notice or passage of time or both, constitute an Event of Default.

"**Responsible Officer**" is any of the Chief Executive Officer, President, Chief Financial Officer and Controller of Borrower.

"**Restricted License**" is any material license or other agreement with respect to which Borrower is the licensee (a) that prohibits or otherwise restricts Borrower from granting a security interest in Borrower's interest in such license or agreement or any other property of Borrower, or (b) for which a default under or termination of could interfere with the Bank's right to sell any Collateral.

"**Revolving Line**" is an Advance or Advances in an amount not to exceed Five Million Dollars ($5,000,000).

"**Revolving Line Maturity Date**" is February 17, 2011.

"**SEC**" shall mean the Securities and Exchange Commission, any successor thereto, and any analogous Governmental Authority

"**Securities Account**" is any "securities account" as defined in the Code with such additions to such term as may hereafter be made.

"**Streamline Period**" is, on and after the Effective Date, the period (i) commencing on the first day of the month following any thirty (30) day period in which Borrower has, for each consecutive day in the immediately-preceding thirty (30) day period, maintained unrestricted cash at Bank plus the Availability Amount in an amount at all times greater than Five Million Dollars ($5,000,000), as determined by Bank, in its sole discretion

(the "**Streamline Balance**"); and (ii) ending on the earlier to occur of (A) the occurrence of a Default or an Event of Default; and (B) the first day thereafter in which Borrower fails to maintain the Streamline Balance, as determined by Bank, in its sole discretion. Upon the termination of a Streamline Period, Borrower must maintain the Streamline Balance each consecutive day for thirty (30) consecutive days, as determined by Bank, in its sole discretion, prior to entering into a subsequent Streamline Period. All Streamline Periods shall commence on the first day of the month following the month in which the Borrower has maintained the Streamline Balance as described above. Borrower shall give Bank prior written notice of Borrower's intention to enter into any such Streamline Period.

"**Subordination Agreement**" is any agreement by and between Bank and any holder of Subordinated Debt, including, without limitation, the Subordination Agreement, dated as of the date hereof, by and between Bank and Hansen Medical, Inc.

"**Subordinated Debt**" is indebtedness incurred by Borrower subordinated to all of Borrower's now or hereafter indebtedness to Bank (pursuant to a subordination, intercreditor, or other similar agreement in form and substance satisfactory to Bank entered into between Bank and the other creditor), on terms acceptable to Bank.

"**Subsidiary**" is, as to any Person, a corporation, partnership, limited liability company or other entity of which shares of stock or other ownership interests having ordinary voting power (other than stock or such other ownership interests having such power only by reason of the happening of a contingency) to elect a majority of the board of directors or other managers of such corporation, partnership or other entity are at the time owned, or the management of which is otherwise controlled, directly or indirectly through one or more intermediaries, or both, by such Person. Unless the context otherwise requires, each reference to a Subsidiary herein shall be a reference to a Subsidiary of Borrower.

"**Total Liabilities**" is on any day, obligations that should, under GAAP, be classified as liabilities on Borrower's consolidated balance sheet, including all Indebtedness.

"**Trademarks**" means any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks.

"**Transaction Report**" is the Bank's standard reporting package for reporting sales, collections, credit memos and other Collateral adjustments, provided by Bank to Borrower.

"**Transfer**" is defined in Section 7.1.

"**Unused Revolving Line Facility Fee**" is defined in Section 2.4(d).

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as a sealed instrument under the laws of the Commonwealth of Massachusetts as of the Effective Date.

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/ Ryan Ravenscroft
Name: Ryan Ravenscroft
Title: Vice President

Effective Date: February 18, 2010

EXHIBIT A – COLLATERAL DESCRIPTION

The Collateral consists of all of Borrower's right, title and interest in and to the following personal property:

All goods, Accounts (including health-care receivables), Equipment, Inventory, contract rights or rights to payment of money, leases, license agreements, franchise agreements, General Intangibles, commercial tort claims, documents, instruments (including any promissory notes), chattel paper (whether tangible or electronic), cash, deposit accounts, fixtures, letters of credit rights (whether or not the letter of credit is evidenced by a writing), securities, and all other investment property, supporting obligations, and financial assets, whether now owned or hereafter acquired, wherever located; and

all Borrower's Books relating to the foregoing, and any and all claims, rights and interests in any of the above and all substitutions for, additions, attachments, accessories, accessions and improvements to and replacements, products, proceeds and insurance proceeds of any or all of the foregoing.

EXHIBIT B

COMPLIANCE CERTIFICATE

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

Date: _____

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 within120 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	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	As amended and within 30 days following approval by Borrower's board	Yes	No

The following Intellectual Property was registered after the Effective Date (if no registrations, state "None")

Financial Covenant	Required	Actual	Complies	
Maintain as indicated:				
Minimum Adjusted Quick Ratio	**1.25:1.00**	**____:1.0**	**Yes**	**No**
Minimum Adjusted EBITDA	*****	**$ ____**	**Yes**	**No**

* See Section 6.9(b) of the Loan and Security Agreement

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

Schedule 1 to Compliance Certificate

Financial Covenants of Borrower

Dated: _____

I. **Adjusted Quick Ratio** (Section 6.9(a))

Required: 1.25:1.00

Actual:

A. Aggregate value of Borrower's unrestricted cash at Bank and Borrower's Cash Equivalents at Bank	$ _____
B. Aggregate value of the net billed accounts receivable of Borrower and its Subsidiaries	$ _____
C. Quick Assets (the sum of line A plus line B)	$ _____
D. Current Liabilities of Borrower and its Subsidiaries	$ _____
E. Current portion of Deferred Revenue	$ _____
F. Adjusted Current Liabilities (line D minus line E)	$ _____
G. Adjusted Quick Ratio (line D divided by line F)	_____

Is line G equal to or greater than 1.25:1:00?

_____ No, not in compliance _____ Yes, in compliance

II. **Adjusted EBITDA** (Section 6.9(b))

Required: Maintain, measured as of the end of each fiscal quarter during the following periods on a trailing three month basis, Adjusted EBITDA of at least the following:

Trailing Three Month Period Ended	Minimum Adjusted EBITDA
December 31, 2009	$ (1,000,000)
March 31, 2010	$ (250,000)
June 30, 2010	$ 1.00
September 30, 2010	$ 250,000
December 31, 2010, and each fiscal quarter ending thereafter	$ 500,000

Actual: All amounts calculated on a trailing three month basis:

A. Net Income $ _____

B. To the extent included in the determination of Net Income

1. The provision for income taxes $ _____
2. Depreciation expense $ _____
3. Amortization expense $ _____
4. Net Interest Expense $ _____
5. Non-cash stock compensation expense $ _____
6. The one-time reversal of the Litigation Accrual (as applicable) $ _____
7. The sum of lines 1 through 5 minus line 6 $ _____

C. Adjusted EBITDA (line A plus line B.7) _____

Is line C equal to or greater than $ [ ]?

_____ No, not in compliance _____ Yes, in compliance

Exhibit 10.6

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

LICENSE AGREEMENT BETWEEN HANSEN AND LUNA

This License Agreement between Hansen and Luna ("**Agreement**") is dated and made effective as of the Effective Date by and between Luna Innovations Incorporated, a Delaware corporation, together with Luna Technologies, Inc., a Delaware corporation (acting jointly and severally, individually and collectively, "**Luna**") and Hansen Medical, Inc., a Delaware corporation ("**Hansen**"). Individually, Luna and Hansen are referred to individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

WHEREAS, (a) Luna Innovations Incorporated and Hansen entered into those certain Terms and Conditions of Sale and Service executed by Hansen on September 27, 2006 and Luna on September 28, 2006 (the "**Hansen-Luna Agreement**") and that certain Mutual Nondisclosure Agreement between Hansen and Luna Innovations Incorporated dated April 1, 2006 (the "**NDA**"), which NDA is acknowledged below and which Hansen-Luna Agreement is amended and restated in its entirety as of the Effective Date by the applicable provisions of this Agreement (so that all surviving provisions constituting the Hansen-Luna Agreement as amended are contained and set forth in this Agreement), and which Hansen-Luna Agreement, as so amended and restated, shall be incorporated into and made a part of that certain Confidential Settlement Agreement (the "**Settlement Agreement**") created to implement the Amended Plan (as defined below); and (b) the Hansen-Luna Agreement shall be interpreted in accordance with the applicable terms and conditions of this Agreement and otherwise in accordance with the Settlement Agreement and Amended Plan, and such interpretation shall be effective as against any other party in interest in the Chapter 11 Case (as defined below) or other third party;

WHEREAS, Luna and Hansen are parties to the case *Hansen Medical Inc. v. Luna Innovations Inc.*, No. 07-088551, in the Superior Court of the State of California, County of Santa Clara relating to certain disputes arising out of the Hansen-Luna Agreement and/or the NDA (the "**Litigation**");

WHEREAS, Luna and Hansen wish to settle the Litigation in the context of the First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc. under Chapter 11 of the Bankruptcy Code ("**Amended Plan**") in Luna's Chapter 11 Case No. 09-71811 ("**Chapter 11 Case**") pending in the U.S. Bankruptcy Court for the Western District of Virginia ("**Bankruptcy Court**") and approved by the Bankruptcy Court's Order Confirming First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc. ("**Confirmation Order**"). This Agreement is one of the "**Hansen Settlement Documents**" (as defined in the Amended Plan) referenced and incorporated in the Amended Plan and Confirmation Order;

WHEREAS, in connection with the settlement of the Litigation through the Amended Plan: (i) Luna agrees to grant a license to Hansen to certain intellectual property related to fiber optic shape sensing or localization technologies, as provided hereinafter and Hansen desires to receive such license; (ii) Luna and Hansen desire to confirm Hansen's ownership of certain intellectual property developed for, and assigned to, Hansen under the Hansen-Luna Agreement and (iii) Hansen agrees to grant and/or confirm the grant of a license to Luna to certain existing intellectual property (including the intellectual property described in the foregoing clause (ii)), as provided hereinafter, and Luna desires to receive such license, in all cases in accordance with the terms and conditions hereof;

WHEREAS, Luna and Intuitive (as defined below) are entering into that certain License Agreement Between Intuitive and Luna ("**Intuitive-Luna License**") as of the Effective Date to allow, among other things, Intuitive and Hansen to continue to work with Luna to develop Fiber Optic Shape Sensing/Localization Technology within the Medical Robotics field (each as defined below);

WHEREAS, Hansen and Intuitive have entered into that certain Cross-License Agreement dated as of September 5, 2005 (the "**2005 Hansen-Intuitive Cross License**"), and it is the intent of the Parties and Intuitive that such 2005 Hansen-Intuitive Cross License shall remain in full force and effect and the terms of such 2005 Hansen-Intuitive Cross License shall in no way be modified, affected or superseded by this Agreement;

NOW, **THEREFORE**, in view of the terms and conditions described below and for other valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

AGREEMENT

1. DEFINITIONS. The following initially capitalized words and phrases (and derivative forms of these capitalized words and phrases) shall have the stated meanings below. The terms "include," "includes," "including" shall be deemed followed by the phrase "without limitation" regardless of whether followed by that phrase:

1.1 "**Affiliates**" means any corporation or other entity that is directly or indirectly controlling, controlled by or under common control with a Party. For purposes of this definition, "control" of an entity means the direct or indirect ownership of securities representing fifty percent (50%) or more of the total voting power entitled to vote in elections of such entity's board of directors or other governing authority, or equivalent interests conferring the power to direct or cause the direction of the governance or policies of such entity. The meaning of "Affiliates" shall be subject to the terms and conditions of Section 6.3.

1.2 "**Colonoscopy Non-Robotic Field**" means [****].

1.3 "**Created By Luna**" means, with respect to Technology, patent rights or other intellectual or industrial property rights, to the extent such Technology, patent rights and other intellectual or industrial property rights were developed, made, created, conceived, reduced to practice (in whole or in part) by employees of Luna or its Affiliates or by other individuals or entities obligated to assign rights therein to Luna or an Affiliate of Luna (in all such cases whether solely or jointly with others), provided, however, that the meaning of "Created By Luna" shall be subject to the terms and conditions of Section 6.3.

1.4 "**Development and Supply Agreement**" means that certain Development and Supply Agreement being entered into by and between the Parties concurrently herewith.

1.5 "**Effective Date**" means the Effective Date of the Amended Plan after entry of the Confirmation Order by the Bankruptcy Court, which the Parties hereby confirm to be January 12, 2010.

1.6 "**Endoluminal** Non-Robotic Field" means [****].

1.7 "**Fiber Optic Shape Sensing/Localization Technology**" or "**FOSSL Technology**" means [****].

1.8 "**Hansen Generated Luna Agreement IP**" means all right, title and interest (including patent rights, copyrights, trade secret rights, mask work rights, trademark rights and all other intellectual property and industrial property rights of any sort throughout the world) relating to any and all inventions (whether or not patentable), works of authorship, mask works, designations, designs, know-how, ideas and information made or conceived or reduced to practice, in whole or in part, by Hansen under the Hansen-Luna Agreement in connection with the projects to develop products specified in the exhibits to the Hansen-Luna Agreement (but not including any technology or intellectual property developed by Hansen prior to or otherwise independently of such projects).

1.9 "**Hansen Licensed IP**" means (a) the Hansen Patents; (b) the Hansen Generated Luna Agreement IP; and (c) the Hansen-Luna Agreement IP.

1.10 "**Hansen Patents**" means patent applications listed on Exhibit E hereto regarding certain Fiber Optic Shape Sensing/Localization Technology filed by Hansen as of the Effective Date with the United States Patent and Trademark Office (and/or under the PCT system), together with any renewal, division, continuation, continued prosecution application or continuation-in-part (solely to the extent claiming priority back to the applications listed on Exhibit E) of any of such patent applications, any and all patents or certificates of invention issuing thereon, and any and all reissues, reexaminations, extensions, divisions, renewals, substitutions, confirmations, registrations and revalidations of or to any of the foregoing, and any foreign counterparts of any of the foregoing, in each case to the extent claiming or covering any Fiber Optic Shape Sensing/Localization Technology.

1.11 "**Hansen Products**" means any Product for which Hansen or its Affiliates has received or is in the process of seeking regulatory approval to market from the Food and Drug Administration ("**FDA**") (or any FOSSL Technology-enabled component or subsystem thereof) which has been, is or will be developed by or for Hansen or its Affiliates, or manufactured by or for Hansen or its Affiliates, or sold by or for Hansen or its Affiliates.

1.12 "**Hansen-Luna Agreement IP**" means all right, title and interest (including patent rights, copyrights, trade secret rights, mask work rights, trademark rights and all other intellectual property and industrial property rights of any sort throughout the world) relating to any and all inventions (whether or not patentable), works of authorship, mask works, designations, designs, know-how, ideas and information made or conceived or reduced to practice, in whole or in part, by Luna under the Hansen-Luna Agreement in connection with the projects to develop products specified in the exhibits to the Hansen-Luna Agreement (but not including any technology or intellectual property developed by Luna prior to or otherwise independently of such projects, including without limitation all technology and intellectual property identified on Exhibit 5 to the Hansen-Luna Agreement). "Hansen-Luna Agreement IP" includes, but is not limited to, the technologies described in Exhibit A.

1.13 "**Intuitive**" means Intuitive Surgical, Inc., a Delaware corporation.

1.14 "**Intuitive-Luna Agreement**" means that certain Development and Supply Agreement dated June 11, 2007 between Intuitive and Luna Innovations Incorporated, as restated and amended by Luna and Intuitive as of the Effective Date pursuant to the Amendment to the 2007 Development and Supply Agreement (the "Amendment") in connection with entering into the Intuitive-Luna License.

1.15 "**Intuitive-Luna Lice**nse" has the meaning given to such term in the recitals.

1.16 "**Intuitive Products**" means any Product for which Intuitive or its Affiliates has received or is in the process of seeking regulatory approval to market from the Food and Drug Administration (or any FOSSL Technology-enabled component or subsystem thereof) which has been, is or will be developed by or for Intuitive or its Affiliates, or manufactured by or for Intuitive or its Affiliates, or sold by or for Intuitive or its Affiliates.

1.17 "**Licensed IP**" means the Licensed Patents and the Licensed Technology.

1.18 "**Licensed Patents**" means any and all patents, inventors' certificates and patent applications throughout the world to the extent claiming, or which would (absent a license) be infringed by the manufacture, use or sale of, any FOSSL Technology, in each case which are owned, licensed (with a right to sublicense) or otherwise controlled by Luna or its Affiliates (subject to Section 6.3) as of the Effective Date or thereafter (including without limitation those listed patent applications and patents set forth in Exhibit B, and any patents or patent applications which claim, or which would (absent a license) be infringed by the manufacture, use or sale of, the subject matter in Exhibit C or any other FOSSL Technology described in subsections (a) through (d) of Section 1.19 (Licensed Technology) below), together with any renewal, division, continuation, continued prosecution application or continuation-in-part of any of such patents, certificates and applications, any and all patents or certificates of invention issuing thereon, and any and all reissues, reexaminations, extensions, divisions, renewals, substitutions, confirmations, registrations and revalidations of or to any of the foregoing, and any foreign counterparts of any of the foregoing, in each case to the extent claiming, or which would (absent a license) be infringed by the manufacture, use or sale of, any FOSSL Technology.

1.19 "**Licensed Technology**" means any and all FOSSL Technology (together with all intellectual and industrial property rights of any sort throughout the world therein or thereunder) other than the Licensed Patents, in each case which are owned, licensed (with a right to sublicense) or otherwise controlled by Luna or its Affiliates (subject to Section 6.3) as of the Effective Date or thereafter, including without limitation (a) FOSSL Technology owned, licensed (with a right to sublicense) or otherwise controlled by Luna prior to the Effective Date, (b) FOSSL Technology Created By Luna in connection with the Intuitive-Luna Agreement (whether before, on or after the Effective Date), (c) FOSSL Technology otherwise Created By Luna prior to, and owned or controlled by Luna or its Affiliates as of, the Effective Date; (d) FOSSL Technology Created By Luna, and owned or controlled by or licensed to Luna or its Affiliates, under or in connection with Luna's research agreement with the Office of Naval Research dated March 6, 2008 (Fiber Optics Shape Sensing for DADS Arrays, N00014-08-C-0156). "Licensed Technology" includes, but is not limited to, any of the foregoing related to the technologies described in Exhibit A and in Exhibit C.

1.20 "**Medical Fields**" means the Medical Robotics Field, the Non-Robotic Medical Devices Field (including the Colonoscopy Non-Robotic Field), the Orthopedics Field, the Vascular Non-Robotic Field and the Endoluminal Non-Robotic Field.

1.21 "**Medical Robotics Field**" means [****].

1.22 "**Non-Robotic Medical Devices Field**" means [****].

1.23 "**Orthopedics Field**" means [****].

1.24 "**Product**" means any device, instrument, diagnostic, therapeutic, product, system, application or services.

1.25 "**SDOF Medical Robotics**" means [****].

1.26 "**Subsidiaries**" means, with respect to any entity, all other entities in which such aforementioned entity has a controlling ownership interest (directly or indirectly) of at least fifty-one percent (51%) of the issued and outstanding equity interests of such other entities.

1.27 "**Technology**" means 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, devices, prototypes, substances, components, inventions (whether or not patentable), mask works, ideas, trade secrets and other information or materials, in tangible or intangible form.

1.28 "**Vascular Non-Robotic Field**" means [****].

1.29 "**2005 Hansen-Intuitive Cross License**" has the meaning given to such term in the recitals.

2. LICENSE GRANTS

2.1 By Luna.

(a) Medical Robotics Field. Subject to the provisions in this Section 2.1(a) below, Luna hereby grants to Hansen and its Affiliates a co-exclusive, worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products, in each case solely within the Medical Robotics Field. The foregoing license shall be co-exclusive between Intuitive and Hansen, which for purposes of such license means that each of Hansen (and its Affiliates) and Intuitive (and its Affiliates) shall enjoy all the rights of an exclusive licensee (but for the rights of the other), except that: (i) Hansen shall have no right to, and shall not, license or sublicense any Licensed IP in the Medical Robotics Field except that Hansen shall have the right to sublicense (through one or multiple tiers) Licensed IP in the Medical Robotics Field solely (A) in connection with the development, manufacture, use or sale of Hansen Products, (B) with respect to SDOF Medical Robotics for which Hansen will have the sole right to grant naked sublicenses to third parties (without any restrictions or interference from either Intuitive or Luna) and Intuitive has no right to grant such naked sublicenses, and/or (C) as otherwise mutually agreed by Intuitive and Hansen and Luna, (ii) Intuitive shall have no right to, and shall not, license or sublicense any Licensed IP in the Medical Robotics Field except that Intuitive shall have the right to sublicense (through one or multiple tiers) Licensed IP in the Medical Robotics Field solely in connection with the development, manufacture, use or sale of Intuitive Products or as otherwise mutually agreed by Hansen and Intuitive and Luna, and (iii) Luna shall retain no rights to or under any Licensed IP within the Medical Robotics Field except (x) solely to provide services to Hansen as authorized by Hansen and/or services to Intuitive as authorized by Intuitive and (y) solely to perform research and development activities pursuant to contracts with the United States government in the Medical Robotics Field (and to grant licenses to the applicable United States government agency as required in connection therewith) but only with the prior written approval of both Hansen and Intuitive, which approval may be given or withheld in the sole discretion of both Hansen and Intuitive, and Luna shall provide to Hansen and Intuitive for their review a copy of each such proposed United States government contract so that they can each evaluate whether or not to approve such activities and/or license grants. To the extent any Licensed IP or Product has any application or use in both the Medical Robotics Field and any other field, this Section 2.1(a) shall not, and is not intended to, prohibit, limit or restrict any such application or use (including development, manufacture, use, offer for sale or sale) in such other field(s), subject to the other provisions (including license grants) in the other sections of this Agreement.

(b) Non-Robotic Medical Devices Field. Subject to the provisions in this Section 2.1(b) below, Luna hereby grants to Hansen and its Affiliates a co-exclusive, worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products, in each case solely within the Non-Robotic Medical Devices Field (which includes, for the avoidance of doubt, the Colonoscopy Non-Robotic Field). The foregoing license shall be co-exclusive between Hansen and Luna, which for purposes of such license means that each of Hansen (and its Affiliates) and Luna (and its Affiliates) shall enjoy all the rights of an exclusive licensee (but for the rights of the other hereunder), except that: (i) Hansen shall have the right to sublicense such license through one or multiple tiers in connection with the development, manufacture, use or sale of any Products (i.e., naked sublicenses are allowed), and (ii) Luna shall have the right to license the Licensed IP within the Non-Robotic Medical Devices Field through one or multiple tiers in connection with the development, manufacture, use or sale of any Products (i.e., naked licenses are allowed). For purposes of clarity, subject only to the foregoing grant to Hansen and its Affiliates, Luna hereby reserves for itself and its Affiliates all of Luna's other rights and interests in and to the Licensed IP in the Non-Robotic Medical Devices Field, including, without limitation, the right under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products within the Non-Robotic Medical Devices Field. Notwithstanding the foregoing, the license granted in this Section 2.1(b) shall be non-exclusive with respect to any Licensed Technology that constitutes "Intuitive New Intellectual Property" as defined in the Intuitive-Luna Agreement.

(c) Orthopedics Field; Vascular Non-Robotic Field. Subject to the provisions in this Section 2.1(c) below, Luna hereby grants to Hansen and its Affiliates an exclusive (even as to Luna and Intuitive), worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license (with the right to sublicense through one or multiple tiers) under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products in each case solely within the Orthopedics Field and the Vascular Non-Robotic Field (i.e., naked sublicenses within such fields are allowed). Luna shall retain no rights to or under any Licensed IP within the Orthopedics Field or within the Vascular Non-Robotic Field except (i) solely to provide services to Hansen as authorized by Hansen and (ii) solely to perform research and development activities pursuant to contracts with the United States government in the Orthopedics Field or in the Vascular Non-Robotic Field (and to grant licenses to the applicable United States government agency as required in connection therewith) but only with the prior written approval of Hansen, which approval may be given or withheld in Hansen's sole discretion, and Luna shall provide to Hansen for its review a copy of each such proposed United States government contract so that Hansen can evaluate whether or not to approve such activities and/or license grants. To the extent any Licensed IP or Product has any application or use in the Orthopedics Field and any other field(s) (other than the Vascular Non-Robotic Field) or the Vascular Non-Robotic Field and any other field(s) (other than the Orthopedics Field), this Section 2.1(c) shall not, and is not intended to, prohibit, limit or restrict any such application or use (including development, manufacture, use, offer for sale or sale) in such other field(s), subject to the other provisions (including license grants) in the other sections of this Agreement and subject to provisions (including license grants) of the Intuitive-Luna License. Notwithstanding the foregoing, the license granted in this Section 2.1(c) shall be non-exclusive with respect to any Licensed Technology that constitutes "Intuitive New Intellectual Property" as defined in the Intuitive-Luna Agreement.

(d) Endoluminal Non-Robotic Field. Subject to the provisions in this Section 2.1(d) below, Luna hereby grants to Hansen and its Affiliates an exclusive (even as to Luna and Intuitive), worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license (with the right to sublicense through one or multiple tiers) under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products in each case solely within the Endoluminal Non-Robotic Field (i.e., naked sublicenses within the Endoluminal Non-Robotic Field are allowed). Luna shall retain no rights to or under any Licensed IP within the Endoluminal Non-Robotic Field except (i) solely to provide services to Hansen as authorized by Hansen, (ii) solely to manufacture and have manufactured Products for Hansen within the Endoluminal Non-Robotic Field in accordance with the Development and Supply Agreement (and any commercial supply agreement entered into between the Parties in connection therewith), and (iii) solely to perform research and development activities pursuant to contracts with the United States government in the Endoluminal Non-Robotic Field (and to grant licenses to the applicable United States government agency as required in connection therewith) but only with the prior written approval of Hansen, which approval may be given or withheld in Hansen's sole discretion, and Luna shall provide to Hansen for its review a copy of each such proposed United States government contract so that Hansen can evaluate whether or not to approve such activities and/or license grants. To the extent any Licensed IP or Product has any application or use in the Endoluminal Non-Robotic Field and any other field(s), this Section 2.1(d) shall not, and is not intended to, prohibit, limit or restrict any such application or use (including development, manufacture, use, offer for sale or sale) in such other field(s), subject to the other provisions (including license grants) in the other sections of this Agreement and subject to provisions (including license grants) of the Intuitive-Luna License. Notwithstanding any of the foregoing to the contrary, in the event the foregoing license to Hansen in the Endoluminal Non-Robotic Field is converted from exclusive to co-exclusive in accordance with the terms and conditions of Section 3.8.1 of the Development and Supply Agreement, then, as of the date of such conversion, the rights of Hansen and Luna under the Licensed IP within the Endoluminal Non-Robotic Field shall be the same as the rights of Hansen and Luna under the Licensed IP within the Non-Robotic Medical Devices Field in accordance with Section 2.1(b). Notwithstanding the foregoing, the license granted in this Section 2.1(d) shall be non-exclusive with respect to any Licensed Technology that constitutes "Intuitive New Intellectual Property" as defined in the Intuitive-Luna Agreement.

(e) Certain Manufacturing Arrangements. The Parties acknowledge that they have agreed to certain manufacturing arrangements within the Endoluminal Non-Robotic Field and the Non-Robotic Medical Field pursuant to and in accordance with the terms and conditions of Section 3.8 of the Development and Supply Agreement.

2.2 Hansen-Luna Agreement IP; License Grants by Hansen.

(a) Hansen-Luna Agreement IP. Luna hereby acknowledges, agrees and confirms that, pursuant to Section 5 of the Hansen-Luna Agreement: (i) Hansen owns all right, title and interest in and to the Hansen-Luna Agreement IP and all Hansen-Luna Agreement IP has been assigned to Hansen pursuant to the Hansen-Luna Agreement as of the date when such Hansen-Luna Agreement IP was first Created By Luna thereunder; and (ii) Luna agreed to assist Hansen in protecting certain of its intellectual property, and accordingly, but without in any way limiting or expanding such agreement, Luna shall reasonably cooperate with Hansen to the extent set forth in the next two sentences (which the Parties acknowledge are the same in substance and scope as the last two sentences of the second paragraph of such Section 5 of the Hansen-Luna Agreement and restate and amend such last two sentences). Luna shall further assist Hansen, at Hansen's expense, to further evidence, record and perfect such assignments of the Hansen-Luna Agreement IP, and to perfect, obtain, maintain, enforce, and defend

any rights assigned. Luna hereby irrevocably designates and appoints Hansen as its agents and attorneys-in-fact, coupled with an interest, to act for and on Luna's behalf to execute and file any document and to do all other lawfully permitted acts to further implement the foregoing intellectual property rights with the same legal force and effect as if executed by Luna.

(b) License from Hansen Outside the Medical Robotics Field. Subject to the provisions in this Section 2.2(b) below, Hansen hereby grants to Luna and its Affiliates a nonexclusive, worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license (with the right to sublicense through one or multiple tiers, i.e., naked sublicensing is allowed) under the Hansen Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products, in each case solely outside the Medical Robotics Field, outside the Orthopedics Field, outside the Vascular Non-Robotic Field and outside the Endoluminal Non-Robotic Field (except that such license to Luna shall also extend within such excluded fields solely to the extent of the scope of Luna's retained rights expressly described in Section 2.12.1(a)(iii)(x) and (y), Section 2.1(c)(i) and (ii); and Section 2.1(d)(i), (ii) and (iii) (and the last sentence of Section 2.1(d)), respectively). Furthermore, Hansen hereby acknowledges, agrees and confirms that, pursuant to Section 5 of the Hansen-Luna Agreement, Hansen has granted to Luna a nonexclusive license under the Hansen Generated Luna Agreement IP and Hansen-Luna Agreement IP in all fields of use outside the Medical Robotics Field (and the foregoing license under the Hansen Licensed IP includes, amends and restates such license pursuant to Section 5 of the Hansen-Luna Agreement); and the Parties agree that the foregoing license pursuant to Section 5 of the Hansen-Luna Agreement is hereby amended to exclude the Orthopedics Field, the Vascular Non-Robotic Field and the Endoluminal Non-Robotic Field (except to the limited extent expressly described above, including by reference to the last sentence of Section 2.1(d)).

2.3 Certain Intellectual Property Matters

(a) Retention of License. Once any Technology, patent rights or other intellectual property of a Party is included within any of the licenses granted by this Agreement, such Technology and rights shall remain so included, and shall be and remain subject to the licenses granted. For example, and without limiting the foregoing, any Technology, patent rights or other intellectual property of an Affiliate of Luna that is included within the Licensed IP at any given time shall remain so included, and shall be and remain subject to the licenses granted to Hansen, even if and after such Affiliate entity ceases at some point to meet the definition of an Affiliate of Luna. As another example, and without limiting the foregoing (or Section 6.3), any assignment of, foreclosure on, or similar action with respect to, any Technology, patent rights or other intellectual property that is included within the Licensed IP (or Hansen Licensed IP as the case may be) shall be subject to the licenses granted by this Agreement and shall not result in the termination of or restriction on such licenses and such licenses shall survive any such assignment, foreclosure or similar actions.

(b) Intuitive-Luna Agreement Related Matters; Development and Supply Agreement Related Matters.

(i) **Intuitive-Luna Agreement Related Matters**. The terms of the Intuitive-Luna Agreement shall remain in full force and effect except as modified by the Amendment or by the Intuitive-Luna License. It is intended by the Parties that the Intuitive-Luna Agreement, as amended by the Amendment, be consistent with the licenses granted in Section 2.1 of this Agreement, the corresponding license granted by Luna to Intuitive in Section 2.1 of the Intuitive-Luna License and the patent enforcement provisions of Article 5 herein and Article 4 of the Intuitive-Luna License. Accordingly, Luna agrees that the Amendment shall provide that, (i) any exclusive licenses within the

Medical Robotics Field granted by Luna to Intuitive under the Intuitive-Luna Agreement (including under Sections 4.1 and 4.2 of the Intuitive-Luna Agreement) shall be modified to the extent required to allow for the co-exclusive license granted by Luna under the Licensed IP to Hansen in this Agreement and to Intuitive in the Intuitive-Luna License; (ii) the provisions of the Intuitive-Luna Agreement (including Sections 4.2 and 14.2.1 of the Intuitive-Luna Agreement) shall be modified to eliminate any restrictions or prohibitions on Luna to develop and manufacture products for Hansen and otherwise perform its obligations under the Development and Supply Agreement; and (iii) any provisions regarding the enforcement of Licensed Patents within the Intuitive-Luna Agreement (such as Section 9.7) shall be subject to and governed by Article 5 of this Agreement and Article 4 of the Intuitive-Luna License with respect to such Licensed Patents. The foregoing matters are and shall be incorporated into the Amended Plan (or, alternatively, into a motion to assume the Amendment) and the Confirmation Order as well as into the Amendment. Luna agrees that it may not amend, rescind or terminate the provisions in the Amendment effectuating the foregoing clauses (i) -(iii) or otherwise amend the Intuitive-Luna Agreement in a manner that amends, rescinds or terminates the foregoing clauses (i) -(iii).

(ii) **Development and Supply Agreement Related Matters**. It is intended by the Parties and Intuitive that the Development and Supply Agreement and this Agreement be consistent with the licenses granted in Section 2.1 of this Agreement, the corresponding license granted by Luna to Intuitive in Section 2.1 of the Intuitive-Luna License and the patent enforcement provisions of Article 5 herein and Article 4 of the Intuitive-Luna License. Accordingly, Hansen and Luna agree not to amend the Development and Supply Agreement or this Agreement in a way that would (i) terminate or rescind the licenses granted to Intuitive in Section 2.1 of the Intuitive-Luna License, (ii) amend, terminate or rescind the provisions in Article 5 of this Agreement or the patent enforcement provisions of the Development and Supply Agreement in a way that conflicts with the current Article 5 of this Agreement and Article 4 of the Intuitive-Luna License, or (iii) restrict or prohibit Luna from developing or manufacture products for Intuitive under, or otherwise performing its obligations under, the Intuitive-Luna Agreement.

(c) IP Created By Luna for Third Parties; No Conflicting Third Party Agreements. To the extent any FOSSL Technology (and all patent rights and other intellectual property rights therein) acquired or Created By Luna independently or otherwise prior to the Effective Date (whether or not under agreements with parties other than Hansen or Intuitive), and still owned by (or licensed to) Luna as of the Effective Date, would not otherwise be fully licensable to Hansen and Intuitive in accordance with the terms and conditions of Section 2.1 above, due to some restriction, exclusive grant or other limitation in a third party agreement or otherwise (or due to the lack of some consent or approval not given), such restriction, exclusivity or limitation shall be removed, released and discharged (and such consent or approval shall be deemed given) as of the Effective Date to the maximum extent allowed under Chapter 11 of the Bankruptcy Code or other applicable laws, so that such FOSSL Technology (and all patent rights and other intellectual property rights therein) can be included within the Licensed IP and fully licensed to Hansen and Intuitive in accordance with the terms and conditions hereof. The foregoing is and shall be incorporated into the Amended Plan and the Confirmation Order. The Parties acknowledge and agree to the foregoing. Furthermore, this Agreement and any license or right granted to Hansen hereunder shall be senior in right and time compared to any lien approved or created pursuant to the Amended Plan and the Confirmation Order, so that no foreclosure under any such lien shall modify or terminate such licenses or rights of Hansen. Luna shall not modify the Intuitive-Luna Agreement or any other existing agreement with any third party or enter into any new agreements with Intuitive or any other third party, or otherwise create or incur any obligation (whether by contract or otherwise), in a way that would terminate or narrow the scope or degree of exclusivity of the licenses granted to Hansen herein (it being understood that, for example, the granting of rights by Luna outside of fields licensed to Hansen

herein or within the scope of Luna's retained rights hereunder would not constitute a termination or narrowing of Hansen's licenses granted hereunder) or the licenses or assignments provided for in the Development and Supply Agreement, or in a way that would breach or result in the violation of any other material terms and conditions of this Agreement (or the Development and Supply Agreement); provided, that the foregoing (and following sentence) is not intended to prevent Luna from granting a security interest or lien on the Licensed IP to any lender or a license to same in respect of the lender's rights and remedies upon an event of default so long as any such security interest, lien or license (or foreclosure thereon) is subject to, and does not terminate or narrow the scope or degree of exclusivity of, the licenses granted to Hansen herein. Luna shall not grant any right, license or interest in, to or under the Licensed IP that terminates or narrows the scope or degree of exclusivity of the rights and licenses granted to Hansen in this Agreement.

(d) New IP Under Future Third Party Agreements. If, at any time after the Effective Date, Luna enters into any agreement with a third party granting rights to such third party under any of the Licensed IP within, or involving a development project within, any of the Medical Fields (without limiting the co-exclusive and exclusive rights of Hansen in Section 2.1), then Luna shall secure the right to license to Hansen within the Medical Robotics Field, Orthopedics Field, Vascular Non-Robotic Field and Endoluminal Non-Robotic Field hereunder any Fiber Optic Shape Sensing/Localization Technology (and all patent rights and other intellectual property rights therein) Created By Luna in connection with such agreement in accordance with the terms of this Agreement, subject to Section 2.4 below (otherwise Luna shall not enter into such agreement). Luna shall use commercially reasonable efforts to secure the right to license Fiber Optic Shape Sensing/Localization Technology and rights therein Created By Luna under such agreements to Hansen within the Non-Robotic Medical Devices Field (including the Colonoscopy Non-Robotic Field); provided, however, that Luna shall have no duty to secure such right to license to Hansen to the extent within the third party's field of development, e.g., if the development field is the Colonoscopy Non-Robotic Field, Luna shall have no duty to secure such a right to license to Hansen within the Colonoscopy Non-Robotic Field, but would use commercially reasonable efforts to secure such right to license to Hansen for the rest of the Non-Robotic Medical Devices Field. Luna shall also use commercially reasonable efforts to secure the right to license such Technology and rights Created By Luna under any other third party agreements (i.e., agreements outside the Medical Fields) to Hansen under the license grants to Hansen hereunder, in all such cases, subject to Section 2.4 below. Furthermore, if Luna obtains a license to any Fiber Optic Shape Sensing/Localization Technology (and/or any patent rights and other intellectual property rights therein) and such license includes rights to sublicense within any of the Medical Fields, Luna shall secure that such right to sublicense includes the right to sublicense to Hansen hereunder in accordance with the terms of this Agreement (i.e., Hansen shall not be excluded from such sublicensing rights on a discriminatory basis), subject to Section 2.4 below.

(e) Acknowledgement Regarding Hansen Patents. Luna hereby acknowledges and agrees that, if and to the extent any Luna personnel is an inventor of any subject matter claimed within any of the Hansen Patents, any rights or interests in such Hansen Patents that Luna would otherwise obtain therein are assigned to Hansen, and to the extent Luna has not already done so, Luna hereby assigns any such rights or interests in such Hansen Patents to Hansen (which assignment confirmation shall be incorporated in the Settlement Agreement and the other Hansen Settlement Documents, the Amended Plan and Confirmation Order). Accordingly, Luna shall reasonably cooperate with Hansen and provide all reasonable assistance (and execute such further reasonable documents) at Hansen's cost and expense in connection with any action Hansen may take to document Hansen's ownership of the Hansen Patents or otherwise prosecute before a patent office to obtain a patent grant and maintain the Hansen Patents.

(f) Disclosure of Licensed IP. Periodically upon reasonable request from Hansen (no more frequently than semi-annually until the [****] anniversary of the Effective Date, but without affecting any disclosure obligations under the Development and Supply Agreement), Luna's and Hansen's CTO's (chief technological officer or someone holding the comparable position) shall have a meeting to review the development of the FOSSL Technology for use in or in connection with the Medical Robotics Field or the Licensed IP, and, upon Hansen's reasonable further request to follow up on such meeting, Luna shall disclose to Hansen any Licensed IP and/or any FOSSL Technology for use in or in connection with the Medical Robotics Field as specified by Hansen in such request in the form of (1) copies of any then-existing reports, summaries, memorandums, articles, invention disclosures, patents and patent applications, in each case (A) to the extent not already disclosed to Hansen and (B) in any event (i) excluding documents to the extent covered by attorney-client privilege, (ii) excluding inventor notebooks, incomplete draft documents and mere email correspondence (but not excluding attached documents to the extent constituting the foregoing documents), and (iii) excluding any information restricted from disclosure to Hansen under third party confidentiality obligations, or (2) Luna may prepare a document fulfilling such request that provides the substance of the responsive information that otherwise would be provided pursuant to clause (1). Luna shall reasonably respond to limited, brief follow-up inquiries from Hansen regarding the items disclosed under (1) and/or (2) above for the purpose of confirming and complementing the sufficiency of the disclosures above. The foregoing shall exclude software source code and related documentation and algorithms designed for the purpose of incorporation into source code (without limiting the provisions of the Development and Supply Agreement). However, the foregoing obligation shall not require Luna to generate any new documents, reports or other materials that do not already exist (except to the extent Luna elects, in its sole discretion, to pursue (2) above instead of (1)) and shall not require Luna to provide Hansen with training with respect to any inventions or Technology contained or described by the claims of such Licensed Patents.

(g) Clarification Regarding Copyrights. With respect to Technology licensed by Luna to Hansen under this Agreement that includes software, works or authorship or copyrighted materials, such licenses shall include the right to copy, modify and make derivative works thereof (and the right to use any ideas, concepts, algorithms and other information contained therein) within the fields and pursuant to the terms and conditions otherwise provided in this Agreement, regardless of when or whether provided or disclosed to Hansen. The foregoing shall not be construed to require the delivery or provision of any particular software (or source code), works of authorship or copyrighted materials except to the extent specifically provided in the Development and Supply Agreement.

(h) Clarification Regarding Non-Licensed Technology. For purposes of clarity, the combination, incorporation or attachment of any Licensed IP or Hansen Licensed IP (as the case may be) as part of or to other Technology that is not Licensed IP or Hansen Licensed IP (as the case may be) shall not result in the portion of the amalgamation that consists of the Technology that is not Licensed IP or Hansen Licensed IP becoming or being transformed into Licensed IP or Hansen Licensed IP under this Agreement.

2.4 Third Party License Payments and Agreement Terms. If Hansen's practice of Licensed IP (including through Hansen's manufacture, use or sale of Products covered thereby or grant of a sublicense covered thereby) that is in-licensed by Luna from third party licensors and sublicensed to Hansen under Section 2.1 (Luna's licenses of such third party Licensed IP being "**Third Party Licenses**" and such third party licensors being "**Third Party Licensors**"), results in a royalty, milestone or similar payment becoming due to any Third Party Licensors, Hansen shall be responsible for such payments but solely to the extent the applicable provisions requiring (and setting forth the method for determining the

amount and calculation of) such royalty, milestone and similar payments are disclosed to Hansen in writing in advance of Hansen incurring any such payments (such payments attributable to Hansen's practice of Licensed IP being, "**Third Party Payments**"). If permitted by such Third Party Licensors and Luna provides Hansen with the instructions therefor, Hansen shall directly pay such amounts to Third Party Licensors on a timely basis. Otherwise, Hansen shall reimburse Luna for any such Third Party Payments actually paid by Luna to the applicable Third Party Licensor within ten (10) business days of receipt of an invoice therefor from Luna (or within such period of time as may be agreed upon by the Parties after review of the applicable Third Party License). Hansen shall have no obligation to make or reimburse (and Luna shall be solely responsible for) any payments under or with respect to any Third Party Licenses except for those Third Party Payments properly disclosed to Hansen in advance as provided above. Exhibit D sets forth a complete list of all Third Party Payments as of the Effective Date currently known to Luna. The Parties shall reasonably cooperate with each other to provide such information and documents as is reasonably required to calculate, pay and report Third Party Payments. If Luna enters into any Third Party Licenses after the Effective Date, Luna shall promptly disclose to Hansen the details of any Third Party Payments thereunder (but in any event at least thirty (30) days before any Third Party Payments would accrue) as well as all terms and conditions therein that are applicable to Hansen or sublicensees generally. Hansen may choose in its sole discretion to exclude any Third Party License from the licenses granted to Hansen hereunder at any time by providing thirty (30) days prior written notice to Luna thereof, in which case Hansen shall have no obligation to make or reimburse any Third Party Payments with respect to such excluded Third Party License (or comply with the applicable terms and conditions thereof with respect to periods following the effective date of such notice) as of the end of such thirty (30) day notice period (except to the extent and for so long as any Third Party Payments continue to accrue even after such exclusion notice in accordance with terms disclosed to Hansen in advance as provided above). If Hansen elects to exclude any Third Party License from the sublicenses to Hansen hereunder in accordance with the foregoing notice, such Third Party License shall be excluded from the Licensed IP for all purposes under this Agreement. Unless Hansen has excluded any Third Party License in accordance with the foregoing, Hansen hereby agrees to comply with terms and conditions required of and applicable to sublicensees under any of the Third Party Licenses, but solely to the extent disclosed to Hansen in advance. Luna shall maintain all Third Party Licenses (not excluded by Hansen in accordance with the foregoing) in full force and effect and comply with the terms and conditions thereof (except to the extent any failure to do so would not terminate, limit or restrict Hansen's sublicense of rights thereunder) and Luna shall not terminate or modify any such Third Party Licenses in a materially adverse manner that terminates, limits or restricts the rights sublicensed to Hansen by Luna herein with respect to such Third Party License or in a manner that materially and adversely increases the obligations of Hansen (i) to make Third Party Payments or (ii) to comply with the terms and conditions of such Third Party License.

2.5 Reservation of Rights. Except for the rights and licenses expressly granted to, acquired by or confirmed for Hansen and its Affiliates hereunder and to Intuitive under Section 2.1 of the Intuitive-Luna License, Luna retains all right, title and interest in and to the Licensed IP and all of Luna's other intellectual and industrial property rights. Without limitation of the foregoing and subject at all times to the licenses granted to Hansen under this Agreement, the Parties confirm that Luna retains its rights to use, make and sell (and license) any and all of its intellectual and industrial property rights (i) within technologies, applications and fields that do not involve FOSSL Technology (for example, nanotechnology, secure computing, industrial coating, flame retardants, ultrasonic, and wireless technologies and applications) and (ii) subject to the licenses granted under Section 2.1 and licenses granted to Intuitive under the Intuitive-Luna License, within technologies, applications and fields outside the Medical Fields that do involve FOSSL Technology, including, for example, industrial application, oil exploration, infrastructure, civil, aeronautics, naval, automotive, telecommunication and consumer

products. Except for the rights and licenses expressly granted to Luna hereunder and under the Development and Supply Agreement, Hansen retains all right, title and interest in and to the Hansen-Luna Agreement IP, the Hansen Licensed IP and all of Hansen's other intellectual and industrial property rights.

3. PAYMENTS

3.1 Compensation from Hansen. The parties acknowledge and agree that the rights and licenses granted by Luna to Hansen under this Agreement are provided in consideration for settlement of the Litigation and pursuant to and part of the Hansen Settlement Documents that are part of and implement the Amended Plan and are incorporated into and made part of the Confirmation Order. Accordingly, among other things, the Parties acknowledge and agree that no payments, royalties or other compensation for the rights and licenses expressly granted to, acquired by or confirmed for Hansen hereunder shall be due or payable by Hansen to Luna hereunder (but without limiting other payments and obligations that Hansen may owe under the terms of this Agreement).

3.2 Compensation from Luna. The parties acknowledge and agree that the rights and licenses granted by Hansen to Luna under this Agreement are provided in consideration for settlement of the Litigation and pursuant to and part of the Hansen Settlement Documents that are part of and implement the Amended Plan and are incorporated into and made part of the Confirmation Order. Accordingly, among other things, the Parties acknowledge and agree that no payments, royalties or other compensation for the rights and licenses expressly granted to, acquired by or confirmed for Luna hereunder shall be due or payable by Luna to Hansen hereunder (but without limiting other payments and obligations that Luna may owe under the terms of this Agreement).

4. REPRESENTATIONS AND WARRANTIES; DISCLAIMERS; INDEMNIFICATION

4.1 By Hansen. Hansen hereby represents, warrants and covenants as follows:

(a) Hansen is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

(b) The execution, delivery and performance of this Agreement by Hansen (i) are within its corporate powers, (ii) have been duly authorized by all necessary corporate action on Hansen's part, and (iii) do not and shall not contravene or constitute a default under any law or regulation, any judgment decree or order, or any contract, agreement or other undertaking applicable to Hansen or the Hansen-Luna Agreement IP.

(c) Hansen has the full right and authority to grant (and/or confirm the grant of) the rights and licenses granted (and/or confirmed) by Hansen under Section 2.2 to Luna herein.

(d) To the best of Hansen's knowledge as of the Effective Date, except for the Litigation and the Chapter 11 Case, there are no actions, suits, investigations, claims or proceedings pending or threatened against Hansen relating to the Hansen-Luna Agreement IP or other Hansen Licensed IP.

(e) Aside from the Development and Supply Agreement (which, among other things, amends and restates the Hansen-Luna Agreement) and this Agreement, there are no agreements between Luna and Hansen as of the Effective Date with respect to FOSSL Technology (other

than the NDA) or that would restrict or prevent the granting of the licenses granted by Luna to Intuitive in Section 2.1 of the Intuitive-Luna License or the granting the corresponding license granted by Luna to Hansen in Section 2.1 of this Agreement.

(f) Aside from the Development and Supply Agreement, there are no amendments or modifications to the Hansen-Luna Agreement.

(g) Hansen agrees not to amend the Cross License Agreement Between Intuitive and Hansen of even date herewith in a way that would (i) terminate or rescind the licenses granted to Luna in Section 2.2(b) of this Agreement, or (ii) conflict with the provisions in Article 5 of this Agreement or the patent enforcement provisions of the Development and Supply Agreement, or (iii) restrict or prohibit Luna from developing or manufacturing products for Intuitive under, or otherwise performing its obligations under, the Intuitive-Luna Agreement.

4.2 By Luna. Luna hereby represents, warrants and covenants as follows:

(a) Luna is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

(b) The execution, delivery and performance of this Agreement by Luna (i) are within its corporate power, (ii) have been duly authorized by all necessary corporate action on Luna's part, and (iii) do not and shall not contravene or constitute a default under any law or regulation, any judgment, decree or order, or any contract, agreement or other undertaking applicable to Luna or the Licensed IP.

(c) Luna has the full right and authority to grant the rights and licenses granted to Hansen in Section 2.1 herein. Without limiting the foregoing, as of the Effective Date, (i) Luna does not own, have a license to or otherwise control (and did not at any time own, have a license to or otherwise control) any FOSSL Technology (or any patent rights and other intellectual property rights therein) that cannot be fully licensed to Hansen under the terms and conditions of this Agreement (within the full scope of the license grants to Hansen hereunder), and (ii) Luna has not granted any right, license, or interest in, to or under the Licensed IP inconsistent with the rights and licenses granted to Hansen in this Agreement (other than under the Intuitive-Luna Agreement, without limiting Section 2.3(b)).

(d) To the best of Luna's knowledge as of the Effective Date, except for the Litigation and the Chapter 11 Case, there are no actions, suits, investigations, claims or proceedings pending or threatened against Luna relating to the Licensed IP and appropriate notices of the Amended Plan and Confirmation Order have been served timely by Luna on any person or entity who might possibly have any such claim.

(e) With the exception of Luna's work with Intuitive, Luna has not disclosed or made any use of any of the Hansen-Luna Agreement IP in connection with work for or with any customers, clients, business partners, or any other third party other than Hansen in the Medical Robotics Field.

(f) As of the Effective Date, Luna has obtained all consents from third parties required to sublicense to Hansen hereunder the rights licensed to Luna under the agreements listed on Exhibit D hereto.

(g) Luna has the full right and authority to agree to the modifications and clarifications to the Intuitive-Luna Agreement as provided by Section 2.3(b) of this Agreement.

(h) Aside from the Intuitive-Luna Agreement and the Intuitive-Luna License, there are no agreements between Luna and Intuitive as of the Effective Date with respect to FOSSL Technology or that would restrict or prevent the granting of the licenses granted by Luna to Intuitive in Section 2.1 of the Intuitive-Luna License or the granting of the corresponding license granted by Luna to Hansen in Section 2.1 of this Agreement.

(i) Aside from the Amendment (which shall be consistent with Section 2.3(b)), there are no amendments or modifications to the original Intuitive-Luna Agreement as of the Effective Date.

(j) Luna agrees not to not amend the Intuitive-Luna License in a way that would (i) terminate or rescind the licenses granted to Hansen in Section 2.1 of this Agreement, (ii) conflict with the provisions in Article 5 of this Agreement or the patent enforcement provisions of the Development and Supply Agreement, or (iii) restrict or prohibit Luna from developing or manufacture products for Hansen under, or otherwise performing its obligations under, the Development and Supply Agreement.

4.3 Disclaimer. EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS AGREEMENT, THE OTHER SETTLEMENT DOCUMENTS, THE AMENDED PLAN AND THE CONFIRMATION ORDER, NEITHER PARTY MAKES, AND EACH PARTY DISCLAIMS, ANY AND ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND AS TO THE VALIDITY OF LICENSED PATENT CLAIMS, WHETHER ISSUED OR PENDING. NOTHING IN THIS AGREEMENT (OR ANY OTHER SETTLEMENT DOCUMENT, THE AMENDED PLAN AND CONFIRMATION ORDER) SHALL BE CONSTRUED AS A REPRESENTATION MADE OR WARRANTY GIVEN BY EITHER PARTY THAT THE PRACTICE BY THE OTHER PARTY OF THE RIGHTS GRANTED BY THIS AGREEMENT WILL NOT INFRINGE THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY.

5. INTELLECTUAL PROPERTY

5.1 Prosecution and Maintenance of Licensed Patents. Luna shall file, prosecute and maintain all Licensed Patents in accordance with Luna's then-current patent protection and maintenance strategy/ies (determined in Luna's reasonable discretion) with respect to its patent portfolio at Luna's sole cost and expense. Luna shall provide Hansen, upon Hansen's reasonable request, with copies of all material correspondence, applications and filings with respect to the Licensed Patents, filed with, sent to or received from the applicable patent office (following the receipt, filing or submission thereof, as the case may be). If Luna decides to cease prosecution or maintenance of any of the Licensed Patents, Luna shall first provide Hansen with written notice of such decision within a reasonable period (but at least forty-five (45) days if practicable) prior to any pending filing or maintenance fee deadline of which it is aware so Hansen may take on behalf of Luna, at Hansen's sole cost and expense, whatever reasonable action may be necessary with respect thereto so long as such action is not reasonably likely to be materially adverse to Luna, as would be reasonably apparent at the time such action is taken (and Hansen shall notify Luna of such proposed actions prior to taking them). Hansen may, in its sole discretion, thereafter assume responsibility for such prosecution or maintenance at its sole cost and

expense, and shall notify Luna in writing prior to assumption if it elects to assume such responsibility. In such event, Hansen shall provide Luna, upon Luna's request, with copies of all material correspondence, applications, and other filings with respect to any such Licensed Patents assumed by Hansen filed with, sent to or received from the applicable patent offices. In the event Hansen so elects to assume such responsibility for a given Licensed Patent, Luna shall reasonably cooperate at Hansen's sole cost and expense. If Hansen identifies any potential claims within the Licensed Patents which Luna has not and does not intend to file, prosecute or continue, Hansen, at its option and sole cost and expense, shall have the right to do so on Luna's behalf with Luna's prior reasonable consent in each instance (not to be unreasonably withheld), and, in such case, Luna shall provide Hansen reasonable cooperation and assistance in connection therewith, at Hansen's sole cost and expense and Hansen shall keep Luna reasonably informed of material developments (including providing drafts of submissions for Luna's review and comment prior to filing). Hansen shall provide Luna, upon Luna's request, with copies of all material correspondence, applications, and other filings with respect thereto filed with, sent to or received from the patent offices having jurisdiction. For the avoidance of doubt, Hansen, as owner of the Hansen Licensed IP, shall have the sole rights to file, prosecute and maintain and the sole rights to enforce, any patents and patent rights within such Hansen Licensed IP, in Hansen's sole discretion.

5.2 Enforcement of Licensed Patents.

(a) In the Medical Robotics Field. Hansen shall have the right (but not the obligation) (along with Intuitive) to institute enforcement actions against infringement or misappropriation or alleged infringement or misappropriation of the Licensed IP solely to the extent within the Medical Robotics Field, in each case at its own expense. If Hansen institutes such enforcement, Hansen shall be the "**Enforcing Party**" and Intuitive shall be the "**Non-Enforcing Party**"; if Intuitive institutes such enforcement Intuitive shall be the "**Enforcing Party**" and Hansen shall be the "**Non-Enforcing Party**." The Enforcing Party shall notify Luna and the Non-Enforcing Party in writing of its decision to institute such enforcement action and shall keep them reasonably apprised of all developments in such enforcement actions and consult with them regarding such enforcement activities, but the Enforcing Party shall not be required to obtain any approvals or consents to take such enforcement actions, subject to Section 5.2(e) below. Each of Luna and the Non-Enforcing Party shall, at the Enforcing Party's expense, reasonably cooperate with the Enforcing Party and provide all reasonable assistance in connection with any such enforcement action, including without limitation agreeing to be named as a party to such action or having such action brought in its name by the Enforcing Party (at the Enforcing Party's expense, including the cost of any fees and court costs) if and to the extent required for the Enforcing Party to have the legal right to initiate such an enforcement action, subject to Section 5.2(e) below, including without limitation as an estate representative pursuant to 11 U.S.C. § 1123(b)(3) and otherwise pursuant to the Amended Plan. The Enforcing Party shall retain all recoveries from such enforcement actions, provided that non-monetary recoveries shall inure to the benefit of both the Enforcing Party and the Non-Enforcing Party as an interested party to the extent of its interest. No settlement, consent judgment or other voluntary final disposition of the action that involves an admission of Luna's (or the Non-Enforcing Party's) liability or wrongdoing, requires Luna (or the Non-Enforcing Party) to take or refrain from taking any action or incur any payment obligations or other liabilities or otherwise binds Luna (or the Non-Enforcing Party) or that involves an admission of the invalidity or unenforceability of the Licensed IP or any other of Luna's (or the Non-Enforcing Party's) intellectual property or that could reasonably be likely to restrict Luna (or the Non-Enforcing Party) from conducting its business, may be entered into without the express written consent of Luna (and, if applicable, the Non-Enforcing Party), which consent shall not be unreasonably withheld. Notwithstanding any of the foregoing to the contrary, any patents within the Licensed Patents that are Created By Luna under the Development and Supply Agreement shall be governed by Section 5.2(b) below (as if within the fields specified therein) with respect to the enforcement thereof (without limiting the licenses granted thereto hereunder).

(b) In the Orthopedics Field, Endoluminal Non-Robotic Field, and Vascular Non-Robotic Field. Hansen shall have the sole right (but not the obligation) to institute enforcement actions against infringement or misappropriation or alleged infringement or misappropriation of the Licensed IP solely to the extent within the Orthopedics Field, the Vascular Non-Robotic Field, or the Endoluminal Non-Robotic Field, including, if required to bring such action, as an estate representative pursuant to 11 U.S.C. § 1123(b)(3) (to the extent provided in the Confirmation Order), to the extent required to bring such actions, and otherwise pursuant to the Amended Plan, in each case at its own expense. Hansen shall keep Luna reasonably apprised of all developments in such enforcement actions and shall consult with Luna regarding such enforcement activities (but, for clarity, no approval or consent from Luna shall be required for Hansen to bring such enforcement actions). Luna shall, at Hansen's expense, reasonably cooperate with Hansen and provide all reasonable assistance in connection with any such litigation, subject to Section 5.2(e) below, including without limitation agreeing to be named as a party to such action or having such action brought in Luna's name by Hansen (in each case at Hansen's cost and expense) if and to the extent required for Hansen to have the legal right to initiate such an enforcement action. Hansen shall retain all recoveries from such enforcement actions. No settlement, consent judgment or other voluntary final disposition of the action that involves an admission of Luna's liability or wrongdoing, requires Luna to take or refrain from taking any action or incur any payment obligations or other liabilities or otherwise binds Luna or that involves an admission of the invalidity or unenforceability of the Licensed IP or any other of Luna's intellectual property or that could reasonably be likely to restrict Luna from conducting its business, may be entered into without the express written consent of Luna, which consent shall not be unreasonably withheld.

(c) In the Non-Robotic Medical Devices Field. Except with respect to claims that fall within clause (a) or (b) above, each of Hansen and Luna shall promptly notify the other of any infringement or misappropriation of the Licensed IP within the Medical Fields of which it becomes aware, and the Parties shall confer together with a view to agreeing upon a common cause of action. If they do not agree upon a common cause of action, then Luna shall have the initial sole right, but shall not be obligated, to institute and prosecute at its own expense, legal actions for infringement or misappropriation of Licensed IP in the Medical Fields outside the Medical Robotics Field, Orthopedics Field, Vascular Non-Robotic Field, and/or Endoluminal Non-Robotic Field. If Luna elects not to pursue such action, then Hansen shall have the right, but shall not be obligated, to prosecute at its own expense such action. In all such cases, all monetary recoveries obtained by the enforcing Party (after reimbursement of the Parties' expenses incurred with respect to such action) shall accrue to and shall be the sole property of such enforcing Party, provided that nonmonetary recoveries shall inure to the benefit of both Parties as an interested party to the extent of its interest. The other Party, at the request and expense of the enforcing Party, shall reasonably assist in the prosecution of such suit (including by being named as a party to such suit if required for the enforcing Party to bring such action), reasonably co-operate with respect thereto, have its employees testify when reasonably requested and make available relevant records, documents, drawings, information, and the like, subject to Section 5.2(e) below. No settlement, consent judgment or other voluntary final disposition of any action brought under this Section 5.2(c) that involves an admission of the non-enforcing Party's liability or wrongdoing, requires the non-enforcing Party to take or refrain from taking any action or incur any payment obligations or other liabilities or otherwise binds the non-enforcing Party or that involves an admission of the invalidity or unenforceability of the Licensed IP or any other of the non-enforcing Party's intellectual property or that could reasonably be likely to restrict the non-enforcing Party from conducting its business, may be entered into without the express written consent of such non-enforcing Party, which consent shall not be unreasonably withheld.

(d) Development and Supply Agreement Patents. To the extent that Section 5.2 of the Development and Supply Agreement provides for different terms and conditions with respect to the prosecution, maintenance and enforcement of certain Licensed Patents Created By Luna under the Development and Supply Agreement, such terms and conditions in the Development and Supply Agreement shall take precedence (and, to the extent inconsistent, apply in lieu of this Article 5) with respect to such Licensed IP. Without limiting the foregoing, enforcement of any Licensed Patents Created By Luna under the Development and Supply Agreement within the Medical Robotics Field shall be enforced under Section 5.2(b) above as if such section also included the Medical Robotics Field solely with respect to such Licensed Patents.

(e) Certain Indemnities. In the event a Party brings an enforcement action with respect to the Licensed IP under this Section 5.2 (the "**Indemnifying Party**"), such Indemnifying Party shall indemnify the other Party (the "**Indemnitee**") for any damages, awards, costs and out-of-pocket expenses imposed on or incurred by the Indemnitee as a result of (and to the extent arising from the subject matter of) such enforcement action (including such damages, awards, costs and expenses resulting from such Indemnitee being named as a party to such action or resulting from any court order for costs, fees, penalties, and other amounts (including the posting of bonds, if any) that may be imposed against the Indemnitee in such enforcement proceedings, to the extent such court order does not arise from such Indemnitee's own actions (unless such actions were directed to be taken by the Indemnifying Party)). Notwithstanding any of the foregoing to the contrary, such indemnification by the Indemnifying Party shall exclude any damages, awards, costs or expenses to the extent based on claims (including cross-claims or counterclaims) that are brought against the Indemnitee with respect to subject matter outside of the infringement, misappropriation, validity or enforceability of the Licensed IP asserted in the action (and outside the actions or omissions of the Indemnifying Party in conducting such enforcement action) or with respect to subject matter which concerns actions or omissions of the Indemnitee that were not directed to be taken or omitted by the Indemnifying Party, in each case, so long as the Indemnitee has the sole right to control the actions based on such claims or subject matter.

6. MISCELLANEOUS

6.1 Entire Agreement. Subject to Section 6.7 below and the Amended Plan and Confirmation Order, this Agreement (and its Exhibits) contains the entire agreement and understanding of the parties with respect to the subject matter hereof, and supersedes and merges all prior and contemporaneous understandings and agreements between the parties, whether written or oral, with respect to such subject matter, it being understood and agreed that (i) the Hansen-Luna Agreement is being amended and restated in its entirety in this Agreement (but not terminated or superseded) and (ii) the NDA survives in accordance with its terms for the purpose of disclosures made under the NDA prior to the effective date of the Hansen-Luna Agreement (provided, however, that, for the avoidance of doubt and notwithstanding anything in the NDA to the contrary, any information disclosed under the NDA which falls within the Licensed IP may be used and disclosed by Hansen in accordance with the terms and conditions of the licenses granted hereunder and the confidentiality provisions in the Development and Supply Agreement, and the NDA shall not restrict such permitted use and disclosure). This Agreement shall not be modified, amended or cancelled other than in a writing signed by authorized representatives of Luna and Hansen.

6.2 No Implied Waiver. Any waiver of any obligation under this Agreement must be in writing. The failure of any Party to enforce at any time any provision of or right under this

Agreement shall not be construed to be a waiver of such provision or right or any other provision, and shall not affect the right of such Party to enforce such provision or right or any other provision. No waiver of any breach hereof shall be construed to be a waiver of any other breach.

6.3 Assignment. This Agreement and the rights of the Parties hereunder may not be assigned by a Party without the prior written consent of the other Party; provided, however, this Agreement (along with the rights granted under this Agreement) may be assigned by a Party without the other Party's consent to an Affiliate or as part of (i) a merger, consolidation, internal reorganization, or acquisition of the assigning Party or (ii) a sale of all or substantially all the assets of the assigning Party. In the event that Luna is acquired by a third party (such third party, hereinafter referred to as an "**Acquiror**"), then the intellectual property of such Acquiror held or developed by such Acquiror (whether prior to or after such acquisition) shall, notwithstanding anything else in this Agreement to the contrary, be excluded from the Licensed IP, and such Acquiror (and Affiliates of such Acquiror which are not Subsidiaries of Luna itself) shall be excluded from the meaning of "Affiliate" solely for purposes of the applicable components of the foregoing intellectual property definitions, in all such cases if and only if: (a) Luna remains a Subsidiary of the Acquiror; (b) substantially all intellectual property of Luna and substantially all research and development assets and operations of Luna, in each case relating to FOSSL Technology, remain with Luna and are not transferred to the Acquiror or another Affiliate of the Acquiror; and (c) the scientific and development activities with respect to FOSSL Technology of Luna and the Acquiror (if any) are maintained separate and distinct. For clarity, in the event that Luna is acquired by an Acquiror and each of the criteria described in subclauses (a) through (c) is not satisfied, then the intellectual property of such Acquiror created, invented, generated or developed after the date of such acquisition shall be included within Licensed IP (but not any intellectual property of such Acquiror existing prior to or as of the date of such acquisition). Subject to the foregoing, the respective obligations of the Parties hereto shall bind, and the respective rights of the Parties shall inure to the benefit of, the Parties' respective permitted assignees and successors. For the avoidance of doubt, any sale or transfer of Licensed IP or Hansen Licensed IP shall only be made fully subject to the terms and conditions of this Agreement.

6.4 Governing Law; Jurisdiction; Venue.

(a) Choice of Law. This Agreement shall be governed by, and interpreted in accordance with: (i) the Bankruptcy Code, and (ii) in the case of applicable non-bankruptcy law, the laws of the State of Delaware, without regard to conflicts of laws, or applicable federal law as to a particular subject where federal law governs, such as for example, the Patent Act governing patents or the Copyright Act governing copyrights.

(b) Bankruptcy Court Jurisdiction. Except as provided in subsection (c) and subsection (d), any disputes arising under this Agreement, or related to the meaning, effect and interpretation of the Amended Plan, the Confirmation Order or this Agreement (which Agreement is a part of the Amended Plan and Confirmation Order), shall be subject to the jurisdiction of the Bankruptcy Court.

(c) Exceptions to Bankruptcy Court Jurisdiction. In the event: (i) the Bankruptcy Court lacks or declines to exercise jurisdiction over a dispute arising under this Agreement, for any reason; (ii) the reference of jurisdiction to the Bankruptcy Court is withdrawn, for any reason; (iii) the dispute or enforcement of this Agreement is related to any intellectual property rights of Intuitive, Hansen or Luna, including without limitation any alleged infringement or misappropriation or misuse thereof; or (iv) the dispute or enforcement arises from or with respect to any provision of, or incorporated into, any of Sections 2.1, 2.2, 2.3, 2.4, 2.5, 4, 5, or 6.3 of this Agreement or causes of action relating

thereto or arising therefrom, or any of Sections 2.1, 2.2, 3, 4, 5, 7, 8 or 10.3 of the Development and Supply Agreement or causes of action relating thereto or arising therefrom, then the state or federal courts for or in New Castle County, Delaware shall have exclusive jurisdiction over any disputes arising under or related to this Agreement.

(d) Alternative Dispute Resolution. Notwithstanding subsections (b) and (c) above and subsection (e) below, in the event some provision of a particular Hansen Settlement Document expressly creates an alternative dispute resolution provision as to a particular type of dispute, then such disputes shall be resolved as so specified in the applicable Agreement.

(e) Consent to Jurisdiction. Each Party hereby (i) consents and submits to the venue and co-exclusive jurisdiction of the Bankruptcy Court and the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware (without prejudice to either the retained rights and jurisdiction of the Bankruptcy Court), (ii) agrees that all claims may be heard and determined in such courts, (iii) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (iv) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the Parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

(f) Resolving Conflicts. If there is any question as to whether the proper jurisdiction or venue for any dispute is in the Bankruptcy Court or in the Delaware Court, the Bankruptcy Court may decide that issue.

(g) Miscellaneous. The prevailing Party in any final judgment of any such controversy, claim or dispute, or the non-dismissing Party in the event of a dismissal without prejudice, shall be entitled to receive from the other Party the reasonable attorneys' fees (and all related costs and expenses) and all other costs and expenses paid or incurred by such prevailing Party in connection with such controversy, claim or dispute and in connection with enforcing any judgment or order with respect thereto.

6.5 Severability. If for any reason a provision of this Agreement, or portion thereof, is finally determined to be unenforceable under applicable law, that provision, or portion thereof, shall nonetheless be enforced, as to circumstances, persons, places and otherwise, to the maximum extent permissible by applicable law so as to give effect to the intent of the parties, and the remainder of this Agreement shall continue in full force and effect.

6.6 Effect of Plan/Confirmation Order. The Parties agree that this Section 6.6 is a settlement proposal that shall apply only to the extent approved by the Confirmation Order. The Parties each agree to use commercially reasonable efforts to support the full rights sought by the Parties hereunder, including without limitation by appropriate proffers or other proof in the plan confirmation process. To the maximum extent possible under applicable law (as affected by the Confirmation Order), this Agreement is not an "executory contract" for the purposes of 11 U.S.C. § 365. Rather, this Agreement constitutes a settlement allocation and partition of intellectual property and other rights disputed in the Litigation and in Hansen's related claims in the Chapter 11 Case but resolved by the Amended Plan and the Confirmation Order. To the extent that a final judgment by a court of competent jurisdiction rules otherwise than that, the executory parts of this Agreement (herein sometimes called a

"**Section 365(n) Contract**") shall be interpreted so that the greatest possible rights and licenses of the licensee Party thereto shall be held to be "executed," thereby minimizing any "executory" parts of the Agreement. As to any Section 365(n) Contract, the parties hereto acknowledge and agree that the rights and licenses granted by the licensor Party to the licensee Party and its Affiliates hereunder are rights with respect to intellectual property (including without limitation "intellectual property" within the meaning of 11 U.S.C. § 101), and: (a) all reports, drawings, samples, prototypes and other books and records and embodiments of the intellectual property shall be deemed "embodiments" of the intellectual property protected by 11 U.S.C. § 365 hereunder; (b) any Hansen Settlement Document or obligations thereunder that the licensee Party designates as such an "agreement supplementary" to such Section 365(n) Contract in its discretion at any time before the Confirmation Hearing in a "Plan Supplement" to the Amended Plan, shall be, to the extent permitted by applicable law (as affected by the Confirmation Order) and so designated by the licensee, an "agreement supplementary" to such Section 365(n) Contract, but no other Hansen Settlement Document or obligations shall be an "agreement supplementary" to such Section 365(n) Contract; and (c) there are no "royalty payments" due from Hansen or Luna as a licensee under such Section 365(n) Contract or, since 11 U.S.C. § 365(n)(2) applies only to the Section 365(n) Contract, but not to any "agreement supplementary" to such contract, under any such supplementary agreement. In the event of any conflict between (i) the provisions of this Section 6.6, or (ii) the rights contemplated by 11 U.S.C. § 365(n), and the Amended Plan or the Confirmation Order, the Amended Plan and Confirmation Order shall govern and control. Hansen and Luna each shall be deemed to have made a request for enforcement of all of its rights and licenses pursuant to 11 U.S.C. § 365(n)(4), without further action by either licensee Party.

6.7 Confidentiality. Confidential information within the Licensed IP and Hansen Licensed IP shall be subject to the terms and conditions of the confidentiality provisions set forth in the Development and Supply Agreement.

6.8 Headings. The headings and captions used in this Agreement are for convenience only and shall not be considered in construing or interpreting this Agreement.

6.9 Interpretation. This Agreement has been negotiated by all parties, and each Party has been advised by competent legal counsel. This Agreement shall be interpreted in accordance with its terms and without any construction in favor of or against any Party.

6.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but which collectively shall constitute one and the same instrument.

6.11 No Effect on 2005 Hansen-Intuitive Cross License. The 2005 Hansen-Intuitive Cross License shall remain in full force and effect and the terms of such 2005 Hansen-Intuitive Cross License shall in no way be modified, affected or superseded by this Agreement.

6.12 Notices. Except as may be otherwise provided herein, all notices, requests, waivers, consents and approvals made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to another Party; (b) when sent by facsimile, with receipt confirmation, to the number set forth below if sent between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day, or on the next business day if sent by facsimile to the number set forth below if sent other than between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day; or (c) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the applicable Parties as set forth below with next business day delivery guaranteed, provided that the sending Party receives a confirmation of delivery from the delivery service provider. Each person making a communication hereunder by facsimile shall attempt to promptly confirm by

telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity or delivery status of any such communication. A Party may change or supplement the addresses given below, or designate additional addresses, for purposes of this Section by giving the other Parties written notice of the new address in the manner set forth above.

If to Hansen Medical, Inc.
800 E. Middlefield Road
Mountain View, CA 94043
Attn: Arthur Hsieh
Facsimile: 650-404-5901
Email: Arthur_Hsieh@hansenmedical.com

If to Luna Innovations Inc. or Luna Technologies, Inc.
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn:
Facsimile:

6.13 Luna Party. For purposes of this Agreement, Luna Innovations Inc. and Luna Technologies, Inc. may be treated by Hansen as one entity, such that, for example, a notice or consent from Luna Innovations Inc. shall be deemed a valid and effective notice or consent also from Luna Technologies, Inc. (and vice versa) and a payment from Hansen to Luna Innovations Inc. shall fully satisfy Hansen's obligation with respect to such payment hereunder as to both entities. Luna Innovations Inc. and Luna Technologies, Inc. shall exercise their rights jointly under this Agreement, and will not take conflicting positions with respect to its obligations to Hansen.

6.14 Further Assurances. Each Party agrees to take or cause to be taken such further actions, and to execute, deliver and file or cause to be executed, delivered and filed such further documents and instruments, and to obtain such consents, as may be reasonably required or requested by the other Party (to the extent consistent with this Agreement and at the other Party's expense) in order to effectuate fully the purposes, terms and conditions of this Agreement. Without limiting the foregoing, each Party shall take such steps reasonably requested by the other Party to perfect, and provide constructive notice of, the licenses and other rights granted to such Party hereunder, including without limitation filings in any governmental office where that is customary or appropriate in accordance with applicable law.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent. A Murphy

Name: Kent A. Murphy

Title: CEO

HANSEN MEDICAL, INC.

By: /s/ Fred Moll

Name: Fred Moll

Title: CEO

LUNA TECHNOLOGIES, INC.

By: /s/ Scott A. Graeff

Name: Scott A. Graeff

Title: President

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT A

Hansen-Luna Agreement IP

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT B

Listed Patents and Patent Applications within Licensed Patents

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT C

Certain Luna Technology within Licensed Technology

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT D

Third Party Licenses

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT E

Hansen Patents

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.7

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

DEVELOPMENT AND SUPPLY AGREEMENT

This Development and Supply Agreement ("**Agreement**") is dated and made effective as of the Effective Date (as defined below) by and between Luna Innovations Incorporated, a Delaware corporation, together with Luna Technologies, Inc., a Delaware corporation (acting jointly and severally, individually and collectively, "**Luna**"), and Hansen Medical, Inc., a Delaware corporation ("**Hansen**"). Luna and Hansen are referred to herein each individually as a "**Party**" and collectively as the "**Parties**".

RECITALS

WHEREAS, Luna and Hansen are parties to the case *Hansen Medical Inc. v. Luna Innovations Inc.*, no. 07-088551, in the Superior Court of the State of California, County of Santa Clara relating to certain disputes arising out of those certain Terms and Conditions of Sale and Service executed by Hansen on September 27, 2006 and Luna on September 28, 2006 and that certain Mutual Nondisclosure Agreement between Hansen and Luna dated April 1, 2006 (the "**Litigation**");

WHEREAS, Luna and Hansen wish to settle the Litigation in the context of the First Amended Joint Plan of Reorganization of Luna Innovations Incorporated, et al. under Chapter 11 of the Bankruptcy Code (as may be amended, "**Amended Plan**") in Luna's Chapter 11 Case No. 09-71811 ("**Chapter 11 Case**") pending in the U.S. Bankruptcy Court for the Western District of Virginia ("**Bankruptcy Court**") which Amended Plan was approved by the Bankruptcy Court's Order Confirming First Amended Joint Plan of Reorganization of Luna Innovations Incorporated, et al. ("**Confirmation Order**"). This Agreement is one of the "Hansen Settlement Documents" (as defined in the Settlement Agreement) referenced and incorporated in the Amended Plan and Confirmation Order ("**Settlement Documents**");

WHEREAS, in connection with the settlement of the Litigation through the Amended Plan, Luna and Hansen are entering into that certain License Agreement Between Hansen and Luna dated of even date herewith (the "**License Agreement**"), and Luna and Intuitive are entering into that certain License Agreement between Intuitive and Luna dated of even date herewith (the "**Intuitive-Luna License**") in each case regarding the grant of certain licenses to fiber optic shape sensing or localization technologies; and

WHEREAS, also in connection with the settlement of the Litigation through the Amended Plan, Luna and Hansen desire that Luna develop for Hansen a localization and shape sensing solution for Hansen's robotic system, and to manufacture and supply such system for Hansen, all in accordance with the terms and conditions hereof.

NOW, **THEREFORE**, in view of the mutual covenants, representations, warranties and other terms and conditions contained herein and for other valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties hereto agree as follows:

AGREEMENT

1. Definitions. The following initially capitalized words shall have the following meanings (and derivative forms shall be interpreted accordingly), and the terms "include," "includes," "including" and derivative forms of them shall be deemed followed by the phrase "without limitation" regardless of whether such phrase appears there (and with no implication being drawn from its inconsistent inclusion or non-inclusion):

1.1 "**Additional Performance Period**" has the meaning given to such term in Section 4.1.3.

1.2 "**Affiliates**" means any corporation or other entity that is directly or indirectly controlling, controlled by or under common control with a Party. For purposes of this definition, "control" of an entity means the direct or indirect ownership of securities representing fifty percent (50%) or more of the total voting power entitled to vote in elections of such entity's board of directors or other governing authority, or equivalent interests conferring the power to direct or cause the direction of the governance or policies of such entity.

1.3 "**Amended Plan**" has the meaning given to such term in the recitals.

1.4 "**Applicable Laws**" means all applicable laws, rules and regulations.

1.5 "**Bankruptcy Court**" has the meaning given to such term in the recitals.

1.6 "**Budget Cap**" has the meaning given to such term in Section 4.1.3.

1.7 "**Chapter 11 Case**" has the meaning given to such term in the recitals.

1.8 "**Commercial Supply Agreement**" has the meaning given to such term in Section 3.3.1.

1.9 "**Commercial Transfer Price**" has the meaning given to such term in Section 3.3.2.

1.10 "**Confidential Information**" has the meaning given to such term in Section 7.1.

1.11 "**Confirmation Order**" has the meaning given to such term in the recitals.

1.12 "[****] **Fees**" has the meaning given to such term in Section 4.1.1.

1.13 "[****] **Milestones**" means the development milestones and corresponding timelines set forth on Exhibit A, as may be amended from time to time in accordance with Section 2.2.

1.14 "**Development Plan**" means the development plan described in Section 2.

1.15 "**Development Program**" means the efforts and activities relating to development of Luna Products to be conducted under this Agreement.

1.16 "[****] **Price**" has the meaning given to such term in Section 3.2.

1.17 "**Discloser**" has the meaning given to such term in Section 7.1.

1.18 "**Effective Date**" means the Effective Date of the Amended Plan after entry of the Confirmation Order by the Bankruptcy Court, which the Parties hereby confirm to be January 12, 2010.

1.19 "**End Product**" means any Product developed, marketed, manufactured or sold by or for Hansen or its Affiliates incorporating or utilizing any Luna Product.

1.20 "[****] **Field**" has the meaning given to such term in the License Agreement.

1.21 "[****] **Product**" has the meaning given to such term in Section 3.8.1.

1.22 "**Fiber Optic Shape Sensing/Localization Technology**" has the meaning given to such term in the License Agreement.

1.23 "**Hansen Indemnitees**" has the meaning given to such term in Section 8.2.

1.24 "**Hansen Licensed IP**" has the meaning given to such term in the License Agreement.

1.25 "**Holdback Amount**" has the meaning given to such term in Section 4.1.1.

1.26 "**Indemnifying Party**" has the meaning given to such term in Section 8.3.

1.27 "**Intellectual Property Rights**" means any and all of the following in any jurisdiction throughout the world (and any rights or interests therein): (a) patents, patent applications and patent and invention disclosures, together with all issuances, continuations, continuations-in-part, divisions, revisions, supplementary protection certificates, extensions and re-examinations thereof, and any other United States or foreign patent rights entitled to the same priority claim (in whole or in part) as any of the foregoing; (b) confidential or proprietary information, know-how and trade secrets; (c) copyrights and all applications, registrations, and renewals in connection with the foregoing; (d) trademarks, service marks, trade names, trade dress and all registrations to and applications for registration of any of the foregoing; and (e) any and all other intellectual or industrial property or proprietary rights.

1.28 "**Interrogator**" has the meaning given to such term in Section 1.36.

1.29 "**Joint Patents**" has the meaning given to such term in Section 5.2.2.

1.30 "**License Agreement**" has the meaning given to such term in the recitals.

1.31 "**Licensed IP**" has the meaning given to such term in the License Agreement.

1.32 "**Licensed Patent**" has the meaning given to such term in the License Agreement.

1.33 "**Litigation**" has the meaning given to such term in the recitals.

1.34 "**Losses**" has the meaning given to such term in Section 8.1.

1.35 "**Luna Indemnitees**" has the meaning given to such term in Section 8.1.

1.36 "**Luna Product**" means [****].

1.37 "[****] **Field**" has the meaning given to such term in the License Agreement.

1.38 "**New Inventions**" has the meaning given to such term in Section 5.2.

1.39 "[****] **Field**" has the meaning given to such term in the License Agreement.

1.40 "[****] **Product**" has the meaning given to such term in Section 3.8.1.

1.41 "[****] **Field**" has the meaning given to such term in the License Agreement.

1.42 "**Product**" means any device, instrument, diagnostic, therapeutic, product, system and application and any related service and/or process.

1.43 "**Project Manager**" has the meaning given to such term in Section 2.3.

1.44 "**Promissory Note**" means that certain Secured Promissory Note entered into between the Parties as one of the Settlement Documents.

1.45 "**Recipient**" has the meaning given to such term in Section 7.1.

1.46 "**Section 365(n) Contract**" has the meaning given to such term in Section 10.6.

1.47 "**Sensor**" has the meaning given to such term in Section 1.36.

1.48 "**Settlement Agreement**" means that certain Confidential Settlement Agreement and Mutual Release entered into by the Parties concurrently herewith.

1.49 "**Settlement Documents**" has the meaning given to such term in the recitals.

1.50 "**Specifications**" means the technical and functional specifications for the applicable Luna Product (including applicable tests to confirm compliance therewith) set forth in the Development Plan and as otherwise provided for in Section 2.2.

1.51 "**Subsidiaries**" has the meaning given to such term in the License Agreement.

1.52 "**Support Memorandum**" has the meaning given to such term in Section 2.6.

1.53 "**Technology**" means 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, devices, prototypes, substances, components, inventions (whether or not patentable), mask works, ideas, trade secrets and other information or materials, in tangible or intangible form.

1.54 "**Third Party Claim**" has the meaning given to such term in Section 8.1.

1.55 "**Third Party Technology**" means any Technology (together with all Intellectual Property Rights therein or thereunder) owned or controlled by a third party that is included by or for Luna in or with any Luna Product or provided to Hansen by Luna in connection with the Development Program or is otherwise necessary for the manufacture, use or sale of any Luna Product.

1.56 "[****] **Field**" has the meaning given to such term in the License Agreement.

2. Development

2.1 Development Program. Luna shall use its commercially reasonable best efforts to develop for Hansen a [****] for Hansen's system in accordance with the Development Plan and the Development Milestones. As a part of such commercially reasonable best efforts, Luna shall provide reasonably adequate and appropriately-skilled staffing for Luna's development work for Hansen hereunder, which in any event shall include Luna devoting to the Development Program the services of the key personnel designated in the Development Plan at the minimum percentage amounts of their total work time set forth therein (as measured over each calendar quarterly period during the Development Program by reference to direct labor time records). Furthermore, Luna shall use its commercially reasonable best efforts to perform the activities, and develop the Technology, as and when described in the Development Plan and the Amended Plan, and Luna shall use its commercially reasonable best efforts to achieve each Development Milestone within the applicable timelines and/or by the applicable deadlines for such Development Milestone set forth on Exhibit A. Without limiting the foregoing, (i) the Parties acknowledge that Luna already has certain ongoing development obligations to Intuitive Surgical, Inc., certain internal product development efforts, and under certain government contracts as of the Effective Date but Luna shall give the Development Program for Hansen at least equal priority to such other obligations (and balance its development work for Hansen and such other parties accordingly), (ii) Luna shall give the Development Program for Hansen at least equal priority to any other development project or similar activities (whether for itself, its Affiliates or for third parties) not described in (i) above, including pursuant to an agreement entered into after the Effective Date, and (iii) Luna may need to hire additional highly qualified employees, possibly because of the loss of employees, and the ability and timing of hiring such employees cannot be guaranteed. The Parties acknowledge that technical and scientific issues and realities may make either or both the Development Plan or the Development Milestones impractical or infeasible. Hansen shall compensate Luna for such development and related activities solely as provided for in Article 4 below.

2.2 Development Plan. Luna's development work hereunder shall be conducted pursuant to a written development plan (the "**Development Plan**"). The Development Plan shall include a detailed workplan (including incorporation of, or reference to, the Development Milestones) and budget covering the Development Program activities to be conducted under this Agreement. The initial Development Plan is attached hereto as Exhibit B (and the Development Milestones are attached as Exhibit A). The Parties may from time to time modify the Development Plan (including the Development Milestones), as mutually agreed. Furthermore, the Development Plan and Development Milestones may be modified in accordance with the process described below in Sections 2.2.1 through 2.2.4. The Specifications shall be part of the Development Plan, or, to the extent not so specified in the Development Plan, independently established in writing in a document executed by both Parties, and any changes thereto (and/or any initial determination thereof) shall be done in accordance with this Section 2.2. The Development Plan (including the Specifications) and Development Milestones may not be modified other than in accordance with this Section 2.2.

2.2.1 If Hansen wishes to request changes to the Development Plan (including the Specifications) and/or the Development Milestones, Hansen shall notify Luna and propose a draft of the modified Development Plan and/or modified Development Milestones for review by Luna. Luna shall provide reasonable consultation and assistance to Hansen in Hansen's efforts to modify the Development Plan and the Development Milestones. Luna shall provide Hansen with any comments on the proposed modifications and a reasonable estimate of changes to the budget, if any, necessitated by the modifications within [****] days of Hansen's request. If Luna has concerns with respect to the timelines for any substantial new Development Milestones or substantial modifications to existing Development

Milestones (whether on their own or as a result of modifications to the Development Plan) proposed by Hansen, Luna shall provide Hansen with a reasonably detailed explanation for Luna's concerns and a proposal with reasonably estimated timelines for such Development Milestones. Hansen shall consider Luna's concerns and proposed budget and timelines in good faith in finalizing the modified Development Plan and/or Development Milestones. No sooner than [****] days after first providing to Luna Hansen's proposed modifications to the Development Plan and/or the Development Milestones in accordance with the foregoing, Hansen may formally propose a final modified Development Plan and/or modified Development Milestones by providing a copy thereof to Luna. Luna shall thereupon have [****] days to approve such modified Development Plan and/or Development Milestones, such approval not to be unreasonably withheld.

2.2.2 Upon any such approval by Luna under Section 2.2.1, such modified Development Plan (including modified Specifications if applicable) and/or modified Development Milestones shall become the Development Plan and/or Development Milestones (as applicable) hereunder and shall replace the previous Development Plan and/or previous Development Milestones (as applicable), except to the extent the modified version expressly incorporates such previous Development Plan and/or Development Milestones or otherwise expressly provides for existing portions thereof to remain in effect.

2.2.3 If Luna does not approve the proposed modifications under Section 2.2.1 within the [****] day period specified above, the Parties shall discuss in good faith for a period of at least [****] days to reach mutual agreement on the proposed modifications. Otherwise, absent such agreement within such [****] day period, Hansen shall have the right at any time after such [****] day period to submit its proposed modifications (including any determination of Specifications, if applicable) to binding dispute resolution under Section 2.6 hereunder, and (to the extent not otherwise resolved prior to completion of any arbitration thereunder) the arbitrator under any arbitration pursuant to Section 2.6 shall be empowered hereunder to determine whether or not Luna's failure to approve is reasonable (and therefore if Hansen's proposed modifications shall become effective hereunder) and/or determine an alternative form of the modifications that is fair to Luna in light of Luna's objections to Hansen's formally proposed modifications but which also most nearly achieves Hansen's goals and objectives of such proposed modifications.

2.2.4 If Luna wishes to request changes to the Development Plan (including the Specifications) and/or Development Milestones, it shall notify Hansen thereof and inform Hansen of the proposed modifications. Luna and Hansen shall thereupon discuss such modifications. No sooner than [****] days after first providing to Hansen Luna's proposed modifications to the Development Plan and/or the Development Milestones in accordance with the foregoing, Luna may formally propose a final modified Development Plan and/or modified Development Milestones by providing a copy thereof to Hansen. Hansen shall thereupon have [****] days to approve such modified Development Plan and/or Development Milestones, such approval not to be unreasonably withheld so long as such proposed modifications are consistent with the reasonable development of a commercially viable End Product and do not significantly increase the budget. If Hansen approves such modification, such modified Development Plan (including modified Specifications if applicable) and/or modified Development Milestones shall become the Development Plan and/or Development Milestones (as applicable) hereunder and shall replace the previous Development Plan and/or previous Development Milestones (as applicable), except to the extent the modified version expressly incorporates such previous Development Plan and/or Development Milestones or otherwise expressly provides for existing portions thereof to remain in effect. If Hansen does not approve the proposed modifications within the [****] day period specific above, Section 2.2.3 shall apply with respect thereto, with the Parties in such section reversed.

2.3 Project Managers. Each Party shall appoint a principal point of contact to be its project manager (each, a "**Project Manager**") who shall coordinate and act as liaison with the other Party with respect to Development Program activities under this Agreement. The initial Project Managers for each Party shall be [****] for Hansen and [****] for Luna. A Party may replace its Project Manager by written notice to the other Party. The Project Managers, in and of themselves, shall not have any decision-making authority and shall have no power to amend or waive compliance with this Agreement or the Development Plan or create any estoppel or defense. Each Party's respective Project Managers shall meet or confer at mutually agreeable times (but at least [****]) to discuss the status of the Development Program. Luna's Project Manager shall have no direct role in or with respect to any products or services provided by Luna to Intuitive Surgical, Inc., a Delaware corporation.

2.4 Reports; Source Code Escrow. Luna shall keep Hansen informed of its progress with respect to its Development Program activities under this Agreement at the junctures set forth in the Development Plan and as follows. Luna shall provide Hansen with written development reports upon Hansen's reasonable request (made no more frequently than once per month) and also to the extent provided for in the Development Plan or Development Milestones, but in any event no less frequently than within [****] days after the end of each calendar month, which reports will include a meaningful summary of progress against the Development Plan and activities accomplished by Luna in relation thereto through the end of the applicable month, including a summary of Technology generated or developed under the Development Program since the date of the last report, significant results, adverse event reports, information and data generated, manufacturing developments, significant challenges anticipated and updates regarding significant intellectual property matters. Upon Hansen's reasonable request at reasonable intervals, Luna will provide Hansen with a copy of tangible and intangible embodiments of Technology generated or developed under the Development Program, including prototypes and models, documents (including specifications and diagrams) and software object code (and, to the extent provided below, software source code), at such times as are reasonable under the circumstances (e.g., after completion of a new version thereof or when a reasonable stopping point in development is reached with respect thereto or a pause in development thereof is warranted); provided, however, that, to the extent the cost of such embodiments, prototypes and models is not included in the Development Plan or is not otherwise covered by Section 3.2, Hansen shall reimburse Luna for the cost (calculated at the same rate as the rate described in Section 4.1) thereof (without any effect on any Budget Cap in the case of such reimbursement). Luna shall make its personnel working on the Development Program reasonably available to Hansen for periodic consultations, by phone or in person (which shall be part of the services provided pursuant to Section 2.1 and compensated for under Section 4.1 (including subject to the budget provisions therein)), as provided for in the Development Plan and Development Milestones, and otherwise as reasonably requested by Hansen. With respect to source code, the following shall apply:

2.4.1 Luna shall cooperate with Hansen to provide any software source code with respect to the Luna Product to the extent required by any Applicable Laws, including regulatory requirements of the FDA and other applicable governmental entities in respect of the Luna Product and/or the End Product within such time periods as reasonably required for compliance. Luna shall provide to Hansen the portions of software source code with respect to the Luna Product to the extent set forth as a deliverable in the Development Plan (including in the Development Milestones) in accordance with the schedule therefore in the Development Plan (including in the Development Milestones).

2.4.2 Following the Effective Date, Luna shall deposit in escrow all source code for software necessary to operate the Luna Product (including source code for software within the Interrogator, as may exist as of the Effective Date and as updated), as imaged on a hard drive with all of

the files and utilities necessary to compile or synthesize the source code, together with any documentation, libraries, tools, utilities and other related materials reasonably necessary for the installation, testing, deployment, operation, modification or use of such software source code (collectively, "**Luna Product Deposit Materials**") with [****] (or, if [****] is not reasonably available, with another reputable software escrow company to be mutually agreed by the Parties). Luna shall periodically update such Luna Product Deposit Materials with the latest versions thereof, but no less frequently than once each [****]. The Luna Product Deposit Materials shall be released to Hansen in the event any of the following occurs (but not in any other case): (i) refusal of Luna to perform continued development, maintenance, upgrading and support of the software within the Luna Product Deposit Materials under Luna's standard rates and under other reasonable and customary terms (it being understood that Luna has no obligation to do so hereunder outside of the Development Program) or failure of Luna to provide such services after agreeing to do so (following notice and an opportunity to cure such failure within [****] days), and (ii) the bankruptcy, liquidation or insolvency of Luna or an assignment for the benefit of creditors by Luna. All fees and expenses payable to [****] (or such other escrow company, if any) for the establishment and maintenance of such escrow arrangement shall be borne and paid by Hansen.

2.4.3 Following the Effective Date, Luna shall deposit in escrow all source code for software included within the Licensed IP, as imaged on a hard drive with all of the files and utilities necessary to compile or synthesize the source code, together with any documentation, libraries, tools, utilities and other related materials reasonably necessary for the installation, testing, deployment, operation, modification or use of such software source code (collectively, "**Technology Deposit Materials**") with [****] (or, if [****] is not reasonably available, with another reputable software escrow company to be mutually agreed by the Parties). Luna shall periodically update such Technology Deposit Materials with the latest versions thereof at least annually. The Technology Deposit Materials shall be released to Hansen in the event any of the following occurs (but not in any other case): (i) a default occurs under the Promissory Note which default is not cured within any time allotted for such cure under such Promissory Note, and (ii) the bankruptcy, liquidation or insolvency of Luna or an assignment for the benefit of creditors by Luna. The escrow arrangement for the Technology Deposit Materials shall terminate upon payment in full of the Promissory Note (at which point all such Technology Deposit Materials, if not already released to Hansen, shall be returned to Luna). All fees and expenses payable to [****] (or such other escrow company, if any) for the establishment and maintenance of such escrow arrangement shall be borne and paid by Hansen, except that Luna shall pay any annual escrow maintenance fees of [****] (or such other escrow company).

2.4.4 Within [****] days following the Effective Date, the Parties shall negotiate and enter into an escrow agreement between the Parties and [****] (or such other escrow company, if any) to establish the escrow arrangement described above under the terms and conditions described above (and other reasonable and customary terms and conditions). Luna shall make the initial deposit of the materials described above into escrow within [****] days after such agreement is entered into. In the event the Parties fail to execute such escrow agreement within [****] days after the Effective Date, either Party may refer the matter to dispute resolution under Section 2.6 for the purpose of finalizing and executing such escrow agreement (with the arbitrator being someone with expertise in software transactions and/or the negotiation of escrow agreements with respect thereto and with each Party submitting their last proposed draft of the escrow agreement with their Support Memorandum thereunder).

2.5 Liquidated Damages.

2.5.1 The Parties acknowledge that Hansen is relying on Luna performing its obligations under Section 2.1 above in order to provide Hansen with important technical solutions that are critical to Hansen's business and that Hansen would suffer significant harm, and lose the benefit of a critical development and supply arrangement, if Luna fails to meet its obligations under Section 2.1. The Parties acknowledge that the liquidated damages set forth in this Section 2.5 are reasonable under the circumstances existing on the Effective Date and reasonably approximate the amount of damage that would be sustained by Hansen as a result of Luna's failure to meet its obligations under Section 2.1, and that it is impracticable or extremely difficult to determine the actual damages that would be sustained by Hansen as a result thereof. The Parties further acknowledge and agree that the amount of the liquidated damages set forth in this Section 2.5 is not a penalty. If a court of competent jurisdiction nonetheless determines, by a final, non-appealable judgment, that the amount of the liquidated damages exceeds the maximum amount permitted by law, then the amount of the liquidated damages shall be reduced to the maximum amount permitted by law in the circumstances, as determined by such court of competent jurisdiction.

2.5.2 In the event Luna breaches Section 2.1 of this Agreement and (a) Luna fails to cure such breach within sixty (60) days after notice thereof from Hansen to Luna describing such breach in reasonable detail as well as those steps known to Hansen, if any, that Luna could take to cure such breach (or, within only thirty (30) days after such a notice with respect to a second (same or similar) breach of Section 2.1 described in such a Hansen notice in the event a first breach of the same or similar nature subject to a Hansen notice hereunder was duly cured by Luna), or (b) such breach is the third (same or similar) breach of Section 2.1 described in a Hansen notice of breach following Luna's timely cure of two prior breaches of the same or similar nature described in previous Hansen notices hereunder, then, in the case of either (a) or (b), Luna shall pay Hansen without offset, recoupment or defense, which are hereby waived by Luna, liquidated damages in the amount of Ten Million Dollars ($10,000,000) plus the amount of Development Fees actually paid by Hansen pursuant to Section 4.1 below, due and payable within five (5) days after the end of the applicable cure period described above (in the case of (a)), or, with respect to the third breach under (b), within five (5) days of Hansen's notice referencing such third breach. In the event that Luna disputes that Luna has breached Section 2.1 of the Agreement or disputes that it has failed to cure such breach within the applicable cure period (or Luna otherwise disputes the payment of liquidated damages that Hansen claims are due hereunder), either Party may by written notice submit the matter to resolution pursuant to Section 2.6 below. For the avoidance of doubt, if Luna breaches Section 2.1 but subsequently cures such breach and/or achieves the next Development Milestone on a timely basis, in either case prior to a notice of breach from Hansen under this Section 2.5.2, Hansen shall thereupon have no right to provide notice of such breach to Luna under this Section 2.5.2.

2.5.3 [****].

2.6 Certain Development Disputes. If either Party has any dispute regarding Luna's performance under Section 2.1 above, or any failures with respect thereto (including the payment of liquidated damages under Section 2.5 and any dispute regarding if and when a given Development Milestone is achieved or otherwise with respect to payments owed under Section 4.1 (without limiting Section 4.2)) or otherwise pursuant to Sections 2.4, 3.3 and 3.8, then prior to taking any other action with respect to such dispute (e.g., litigation), except as may be required to preserve a Party's rights with respect to the dispute process described in the Amended Plan, the complaining Party shall refer the dispute to the Chief Executive Officers of the Parties for good-faith discussions over a period of not less than [****] days. Each Party will make such executives reasonably available for such discussions. If the

Parties are unable to resolve any such dispute through such discussions within such [****] days, then either Party may initiate resolution of the matter in accordance with the following expedited dispute resolution process (which shall be the exclusive dispute resolution process for any such dispute, except for, to the extent applicable, the dispute process described in the Amended Plan). Upon either Party's request at such point, the Parties shall submit such dispute to arbitration proceedings under the Comprehensive Arbitration Rules and Procedures of [****] as modified by this Section. The arbitration shall take place in New York City, New York before a single arbitrator. The Parties shall jointly select the arbitrator, and should they fail to agree on such arbitrator within [****] days of this Section being invoked, the Parties shall request that [****] appoint an appropriate arbitrator who shall be a neutral, independent and impartial individual with expertise in the development of medical devices. Within [****] days after an arbitrator is selected (or appointed, as the case may be), each Party will deliver to both the arbitrator and the other Party a memorandum (the "**Support Memorandum**") in support of its position with respect to the dispute (including any data or information in support thereof). Within [****] days after receipt of the other Party's Support Memorandum, each Party may submit to the arbitrator (with a copy to the other Party) a rebuttal to the other Party's Support Memorandum. Neither Party may have communications (either written or oral) with the arbitrator other than for the sole purpose of engaging the arbitrator or as expressly permitted in this Section; however, the arbitrator may convene a hearing if the arbitrator so chooses to hear oral argument and discussion regarding the dispute in question. The Parties shall direct the arbitrator to decide the applicable dispute within [****] days after the arbitrator's selection (or appointment, as the case may be). The decision of the arbitrator shall be final, binding, and unappealable and shall be deemed the decision of the Parties hereunder and may be entered by any Party in a court of competent jurisdiction. Nothing in this Section 2.6 shall limit or restrict Hansen's ability to enforce or defend its rights under this Agreement pursuant to the dispute process described in the Amended Plan.

2.7 Further Assurances and Assistance. Each Party agrees to take or cause to be taken such further actions, and to execute, deliver and file or cause to be executed, delivered and filed such further documents and instruments, and to obtain such consents, as may be reasonably required or requested by the other Party (to the extent consistent with this Agreement and at the other Party's expense) in order to effectuate fully the purposes, terms and conditions of this Agreement. Without limiting the foregoing, each Party shall provide the other Party with assistance, information and cooperation reasonably requested by such other Party (and at such other Party's expense) in connection with such other Party's compliance with regulatory requirements and Applicable Laws with respect to the Luna Products and/or End Products (with respect to the Luna Product portion thereof) and as required to obtain regulatory approvals and industry certifications for Luna Products or End Products (with respect to the Luna Product portion thereof), including without limitation in connection with all regulatory filings, approvals and registrations for Luna Products and End Products (with respect to the Luna Product portion thereof).

3. Manufacture and Supply

3.1 Generally. If Hansen so desires (but subject to Section 3.3.5 below), Luna shall manufacture and supply Luna Products to Hansen in such amounts requested by Hansen up to Hansen's requirements of Luna Products for development and commercialization of Luna Products or End Products, in accordance with the Specifications for such Luna Products. Luna represents and warrants that all Luna Products furnished to Hansen by Luna hereunder (a) shall be manufactured in accordance with all Applicable Laws (including current Good Manufacturing Practice regulations and Quality System regulations, in each case promulgated by the US Food and Drug Administration (or its counterparts in jurisdictions outside the United States) and applicable International Conference on Harmonization

manufacturing rules and guidelines), the ISO 13485 standard for Medical Devices and other generally recognized industry standards and certifications, such other ISO standards (if any) or UL certifications (it being acknowledged that these other standards and certifications and the cost of meeting them will be incorporated into the Development Plan), (b) shall be free from defects in material or workmanship, and (c) shall conform to the Specifications therefor in all material respects. If Luna wishes to use third party manufacturers to meet its manufacturing and supply obligations under this Article 3 for Luna Products, Luna shall provide Hansen with prior written notice of Luna's intent with respect thereto specifying the identity of the intended third party manufacturer and a draft agreement of the terms under which Luna proposes to engage such third party manufacturer, which draft agreement shall contain at least the terms and conditions of this Article 3 and other applicable terms and conditions of this Agreement and shall (at Hansen's option) include the right for Hansen to be included as a third party beneficiary to such agreement. All such proposed third party manufacturers and agreements shall be subject to Hansen's review and prior written consent before Luna may use, or validly conclude an agreement engaging, any third party manufacturer for Luna Products, and Luna acknowledges that Hansen may reasonably condition or withhold its consent thereto on a case-by-case basis. This Section 3.1 shall not prevent Luna from including components in Luna Products purchased from third parties, subject to Section 5.3. The Parties shall appoint project managers for purposes of the manufacture and supply arrangements set forth in this Article 3 with similar roles and authorities as the Project Managers described in Section 2.3 with respect to the Development Program. For the avoidance of doubt, the manufacture and supply provisions in this Article 3 shall also include Luna Products that Hansen desires to order for its Subsidiaries and permitted sublicensees, and the provisions above and below in this Article 3 shall be interpreted to allow for the purchasing of Luna Products from Luna by or for such Subsidiaries and sublicensees, as may be directed by Hansen from time to time. Except to the extent expressly provided for in Section 3.3.5 and 3.8, nothing in this Agreement shall be construed (a) as imposing any requirement on Hansen (or its designees) to order or purchase Products or any other products in any quantity from Luna or (b) to limit Hansen's (or its designees') ability to manufacture, or have a third party manufacture, Products or any other products.

3.2 Supply for Development. As and to the extent requested by Hansen, Luna shall manufacture and supply to Hansen, in accordance with Section 3.1, Luna Products for purposes of developing and/or obtaining regulatory approval of the Luna Products or End Products (including for non-clinical and clinical studies) and other similar and related purposes at the Development Transfer Price, but not for commercial sale. Hansen shall keep Luna reasonably informed of its anticipated requirements of Luna Products for such purposes, whether through the Project Manager meetings pursuant to Section 2.3 (if applicable), or otherwise. Hansen may order Luna Products for the development-related purposes described above under this Section 3.2 from Luna by providing Luna with a binding purchase order indicating: (i) the quantities of Luna Product ordered (provided such quantities are consistent with the terms of this Agreement), (ii) the requested delivery date [****], and (iii) a delivery location. Upon receipt of any such conforming purchase order, Luna shall manufacture and supply Luna Product in accordance therewith. Any term in such purchase order that is inconsistent with this Agreement shall not be binding upon Luna; otherwise Luna shall send a confirmation to Hansen within [****] of receiving any such conforming purchase order. "**Development Transfer Price**" means [****].

3.3 Commercial Supply

3.3.1 Commercial Supply Agreement. If Hansen commercially launches an End Product containing a Luna Product Luna shall manufacture and supply to Hansen up to Hansen's requirements of Luna Products (but subject to Section 3.3.5 below) for commercial sale (presumably as incorporated into End Products) in accordance with this Section 3.3. If Hansen so decides to launch such an End Product containing a Luna Product, the Parties shall [****].

3.3.2 Commercial Transfer Price. Luna shall supply to Hansen Luna Products for commercial sale (or marketing or promotional purposes) (presumably as incorporated into End Products) at the Commercial Transfer Price. [****].

3.3.3 Quality Agreement. Promptly upon Hansen's request, Hansen and Luna (and/or Luna's third party manufacturer of Luna Product if applicable for regulatory purposes) shall negotiate and execute a reasonable and customary quality agreement governing manufacture of Luna Product consistent with Applicable Laws (including regulatory requirements).

3.3.4 Advance Requirements Forecasts. Hansen shall provide Luna with reasonable advance notice (but no less frequently than on a rolling three month basis) of its forecasted supply needs so as to allow Luna the ability to prepare to meet such supply needs. The Commercial Supply Agreement shall specify the extent to which such forecasts are binding and/or can be modified by Hansen.

3.3.5 [****].

3.3.6 Other Provisions. The Commercial Supply Agreement shall contain provisions governing, inter alia, product recalls and withdrawals, inventory and buffer stocks, reasonably cost reduction efforts, facility licensures and permits (and the maintenance thereof), adverse event procedures, term and termination provisions [****] and government inspections.

3.4 Delivery. All shipments and deliveries of Luna Products shall be made FCA at the delivery location specified in the purchase order therefor (Incoterms 2000). [****]. Luna shall provide appropriate documentation (including documentation required to comply, and for Hansen to comply, with all Applicable Laws (including regulatory requirements) and to establish compliance with applicable industry standards and certifications with respect to such Luna Product) as well as an invoice stating the Development Transfer Price or Commercial Transfer Price, as applicable, and describing in detail the calculation thereof, with all shipments of Luna Product hereunder.

3.5 Payment for Luna Product; Acceptance of Luna Product. All payments for Luna Products (at the Development Transfer Price or Commercial Transfer Price, as the case may be) shall be due within [****] days from the date Luna delivers Luna Product to the delivery location specified in the applicable purchase order. Hansen shall have [****] days from the date of receipt by Hansen to reject any Luna Product that does not conform to Hansen's purchase order therefor (with respect to supply of Luna Products for commercial sale, to the extent the terms of such purchase order are consistent with those of the Commercial Supply Agreement) or does not conform in all material respects to the Specifications therefor or otherwise does not comply in all material respects with the requirements of Section 3.1, or else such Luna Product shall be deemed accepted. If Hansen rejects Luna Product in accordance with the foregoing, then, at Hansen's election: (i) Hansen shall not be obligated to pay for such rejected Luna Product (and Luna shall refund to Hansen any amounts paid for such rejected Luna Product and reimburse Hansen for any amounts incurred for return shipment or destruction of such rejected Luna Product if Luna requests return or destruction thereof) or (ii) Luna shall manufacture and deliver replacement conforming Luna Product within a reasonably prompt period of time, which such replacement conforming Luna Product shall be subject to the terms of this Article 3, including the acceptance process set forth in this Section 3.5.

3.6 Records; Inspections. Luna shall keep and maintain complete and accurate records, reports and other documents as may be reasonably required to confirm its compliance with this Article 3 and Applicable Laws with respect to its manufacturing activities hereunder. Luna shall permit Hansen representatives to enter Luna's facilities upon reasonable prior notice and at reasonable intervals, during normal business hours for the purpose of reviewing such records, reports and documents and making quality assurance audits of the facilities and of the procedures and processes used by Luna in storing, manufacturing and shipping Luna Products and for the purpose of confirming compliance with Article 3 and Applicable Laws. Luna shall ensure that any third party manufacturer to which Luna subcontracts manufacture of Luna Products shall grant Hansen at least equivalent rights to inspect the facilities of such third party manufacturer.

3.7 Manufacturing Technology Transfer. Without limiting Hansen's rights to manufacture or have manufactured Luna Products, in the event that (a) Luna is unable to meet Hansen's reasonable supply needs of Luna Products (to the extent in accordance with this Agreement) [****].

3.8 [****] **Supply Arrangements for Other Products.**

3.8.1 [****] **Field.**

(a) For the period of [****] years after the Effective Date, in the event that (i) Hansen elects to [****].

(b) During the period beginning on the [****] anniversary of the Effective Date and continuing thereafter, [****].

3.8.2 Non-Robotic Medical Field Outside Orthopedics, Endoluminal or Vascular. For a period of [****] years from the Effective Date, in the event that [****].

4. Compensation

4.1 Development Fees. Hansen shall pay Luna for its development work done pursuant to Section 2.1 above in accordance with this Section 4.1.

4.1.1 [****] **Fees.** [****].

4.1.2 Invoicing and Payment. [****].

4.1.3 [****].

4.1.4 [****].

4.2 Audit Luna shall keep and maintain complete and accurate books, records and accounts as may be reasonably required to confirm its compliance with this Agreement and the amounts payable hereunder (including under Section 4.1 and under Article 3). Hansen shall have the right once per twelve month period, upon reasonable advance notice and during normal business hours to have an independent third party auditor (one that is not otherwise engaged by Hansen for other auditing or tax purposes) audit such books, records and accounts to verify the accuracy of the reports and amount of payments payable hereunder. [****].

5. Intellectual Property

5.1 Acknowledgement of License Agreement. The Parties acknowledge that they are concurrently entering into the separate License Agreement governing the terms and conditions of licenses under certain Technology (and Intellectual Property Rights therein or thereunder) relevant to the development activities contemplated under this Agreement, including with respect to Fiber Optic Shape Sensing/Localization Technology. Nothing herein shall limit the rights and licenses expressly granted to, acquired by or confirmed for Hansen or Luna in the License Agreement. For the avoidance of doubt, any Technology (and Intellectual Property Rights therein or thereunder) developed, made, created, conceived or reduced to practice (in whole or in part) by or for Luna in connection with Luna's development activities or performance under this Agreement shall be included in the Licensed IP (including as used in Section 2.1 of the License Agreement) for all purposes under the License Agreement, including for purposes of the licenses granted to Hansen under the terms and conditions of the License Agreement (except, with respect to Joint Patents, to the extent assigned to Hansen hereunder). Furthermore, the Parties acknowledge and agree that the licenses granted to Hansen under the License Agreement are essential to this Agreement and necessary for Hansen to enjoy the benefits of the Development Program and other terms and conditions of this Agreement, and that, without such licenses, the purposes and performance of this Agreement would be entirely frustrated and materially impaired. Accordingly, without limiting the terms and conditions of the License Agreement (or any rights or remedies for any breach thereof), the Parties agree that any termination of the licenses granted to Hansen under the License Agreement or any narrowing of (i) the scope of such licenses or (ii) the degree of their exclusivity (which narrowing results in a material impairment of the purposes or performance of this Agreement and/or the License Agreement), shall be a material breach of this Agreement.

5.2 New Inventions. To the extent a Party develops, makes, conceives or reduces to practice a new patentable invention under the Development Program ("**New Inventions**"), subject to the License Agreement, ownership of the patent rights to such New Invention between the Parties shall be governed as follows:

5.2.1 Hansen Inventions. Hansen shall own all patent rights to any New Inventions that Hansen solely develops, makes, conceives or reduces to practice (i.e., no employee or consultant of Luna is an "inventor" thereof under applicable patent law). Hansen shall have the sole right to file any patent application on any such New Invention and to control the prosecution and enforcement thereof. Hansen shall promptly notify Luna in writing of any such New Inventions within thirty (30) days of documenting same.

5.2.2 Joint Inventions. Hansen shall own all patent rights to any New Inventions that Hansen and Luna jointly develop, make, conceive or reduce to practice (i.e., an employee or consultant of each of Hansen and Luna is an "inventor" thereof under applicable patent law) (to the extent any patent application is filed thereon, together with any patents issuing thereon and other patent rights arising therefrom or claiming priority thereto, a "**Joint Patent**"). Hansen shall have the sole right to file any patent application on any such New Invention (and to control the prosecution and enforcement thereof); provided that (i) Luna shall cooperate in the filing of any such patent application to the extent consistent with applicable patent law and (ii) Hansen shall provide Luna with a copy of each such patent application. The Parties acknowledge that any Joint Patent(s) are subject to the applicable terms and conditions of the License Agreement and Section 5.2.5 below. Each Party shall promptly notify the other in writing of any such New Inventions within thirty (30) days of documenting same.

5.2.3 Luna Inventions. Luna shall own all patent rights to any New Inventions that Luna solely develops, makes, conceives or reduces to practice (i.e., no employee or consultant of Hansen is an "inventor" thereof under applicable patent law). Luna shall have the sole right to file any patent application on any such New Invention and to control the prosecution and enforcement thereof, subject to the provisions below. The Parties acknowledge that any such New Inventions are subject to the applicable terms and conditions of the License Agreement and the Intuitive-Luna License, to the extent applicable to such New Inventions (including Sections 5.1 and 5.2 of the License Agreement, but without limiting the additional terms and conditions regarding patent prosecution and enforcement below, and including in any event the inclusion of such New Inventions and Intellectual Property Rights therein or thereto within the Licensed IP licensed to Hansen under the License Agreement). Luna shall promptly notify Hansen in writing of any such New Inventions within thirty (30) days of documenting same. Upon Hansen's reasonable request, Hansen shall have the right to review and provide input on all patent filings and responses regarding the New Inventions prior to their filing or submission with any applicable patent office. Prior to dropping prosecution of any claim within any patent applications on any New Inventions, Luna shall notify Hansen thereof and Hansen, at is option, shall have the right to continue the prosecution of such claim and Luna shall provide Hansen reasonable cooperation and assistance in connection therewith. Hansen shall have the sole and exclusive right to enforce any patents on New Inventions with respect to any infringement or alleged infringement thereof in the [****] Field, the [****] Field and the [****] Field and the [****] Field, and the terms and conditions of Section 5.2(b) of the License Agreement shall otherwise apply with respect thereto.

5.2.4 Patent Ownership. Luna hereby assigns (and agrees to assign, identify, document and deliver) to Hansen all right, title and interest in and to any Joint Patent. Luna shall execute and deliver all documents reasonably required by Hansen to evidence, perfect, record or enforce such assignment and/or the Joint Patents, and appoints Hansen as its attorney-in-fact to execute and deliver such documents if Hansen is unable, after making reasonable inquiry, to obtain Luna's signature. Hansen shall have the sole right (in its sole discretion) to control and oversee all filing, prosecuting, maintaining and enforcing any and all Joint Patents at its own expense, and Luna shall reasonably cooperate with Hansen and provide all reasonable assistance (and execute such documents) in connection with any action Hansen may take with respect thereto, in all cases at Hansen's sole cost and expense. Notwithstanding anything to the contrary herein, the Parties agree that applicable patent law shall govern who is an inventor of any New Invention. In the event of any disagreement about ownership, inventorship or similar matters arising out of this Agreement or otherwise related to New Inventions, the Parties hereby agree first to have their Chief Executive Officers or their designees meet and confer to attempt to resolve such disagreement. If such disagreement is not resolved within [****] days of either party's referral of such disagreement for resolution by such Chief Executive Officers or their designees, the Parties agree to submit such disagreement to final and binding arbitration administered by the American Arbitration Association under its Patent Arbitration Rules before one single neutral arbitrator. Such arbitration shall occur in New York City, New York. The decision of the arbitrator shall be final, binding, and unappealable and shall be deemed the decision of the Parties hereunder and may be entered by any Party in a court of competent jurisdiction.

5.2.5 [****] **License to Joint Patents outside of** [****] **Fields.** Hansen hereby grants Luna an irrevocable, perpetual, fully paid-up, royalty-free, nonexclusive, transferable, sublicensable, worldwide license under the Joint Patent(s) to research, develop, make, have made, use, have used, import, sell, have sold, offer to sell, sell and transfer and otherwise commercialize and exploit under any such Joint Patents in all fields of use outside the [****].

5.2.6 Retained Rights. For purpose of clarification and not of limitation (and without limiting any other provisions of this Agreement or any terms and conditions of the License Agreement), nothing in this Section 5.2 shall assign the ownership of any Technology of any Party (other than the Joint Patents to Hansen as provided above) nor limit the use of any Technology of any Party, except, with respect to Luna, to the extent any such use by Luna is covered by the valid and enforceable claims of any issued Joint Patent.

5.3 Third Party Technology. Luna shall inform Hansen prior to including Third Party Technology in or with any Luna Products (or otherwise providing such Third Party Technology to Hansen in connection with the development of Luna Products hereunder). To the extent any such Third Party Technology is so included or provided, Luna shall provide Hansen with written notice informing Hansen thereof and acknowledging Hansen's rights thereto (and confirming such rights are as provided for in the License Agreement). To the extent any such Third Party Technology is required for Luna to manufacture and supply Luna Products hereunder, and any royalties with respect thereto are to be included in the formula for the Development Transfer Price or the Commercial Transfer Price under Sections 3.2 and 3.3.2, respectively, then Hansen must provide its prior written consent; provided, however, that if Hansen does not consent thereto, notwithstanding anything else herein to the contrary, Luna shall have no duty to supply such Luna Products. If Luna includes Third Party Technology with or in any Luna Products (or otherwise provides such Third Party Technology to Hansen in connection with the development of Luna Products hereunder) without such Third Party Technology having been licensed or sublicensed to Hansen in accordance with the foregoing, or if Luna infringes any third party patents or misappropriates any trade secrets in the course of its performance of the Development Program hereunder, then in all such cases, Luna shall indemnify, defend and hold harmless the Hansen Indemnitees from and against any loss, damage, liability, judgment, fine, or amount paid in settlement (with Luna's consent) and expense or cost of defense arising from any claim, demand, action, proceeding, in all such cases suffered or incurred by the Hansen Indemnitees resulting from Hansen's use and exploitation of such Third Party Technology.

6. Representations and Warranties

6.1 By Hansen. Hansen hereby represents, warrants and covenants as follows:

6.1.1 Hansen is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

6.1.2 The execution, delivery and performance of this Agreement by Hansen (i) are within its corporate powers, (ii) have been duly authorized by all necessary corporate action on Hansen's part, and (iii) do not and shall not contravene or constitute a default under, and are not and shall not be inconsistent with, any law or regulation, any judgment decree or order, or any contract, agreement or other undertaking applicable to Hansen.

6.2 By Luna. Luna hereby represents, warrants and covenants as follows:

6.2.1 Luna is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

6.2.2 The execution, delivery and performance of this Agreement by Luna (i) are within its corporate power, (ii) have been duly authorized by all necessary corporate action on Luna's part, and (iii) do not and shall not contravene or constitute a default under, and are not and shall not be inconsistent with, any law or regulation, any judgment, decree or order, or any contract, agreement or other undertaking applicable to Luna.

6.2.3 Luna shall perform under Section 2.1 above in a professional and workmanlike manner, consistent with industry standards, and in compliance with Applicable Laws.

6.2.4 Luna is not now nor has in the past been debarred or disqualified or the subject of debarment or disqualification proceedings by any regulatory authority having jurisdiction and will not knowingly use in connection with its Development Program activities hereunder any employee, consultant or investigator that has been debarred or disqualified or the subject of debarment or disqualification proceedings by any regulatory authority having jurisdiction. Luna covenants that it will notify Hansen, subject to any confidentiality obligations and the preservation of attorney-client privilege, immediately after Luna's receipt of information of any debarment or disqualification (or the initiation of any action or proceeding therefor) of any person performing Development Program activities for Luna hereunder.

6.2.5 Luna has reviewed and approved the Development Plan and the Development Milestones as of the Effective Date with the intent and expectation that such Development Plan and Development Milestones can be successfully achieved and Luna is not aware as of the Effective Date (as can be shown by clear and convincing evidence) of any technical or scientific issues or realities that are likely to render the Development Plan and Development Milestones impractical or infeasible or likely to not be achieved within the proposed time frames and budget.

6.3 Disclaimer. EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS AGREEMENT, NEITHER PARTY MAKES, AND EACH PARTY HEREBY DISCLAIMS, ANY AND ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

7. Confidentiality

7.1 Definition. "**Confidential Information**" means all non-public written, visual, oral and electronic data and information disclosed by one Party ("**Discloser**") to the other Party ("**Recipient**") under this Agreement or the License Agreement that relates to the Discloser's business, technology, products, processes, techniques, research, development and marketing and is marked as confidential or proprietary or disclosed under circumstances reasonably indicating that it is confidential or proprietary. All Hansen Licensed IP, Hansen New Inventions and unpublished patent applications for Joint Patents shall be Confidential Information of Hansen and Hansen shall be the Discloser (and Luna the Recipient) thereof; and all Licensed IP and Luna New Inventions shall be Confidential Information of Luna and Luna shall be the Discloser (and Hansen the Recipient) thereof. All Confidential Information (including without limitation all copies, extracts and portions thereof) shall remain the property of Discloser. Except as expressly agreed otherwise by the Parties, Recipient does not acquire any Intellectual Property Rights under any disclosure hereunder except the limited right to use such Confidential Information in accordance with this Agreement and/or the License Agreement.

7.2 Restrictions. Recipient shall hold all Confidential Information of Discloser in strict confidence and shall not disclose any such Confidential Information to any third party except as expressly provided in this Section 7.2. Recipient may disclose the Confidential Information of Discloser

only to regulatory authorities and employees, agents, contractors, Subsidiaries and actual and potential licensees and sublicensees (solely to the extent, in the case of any such licensee or sublicensee, such Confidential Information to be disclosed is licenseable or sublicenseable to such licensee or sublicensee), in all such cases who have a reason to know such information for purposes of Recipient's performance of its obligations or exercise of its rights under this Agreement and/or the License Agreement and (except with respect to regulatory authorities) who are bound in writing by restrictions regarding disclosure and use at least as protective of Discloser as the terms and conditions in this Agreement. Recipient shall not use any Confidential Information of Discloser for the benefit of itself or any third party or for any purpose other than to perform its obligations and exercise its rights under this Agreement and/or the License Agreement. Recipient shall take at least the same degree of care that it uses to protect its own confidential and proprietary information and materials of similar nature and importance (but in no event less than reasonable care) to protect the confidentiality and avoid the unauthorized use, disclosure, publication, or dissemination of the Confidential Information of Discloser.

7.3 Scope. The foregoing restrictions on disclosure and use shall not apply with respect to any Confidential Information of Discloser to the extent such Confidential Information: (a) was or becomes publicly known through no wrongful act or omission of the Recipient or its Affiliates and their respective employees, agents and representatives; (b) was rightfully known by Recipient (except, for purposes of Luna as Recipient, with respect to Joint Patents and Hansen Licensed IP) before receipt from Discloser; (c) becomes rightfully known to Recipient (except, for purposes of Luna as Recipient, with respect to Joint Patents and Hansen Licensed IP) from a source other than Discloser without breach of a duty of confidentiality to Discloser or its Affiliates; or (d) is independently developed by Recipient (except, for purposes of Luna as Recipient, with respect to Joint Patents and Hansen Licensed IP) without the use of or access to the Confidential Information of Discloser. In addition, Recipient may use or disclose Confidential Information of Discloser to the extent (i) approved by Discloser in writing or (ii) Recipient is legally compelled to disclose such Confidential Information, provided, however, that prior to any such compelled disclosure, Recipient shall give Discloser reasonable advance notice of any such disclosure and shall cooperate with Discloser in protecting against any such disclosure and/or obtaining a protective order narrowing the scope of such disclosure and/or use of such Confidential Information.

8. Indemnification; Limitation of Liability

8.1 By Hansen. Subject to Section 8.3, Hansen will defend, indemnify and hold harmless Luna and its officers, directors, shareholders, employees, contractors and agents (collectively, the "**Luna Indemnitees**") from and against any losses, damages, liabilities, judgments, fines, amounts paid in settlement, expenses and costs of defense (including reasonable attorneys' fees and witness fees) (collectively, "**Losses**") resulting from any demand, claim, action or proceeding brought or initiated by a third party (each a "**Third Party Claim**") against any Luna Indemnitee(s) to the extent arising from: [****]. The foregoing indemnification shall not apply to the extent that such Losses arise from or relate to any Luna Indemnitee's gross negligence, intentionally harmful misconduct or breach of this Agreement or the Commercial Supply Agreement or to the extent Luna has an indemnification obligation pursuant to Section 8.2 for such Losses.

8.2 By Luna. Subject to Section 8.3, Luna will defend, indemnify and hold harmless Hansen and its Affiliates, officers, directors, shareholders, licensees, designees, customers, employees, contractors and agents (collectively, the "**Hansen Indemnitees**") from and against any Losses resulting from any Third Party Claim against any Hansen Indemnitee(s) to the extent arising from: [****]. The foregoing indemnification shall not apply to the extent that such Losses arise from or relate to any Hansen

Indemnitee's gross negligence, intentionally harmful misconduct or breach of this Agreement or the Commercial Supply Agreement or to the extent Hansen has an indemnification obligation pursuant to Section 8.1 for such Losses.

8.3 Indemnity Procedures. The Party seeking indemnification hereunder shall give the other Party (the "**Indemnifying Party**"): (a) prompt written notice of any Third Party Claim for which indemnification is sought; (b) sole control over the defense or settlement of such Third Party Claim; and (c) reasonable assistance, at the Indemnifying Party's expense, in the defense and settlement of the Third Party Claim. In no event, however, may the Indemnifying Party settle any Third Party Claim in a manner that diminishes the rights or interests of the other Party under this Agreement and/or obligates the other Party to make any payment or take any action without the written consent of the other Party, which consent shall not be unreasonably withheld, conditioned or delayed. If the Indemnifying Party fails to assume the defense, or if the Parties cannot agree as to the application of Section 8.1 or Section 8.2 in any given instance, then the Party seeking indemnification may conduct the defense and reserves the right to seek indemnification under this Agreement upon resolution with the third party of the underlying matter.

8.4 Limitation of Liability. EXCEPT FOR BREACH OF ARTICLE 7 OR THE INDEMNIFICATION OBLIGATIONS SET FORTH IN SECTIONS 8.1 OR 8.2, AND EXCLUDING SECTION 2.5 AND WITHOUT LIMITING ANY LIQUIDATED DAMAGES PAYABLE THEREUNDER, IN NO EVENT SHALL A PARTY BE LIABLE TO THE OTHER PARTY FOR SPECIAL, CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR PUNITIVE DAMAGES OR LOST PROFITS ARISING OUT OF OR RELATED TO THIS AGREEMENT, HOWEVER CAUSED, UNDER ANY THEORY OF LIABILITY.

9. Term and Termination

9.1 Term. This Agreement shall become effective on the Effective Date and shall remain in force and effect until [****].

9.2 Termination by Hansen. In addition to any available remedies at law or in equity, this Agreement may be terminated by Hansen by giving notice of termination to Luna: (a) in the event that Luna files or institutes any bankruptcy, liquidation or receivership proceedings, or in the event that Luna makes an assignment of a substantial portion of its assets for the benefit of its creditors; provided, however, that, in the case of any involuntary bankruptcy proceeding such right to terminate shall only become effective if Luna consents to the involuntary bankruptcy or such proceeding is not dismissed within sixty (60) days after the filing thereof; (b) if Luna breaches [****] and fails to cure such breach in accordance with this Agreement within sixty (60) days after receipt of the initial notification by Hansen of such breach or such longer period of time as provided in this Agreement; and (c) [****]. Except as expressly provided in the foregoing or in Section 2.5.3, Hansen shall have no right to terminate this Agreement.

9.3 Termination by Luna. In addition to any available remedies at law or in equity, this Agreement may be terminated by Luna by giving notice of termination to Hansen: (a) in the event that Hansen files or institutes any bankruptcy, liquidation or receivership proceedings, or in the event that Hansen makes an assignment of a substantial portion of its assets for the benefit of its creditors; provided, however, that, in the case of any involuntary bankruptcy proceeding such right to terminate shall only become effective if Hansen consents to the involuntary bankruptcy or such proceeding is not dismissed within sixty (60) days after the filing thereof; and (b) if Hansen breaches [****] and fails to cure such

breach within thirty (30) days after receipt of notification by Luna of such breach (provided; however, that if Hansen disputes [****], Luna shall not have the right to terminate this Agreement unless and until it is finally determined, in accordance with Section 2.6 (or the other applicable dispute resolution provisions of this Agreement) that Hansen is obligated to [****] and Hansen subsequently fails to cure such breach (e.g., [****]), within thirty (30) days of such final determination (it being understood that Luna shall not have the right to terminate this Agreement if Hansen so cures following such final determination in dispute resolution). Except as expressly provided in the foregoing, Luna shall have no right to terminate this Agreement.

9.4 Effect of Termination. Expiration or termination of this Agreement (including under Section 2.5) for any reason shall not release either Party from any obligation or liability which, at the time of such expiration or termination, has already accrued to the other Party or which is attributable to a period prior to such expiration or termination. The following Sections and Articles shall survive the expiration or termination of this Agreement for any reason: Section 2.4, 2.5, 2.6, Article 5, Article 7, Article 8, Article 9, and Article 10.

10. Miscellaneous

10.1 Entire Agreement. Subject to Section 10.6 below, this Agreement (and its Exhibits), together with the Settlement Agreement, the other Settlement Documents, and the Amended Plan and Confirmation Order, contain the entire agreement and understanding of the Parties with respect to the subject matter hereof, and supersede and merge all prior and contemporaneous understandings and agreements between the Parties, whether written or oral, with respect to such subject matter. This Agreement shall not be modified, amended or cancelled other than in a writing signed by authorized representatives of both Parties.

10.2 No Implied Waiver. Any waiver of any obligation under this Agreement or any other Settlement Document must be in writing. The failure of either Party to enforce at any time any provision of or right under this Agreement shall not be construed to be a waiver of such provision or right or any other provision, and shall not affect the right of such Party to enforce such provision or right or any other provision. No waiver of any breach hereof shall be construed to be a waiver of any other breach.

10.3 Assignment. This Agreement and the rights of the Parties hereunder may not be assigned by either Party to this Agreement without the prior written consent of the other Party; provided, however, this Agreement (along with the rights granted hereunder) may be assigned by either Party without the other Party's consent as part of a merger, consolidation or acquisition of the assigning Party;

sale of all or substantially all the assets of the assigning Party; or a similar reorganization of the assigning Party. Subject to the foregoing, the respective obligations of the Parties hereto shall bind, and the respective rights of the Parties shall inure to the benefit of, the Parties' respective permitted assignees and successors.

10.4 Governing Law; Jurisdiction; Venue.

10.4.1 Choice of Law. This Agreement shall be governed by, and interpreted in accordance with: (a) the Bankruptcy Code, and (b) in the case of applicable nonbankruptcy law, the laws of the State of Delaware, without regard to conflicts of laws, or applicable federal law as to a particular subject where federal law governs, such as for example, the Patent Act governing patents or the Copyright Act governing copyrights.

10.4.2 Bankruptcy Court Jurisdiction. Except as provided in Section 10.4.3 and Section 10.4.4, any disputes arising under this Agreement, or related to the meaning, effect and interpretation of the Amended Plan, the Confirmation Order or this Agreement (which Agreement is a part of the Amended Plan and Confirmation Order), shall be subject to the jurisdiction of the Bankruptcy Court.

10.4.3 Exceptions to Bankruptcy Court Jurisdiction. In the event: (a) the Bankruptcy Court lacks or declines to exercise jurisdiction over a dispute arising under this Agreement, for any reason; (b) the reference of jurisdiction to the Bankruptcy Court is withdrawn, for any reason; (c) the dispute or enforcement is related to any intellectual property rights of Hansen or Luna, including without limitation any alleged infringement or misappropriation or misuse thereof; or (d) the dispute or enforcement arises from or with respect to any provision of, or incorporated into, any of Sections 2.1, 2.2, 2.3, 2.4, 2.5, 4, 5, or 6.3 of the License Agreement or causes of action relating thereto or arising therefrom, or any of Sections 2.1, 2.2, 3, 4, 5, 7, 8 or 10.3 of this Agreement or causes of action relating thereto or arising therefrom, then the state or federal courts for or in New Castle County, Delaware shall have jurisdiction over any disputes arising under or related to this Agreement.

10.4.4 Alternative Dispute Resolution. Notwithstanding Sections 10.4.2 and 10.4.3 above and Section 10.4.5 below, in the event some provision of a particular Settlement Document expressly creates an alternative dispute resolution provision as to a particular type of dispute, such as Sections 2.6 or 5.2.4 of this Agreement (or provisions of this Agreement expressly invoking Section 2.6), then such disputes shall be resolved as so specified in the applicable Agreement.

10.4.5 Consent to Jurisdiction. Each Party hereby (a) consents and submits to the venue and co-exclusive jurisdiction of the Bankruptcy Court and the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware (without prejudice to either the retained rights and jurisdiction of the Bankruptcy Court), (b) agrees that all claims may be heard and determined in such courts, (c) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (d) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the Parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

10.4.6 Resolving Conflicts. If there is any question as to whether the proper jurisdiction or venue for any dispute is in the Bankruptcy Court or in the Delaware Court, the Bankruptcy Court may decide that issue.

10.4.7 Miscellaneous. The prevailing Party in any final judgment of any such controversy, claim or dispute, or the non-dismissing Party in the event of a dismissal without prejudice, shall be entitled to receive from the other Party the reasonable attorneys' fees (and all related costs and expenses) and all other costs and expenses paid or incurred by such prevailing Party in connection with such controversy, claim or dispute and in connection with enforcing any judgment or order with respect thereto.

10.5 Severability. If for any reason a provision of this Agreement, or portion thereof, is finally determined to be unenforceable under Applicable Laws, that provision, or portion thereof, shall

nonetheless be enforced, as to circumstances, persons, places and otherwise, to the maximum extent permissible by Applicable Laws so as to give effect to the intent of the Parties, and the remainder of this Agreement shall continue in full force and effect.

10.6 Effect of Plan/Confirmation Order. The Parties agree that this Section 10.6(a) is a settlement proposal that shall apply only to the extent approved by the Confirmation Order. The Parties each agree to use commercially reasonable efforts to support the full rights sought by the Parties hereunder, including without limitation by appropriate proffers or other proof in the plan confirmation process. To the maximum extent possible under applicable law (as affected by the Confirmation Order), this Agreement is not an "executory contract" for the purposes of 11 U.S.C. § 365. Rather, this Agreement constitutes a settlement allocation and partition of intellectual property and other rights disputed in the Litigation and in Hansen's related claims in the Chapter 11 Case but resolved by the Amended Plan and the Confirmation Order. To the extent that a final judgment by a court of competent jurisdiction rules otherwise than that, the executory parts of this Agreement (herein sometimes called a "**Section 365(n) Contract**") shall be interpreted so that the greatest possible rights and licenses of the licensee Party thereto shall be held to be "executed," thereby minimizing any "executory" parts of the Agreement. As to any Section 365(n) Contract, the parties hereto acknowledge and agree that the rights and licenses granted by the licensor Party to the licensee Party and its Affiliates hereunder are rights with respect to intellectual property (including without limitation "intellectual property" within the meaning of 11 U.S.C. § 101), and: (a) all reports, drawings, samples, prototypes and other books and records and embodiments of the intellectual property shall be deemed "embodiments" of the intellectual property protected by 11 U.S.C. § 365 hereunder; (b) any Settlement Document or obligations thereunder that the licensee Party designates as such an "agreement supplementary" to such Section 365(n) Contract in its discretion at any time before the Confirmation Hearing in a "Plan Supplement" to the Amended Plan, shall be, to the extent permitted by applicable law (as affected by the Confirmation Order) and so designated by the licensee, an "agreement supplementary" to such Section 365(n) Contract, but no other Settlement Document or obligations shall be an "agreement supplementary" to such Section 365(n) Contract; and (c) there are no "royalty payments" due from Hansen or Luna as a licensee under such Section 365(n) Contract or, since 11 U.S.C. § 365(n)(2) applies only to the Section 365(n) Contract, but not to any "agreement supplementary" to such contract, under any such supplementary agreement. In the event of any conflict between (i) the provisions of this Section 10.6(a), or (ii) the rights contemplated by 11 U.S.C. § 365(n), and the Amended Plan or the Confirmation Order, the Amended Plan and Confirmation Order shall govern and control. Hansen and Luna each shall be deemed to have made a request for enforcement of all of its rights and licenses pursuant to 11 U.S.C. § 365(n)(4), without further action by either licensee Party.

10.7 Headings. The headings and captions used in this Agreement are for convenience only and shall not be considered in construing or interpreting this Agreement.

10.8 Interpretation. This Agreement has been negotiated by all Parties, and each Party has been advised by competent legal counsel. This Agreement shall be interpreted in accordance with its terms and without any construction in favor of or against either Party.

10.9 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but which collectively shall constitute one and the same instrument.

10.10 Force Majeure. No Party shall be responsible for delays to the extent resulting from causes beyond such Party's control, including without limitation fire, explosion, flood, war, strike, crisis, terrorist attack, earthquake, power failure, or riot, provided that the nonperforming Party notifies the other Party thereof and uses commercially reasonable efforts to mitigate or remove such causes of nonperformance.

10.11 Relationship of the Parties. Luna's relationship with Hansen shall be that of an independent contractor and nothing in this Agreement should be construed to create a partnership, joint venture, agency or employer-employee relationship between the Parties. Luna is not the agent of Hansen and is not authorized and shall not have any authority to make any representation, contract or commitment on behalf of Hansen, or otherwise bind Hansen in any respect whatsoever. Luna (and its employees and agents) shall not be entitled to any of the benefits Hansen may make available to its employees, such as group insurance, profit-sharing or retirement benefits. Luna shall be solely responsible for all tax returns and payments required to be filed with or made to any federal, state or local tax authority with respect to Luna's performance of services and receipt of amounts under this Agreement. Hansen may regularly report amounts paid to Luna with the Internal Revenue Service as required by law. Because Luna is an independent contractor, Hansen shall not withhold or make payments for social security, make unemployment insurance or disability insurance contributions, or obtain worker's compensation insurance on Luna's (or its employees' or agents') behalf. Luna shall comply with, and agrees to accept exclusive liability for its own non-compliance with all Applicable Laws regarding its employees, consultants, taxes, benefits and payroll, including obligations such as payment of all taxes, social security, disability and other contributions based on amounts paid to Luna, its agents or employees under this Agreement. Luna hereby agrees to indemnify, hold harmless and defend Hansen against any and all such liability, taxes or contributions, including penalties and interest.

10.12 Notices. Except as may be otherwise provided herein, all notices, requests, waivers, consents and approvals made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other Party; (b) when sent by facsimile, with receipt confirmation, to the number set forth below if sent between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day, or on the next business day if sent by facsimile to the number set forth below if sent other than between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day; or (c) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the applicable parties as set forth below with next business day delivery guaranteed, provided that the sending Party receives a confirmation of delivery from the delivery service provider. Each person making a communication hereunder by facsimile shall attempt to promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity or delivery status of any such communication. A Party may change or supplement the addresses given below, or designate additional addresses, for purposes of this Section by giving the other Party written notice of the new address in the manner set forth above.

If to Hansen Medical, Inc.
800 E. Middlefield Road
Mountain View, CA 94043
Attn: Arthur Hsieh
Facsimile: 650-404-5901
Email: Arthur_Hsieh@hansenmedical.com

If to Luna Innovations Inc.
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn:
Facsimile:

If to Luna Technologies, Inc.
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn:
Facsimile:

10.13 Luna Party. For purposes of this Agreement, Luna Innovations Inc. and Luna Technologies, Inc. may be treated by Hansen as one entity, such that, for example, a notice or consent from Luna Innovations Inc. shall be deemed a valid and effective notice or consent also from Luna Technologies, Inc. (and vice versa) and a payment from Hansen to Luna Innovations Inc. shall fully satisfy Hansen's obligation with respect to such payment hereunder as to both entities. Luna Innovations Inc. and Luna Technologies, Inc. shall exercise their rights jointly under this Agreement, and will not take conflicting positions vis a vis Hansen.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent. A Murphy

Name: Kent A. Murphy

Title: CEO

HANSEN MEDICAL, INC.

By: /s/ Fred Moll

Name: Fred Moll

Title: CEO

LUNA TECHNOLOGIES, INC.

By: /s/ Scott A. Graeff

Name: Scott A. Graeff

Title: President

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit A

Development Milestones

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit B

Development Plan

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

AMENDMENT NO. 1 TO

DEVELOPMENT AND SUPPLY AGREEMENT

This Amendment No. 1 to Development and Supply Agreement (this "**Amendment**") is entered into as of February 17, 2010, by and between Luna Innovations Incorporated, a Delaware corporation, together with Luna Technologies, Inc., a Delaware corporation (acting jointly and severally, individually and collectively, "**Luna**"), and Hansen Medical, Inc., a Delaware corporation ("**Hansen**").

RECITALS

WHEREAS, Luna and Hansen are parties to that certain Development and Supply Agreement (the "**Agreement**");

WHEREAS, Luna is entering in a loan agreement with Silicon Valley Bank, a California corporation, pursuant to which Hansen is executing that certain Subordination Agreement, effective as of February 18, 2010, by and between Silicon Valley Bank, and Hansen (the "**Subordination Agreement**"); and

WHEREAS, as an inducement to Hansen to enter into the Subordination Agreement, Luna and Hansen desire to amend Sections 4.1 and 9.4 of the Agreement to suspend, under the circumstances as specified in this Amendment, Hansen's obligation to make payments to Luna as set forth therein.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Luna and Hansen hereby agree to amend the Agreement as follows:

AMENDMENT

1. Definitions. Except as otherwise provided herein, capitalized terms used in this Amendment shall have the definitions set forth in the Agreement.

2. Amendments to Article 1.

Article 1 of the Agreement shall be amended to include new Sections 1.57, 1.58 and 1.59 to read in their entirety as follows:

"**1.57** "**Subordination Agreement**" means that certain Subordination Agreement entered into as of February 18, 2010 by and between Silicon Valley Bank, a California corporation, and Hansen."

"**1.58** "**Blockage Period**" has the meaning given to such term in the Subordination Agreement; provided, however, that for purpose of this Amendment a Blockage Period shall be deemed to continue until the applicable Deferred Payment is permitted under the last sentence of Section 3(b) of the Subordination Agreement."

"**1.59** "**Deferred Payment**" has the meaning given to such term in the Subordination Agreement.

3. Amendments to Section 4.1.

The first sentence of Section 4.1.1 of the Agreement shall be amended to read in its entirety as follows:

"[****]"

The first sentence of Section 4.1.2 of the Agreement shall be amended to read in its entirety as follows:

"[****]"

In addition, Section 4.1 of the Agreement shall be amended to include a new Section 4.1.5 that shall read in its entirety as follows:

"Notwithstanding the foregoing, during any Blockage Period and continuing until the end of the Blockage Period and when Luna has paid Hansen the applicable Deferred Payment, Hansen may defer any and all payments due to Luna under Section 4.1 of this Agreement."

4. Amendment to Section 9.4. Section 9.4 of the Agreement shall be amended to read in its entirety as follows:

"Expiration or termination of this Agreement (including under Section 2.5) for any reason shall not release either Party from any obligation or liability which, at the time of such expiration or termination, has already accrued to the other Party or which is attributable to a period prior to such expiration or termination. The following Sections and Articles shall survive the expiration or termination of this Agreement for any reason: Sections 2.4, 2.5, 2.6, 4.1.5, Article 5, Article 7, Article 8, Article 9, and Article 10."

5. Terms and Conditions of Agreement. Except as expressly modified hereby, all terms, conditions and provisions of the Agreement shall continue in full force and effect.

6. Conflicting Terms. In the event of any inconsistency or conflict between the Agreement and this Amendment, the terms, conditions and provisions of this Amendment shall govern and control.

7. Term and Termination. This Amendment shall become effective upon its execution by each of Luna and Hansen and shall remain in force and effect until such date as the Subordination Agreement is terminated in accordance with its terms.

8. Entire Agreement. This Amendment and the Agreement constitute the entire and exclusive agreement between the parties with respect to this subject matter. All previous discussions and agreements with respect to this subject matter are superseded by the Agreement and this Amendment. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same instrument.

[*Signature Page to Follow*]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed by their duly authorized representatives as of the date first listed above.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent A. Murphy

Name: Kent A. Murphy

Title: CEO

HANSEN MEDICAL, INC.

By: /s/ Fred Moll

Name: Fred Moll

Title: CEO

LUNA TECHNOLOGIES, INC.

By: /s/ Scott A. Graeff

Name: Scott A. Graeff

Title: President

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

AMENDMENT NO. 2 TO

DEVELOPMENT AND SUPPLY AGREEMENT

This Amendment No. 2 to Development and Supply Agreement (this "**Amendment**") is entered into as of April 2, 2010, by and between Luna Innovations Incorporated, a Delaware corporation, together with Luna Technologies, Inc., a Delaware corporation (acting jointly and severally, individually and collectively, "**Luna**"), and Hansen Medical, Inc., a Delaware corporation ("**Hansen**").

RECITALS

WHEREAS, Luna and Hansen are parties to that certain Development and Supply Agreement having an effective date of January 12, 2010 and amended by Amendment No. 1 to Development and Supply Agreement dated as of February 17, 2010 (collectively, the "**Agreement**");

WHEREAS, Luna and Hansen desire to amend Exhibit A and Exhibit B of the Agreement to clarify certain prototype specifications and to extend the deadlines for certain milestones.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Luna and Hansen hereby agree to amend the Agreement as follows:

AMENDMENT

1. Definitions. Except as otherwise provided herein, capitalized terms used in this Amendment shall have the definitions set forth in the Agreement.

2. Amendments to Exhibit A [****]. Exhibit A of the Agreement shall be amended as follows:

[[****]

3. Amendments to Exhibit A and Exhibit B [****].

(a) Exhibit A of the Agreement shall be amended as follows:

(i) In Exhibit A[****]:

"[****]"

shall be replaced with the following sentence:

"[****]"

(b) Exhibit B of the Agreement shall be amended as follows:

(i) In Exhibit B[****]:

"[****]"

shall be replaced with the following sentence:

"[****]"

4. Amendments to Exhibit A regarding data interface. Exhibit A of the Agreement shall be amended as follows:

(a) In Exhibit A[****] containing the following sentence:

"[****]"

shall be replaced with the following:

"[****]"

(b) In Exhibit A[****] containing the following sentence:

"[****]"

shall be replaced with the following:

"[****]"

(c) In Exhibit A[****] containing the following sentence:

"[****]"

shall be replaced with the following:

"[****]"

(d) In Exhibit A[****] containing the following sentence:

"[****]"

shall be replaced with the following:

"[****]"

5. Amendments to Exhibit A and Exhibit B regarding milestone deadlines. Exhibit A and Exhibit B of the Agreement shall be amended as follows:

(a) In Exhibit A[****]:

"[****]"

shall be replaced with the following:

"[****]"

(b) In Exhibit A[****]:

"[****]"

shall be replaced with the following:

"[****]"

(c) In Exhibit A[****]:

"[****]"

shall be replaced with the following:

"[****]"

(d) In Exhibit A[****]:

"[****]"

shall be replaced with the following:

"[****]"

(e) In Exhibit A[****]:

"[****]"

shall be replaced with the following:

"[****]"

(f) In Exhibit B[****]:

"[****]"

shall be replaced with the following:

"[****]"

(g) In Exhibit B[****]:

"[****]"

shall be replaced with the following:

"[****]"

(h) In Exhibit B[****]:

"[****]"

shall be replaced with the following:

"[****]"

(i) In Exhibit B[****]:

"[****]"

shall be replaced with the following:

"[****]"

6. Amendments to Exhibit A and Exhibit B regarding [****]. Exhibit A and Exhibit B of the Agreement shall be amended as follows:

(a) In Exhibit A[****]:

"[****]"

shall be replaced by the following sentence:

"[****]"

(b) In Exhibit B[****]:

"[****]"

shall be replaced with the following language:

"[****]"

(c) For avoidance of doubt[****].

7. Amendment to Exhibit A regarding [****]. Exhibit A of the Agreement shall be amended as follows:

(a) In Exhibit A, [****]:

"[****]"

shall be replaced with the following language:

"[****]"

(b) In Exhibit A, [****]:

"[****]"

shall be replaced with the following language:

"[****]"

(c) In Exhibit A[****]:

"[****]"

shall be deleted in its entirety.

8. Amendment to Exhibit A [****]. Exhibit A of the Agreement shall be amended as follows:

(a) In Exhibit A[****]:

• [****]

• [****]

(b) In Exhibit A[****]:

"[****]"

shall be replaced with the following language:

"[****]"

(c) In Exhibit A[****]:

"[****]"

shall be replaced with the following language:

"[****]"

(d) In Exhibit A, [****]:

"[****]"

shall be replaced with the following language:

"[****]"

(e) In Exhibit A[****]:

"[****]"

shall be replaced with the following language:

"[****]"

(f) In Exhibit A[****]:

"[****]"

shall be replaced with the following language:

"[****]"

9. Terms and Conditions of Agreement. Except as expressly modified hereby, all terms, conditions and provisions of the Agreement shall continue in full force and effect.

10. Conflicting Terms. In the event of any inconsistency or conflict between the Agreement and this Amendment, the terms, conditions and provisions of this Amendment shall govern and control.

11. Term and Termination. This Amendment shall become effective upon its execution by each of Luna and Hansen.

12. Entire Agreement. This Amendment and the Agreement constitute the entire and exclusive agreement between the parties with respect to this subject matter. All previous discussions and agreements with respect to this subject matter are superseded by the Agreement and this Amendment. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same instrument.

[*Signature Page to Follow*]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed by their duly authorized representatives as of the date first listed above.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent A. Murphy

Name: Kent A. Murphy

Title: CEO

HANSEN MEDICAL, INC.

By: /s/ Fred Moll

Name: Fred Moll

Title: CEO

LUNA TECHNOLOGIES, INC.

By: /s/ Scott A. Graeff

Name: Scott A. Graeff

Title: President

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.8

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

LICENSE AGREEMENT BETWEEN INTUITIVE AND LUNA

This License Agreement Between Intuitive and Luna ("**Agreement**") is dated and made effective as of the Effective Date by and between Luna Innovations Incorporated, a Delaware corporation, together with Luna Technologies, Inc., a Delaware corporation (acting jointly and severally, individually and collectively, "**Luna**") and Intuitive Surgical, Inc., a Delaware corporation ("**Intuitive**"). Individually, Luna and Intuitive are referred to individually as a "**Party**" and collectively as the "**Parties**."

RECITALS

WHEREAS, Luna and Intuitive are parties to a Development and Supply Agreement, dated June 11, 2007 (the "**2007 Intuitive-Luna Agreement**"), as it existed prior to the Effective Date and as amended and restated by Luna and Intuitive as of the Effective Date ("**Intuitive-Luna Agreement**") pursuant to the Amendment to the 2007 Development and Supply Agreement (the **"Amendment"**) in connection with entering into this Agreement.

WHEREAS, Intuitive acknowledges that Hansen Medical, Inc. ("**Hansen**"), and Luna (as defined below) are parties to the case *Hansen Medical Inc. v. Luna Innovations Inc*., no. 07-088551, in the Superior Court of the State of California, County of Santa Clara (the "**Litigation**");

WHEREAS, Intuitive was not a party to the Litigation, had no opportunity to contest the factual or legal allegations made by either Luna or Hansen in the Litigation, and reserves its rights to contest any of the allegations made by either Luna or Hansen in the Litigation;

WHEREAS, without interfering with the ability of Hansen and Luna to establish whatever arrangements Hansen and Luna may wish to establish for themselves outside the Medical Robotics Field, the Parties are entering into this Agreement to allow, among other things, Intuitive and Hansen to continue to work with Luna to develop Fiber Optic Shape Sensing/Localization Technology within the Medical Robotics field;

WHEREAS, Hansen and Luna are settling the Litigation in the context of the First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc. under Chapter 11 of the Bankruptcy Code ("**Amended Plan**") in Luna's Chapter 11 Case No. 09-71811 ("**Chapter 11 Case**") pending in the U.S. Bankruptcy Court for the Western District of Virginia ("**Bankruptcy Court**") and approved by the Bankruptcy Court's Order Confirming First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc. ("**Confirmation Order**"). This Agreement is one of the "Hansen Settlement Documents" (as defined in the Amended Plan) referenced and incorporated in the Amended Plan and Confirmation Order; and

WHEREAS, in connection with the settlement of the Litigation through the Amended Plan, (i) Hansen and Luna are entering into that certain License Agreement Between Hansen and Luna (the "**Hansen-Luna License**") as of the Effective Date and (ii) Intuitive and Luna are entering into this Agreement, under each of which certain co-exclusive licenses are being granted by Luna to Hansen and Intuitive, respectively, within the Medical Robotics Field with respect to certain Luna intellectual property.

NOW, THEREFORE, in view of the terms and conditions described below and for other valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Parties agree as follows:

AGREEMENT

1. DEFINITIONS

The following initially capitalized words and phrases (and derivative forms of these capitalized words and phrases) shall have the stated meanings below. The terms "include," "includes," "including" shall be deemed followed by the phrase "without limitation" regardless of whether followed by that phrase:

1.1 "**Affiliates**" means any corporation or other entity that is directly or indirectly controlling, controlled by or under common control with a Party. For purposes of this definition, "control" of an entity means the direct or indirect ownership of securities representing fifty percent (50%) or more of the total voting power entitled to vote in elections of such entity's board of directors or other governing authority, or equivalent interests conferring the power to direct or cause the direction of the governance or policies of such entity.

1.2 "**Created By Luna**" means, with respect to Technology, patent rights or other intellectual or industrial property rights, to the extent such Technology, patent rights and other intellectual or industrial property rights were developed, made, created, conceived, reduced to practice (in whole or in part) by employees of Luna or its Affiliates or by other individuals or entities obligated to assign rights therein to Luna or an Affiliate of Luna (in all such cases whether solely or jointly with others).

1.3 "**Development Agreement**" shall mean the Development and Supply Agreement by and between Luna and Hansen of even date herewith.

1.4 "Effective Date" means the Effective Date of the Amended Plan after entry of the Confirmation Order by the Bankruptcy Court, which the Parties hereby confirm to be January 12, 2010.

1.5 "**Fiber Optic Shape Sensing/Localization Technology**" or "**FOSSL Technology**" means [****].

1.6 "**Hansen Products**" means any Product for which Hansen or its Affiliates has received or is in the process of seeking regulatory approval to market from the Food and Drug Administration ("FDA") (or any FOSSL Technology-enabled component or subsystem thereof) which has been, is or will be developed by or for Hansen or its Affiliates, or manufactured by or for Hansen or its Affiliates, or sold by or for Hansen or its Affiliates.

1.7 "**Hansen-Luna Agreement**" means those certain Terms and Conditions of Sale and Service executed by Hansen on September 27, 2006 and Luna on September 28, 2006, which Hansen-Luna Agreement is amended and restated in its entirety as of the Effective Date by the applicable provisions of the Hansen-Luna License.

1.8 "**Hansen-Luna Agreement IP**" means all right, title and interest (including patent rights, copyrights, trade secret rights, mask work rights, trademark rights and all other intellectual property and industrial property rights of any sort throughout the world) relating to any and all inventions (whether or not patentable), works of authorship, mask works, designations, designs, know-how, ideas and information made or conceived or reduced to practice, in whole or in part, by Luna under the Hansen-Luna Agreement in connection with the projects to develop products specified in the exhibits to the Hansen-Luna Agreement (but not including any technology or intellectual property developed by Luna prior to or otherwise independently of such projects, including without limitation all technology and intellectual property identified on Exhibit 5 to the Hansen-Luna Agreement). "Hansen-Luna Agreement IP" includes, but is not limited to, the technologies described in Exhibit A.

1.9 "**Hansen-Luna License**" has the meaning given to such term in the recitals.

1.10 "**Intuitive-Luna Agreement**" has the meaning given to such term in the recitals, and the associated term, "**Amendment**", also has the meaning given to such term in the recitals.

1.11 "**Intuitive New Intellectual Property**" shall have the meaning given thereto in Section 9.2.2 (i) of the Intuitive-Luna Agreement.

1.12 "**Intuitive Products**" means any Product for which Intuitive or its Affiliates has received or is in the process of seeking regulatory approval to market from the Food and Drug Administration (or any FOSSL Technology-enabled component or subsystem thereof) which has been, is or will be developed by or for Intuitive or its Affiliates, or manufactured by or for Intuitive or its Affiliates, or sold by or for Intuitive or its Affiliates.

1.13 "**Licensed IP**" means the Licensed Patents and the Licensed Technology.

1.14 "**Licensed Patents**" means any and all patents, inventors' certificates and patent applications throughout the world to the extent claiming, or which would (absent a license) be infringed by the manufacture, use or sale of, any FOSSL Technology, in each case which are owned, licensed (with a right to sublicense) or otherwise controlled by Luna or its Affiliates as of the Effective Date or thereafter (including without limitation those listed patent applications and patents set forth in Exhibit B, and any patents or patent applications which claim or disclose, or which would (absent a license) be infringed by the manufacture, use or sale of, the subject matter in Exhibit C or any other FOSSL Technology described in subsections (a) through (d) of Section 1.15 (Licensed Technology) below), together with any renewal, division, continuation, continued prosecution application or continuation-in-part of any of such patents, certificates and applications, any and all patents or certificates of invention issuing thereon, and any and all reissues, reexaminations, extensions, divisions, renewals, substitutions, confirmations, registrations and revalidations of or to any of the foregoing, and any foreign counterparts of any of the foregoing, in each case to the extent claiming, or which would (absent a license) be infringed by the manufacture, use or sale of, any FOSSL Technology.

1.15 "**Licensed Technology**" means any and all FOSSL Technology (together with all intellectual and industrial property rights of any sort throughout the world therein or thereunder) other than the Licensed Patents, in each case which are owned, licensed (with a right to sublicense) or otherwise controlled by Luna or its Affiliates as of the Effective Date or thereafter, including without limitation (a) FOSSL Technology owned, licensed (with a right to sublicense) or otherwise controlled by Luna prior to the Effective Date, (b) FOSSL Technology Created By Luna in connection with the Intuitive-Luna Agreement (whether before, on or after the Effective Date), (c) FOSSL Technology otherwise Created By Luna prior to, and owned or controlled by Luna or its Affiliates as of, the Effective Date; (d) FOSSL Technology Created By Luna, and owned or controlled by or licensed to Luna or its Affiliates, under or in connection with Luna's research agreement with the Office of Naval Research dated March 6, 2008 (Fiber Optics Shape Sensing for DADS Arrays, N00014-08-C-0156). "Licensed Technology" includes, but is not limited to, any of the foregoing related to the technologies described in Exhibit C.

1.16 "**Medical Robotics Field**" means [****].

1.17 "Product" means any device, instrument, diagnostic, therapeutic, product, system, application or services.

1.18 "**SDOF Medical Robotics**" means [****].

1.19 "**Subsidiaries**" means, with respect to any entity, all other entities in which such aforementioned entity has a controlling ownership interest (directly or indirectly) of at least fifty-one percent (51%) of the issued and outstanding equity interests of such other entities.

1.20 "**Technology**" means 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, devices, prototypes, substances, components, inventions (whether or not patentable), mask works, ideas, trade secrets and other information or materials, in tangible or intangible form.

1.21 "2005 Hansen-Intuitive Cross License" means the September 2005 Cross License Agreement entered into by Intuitive and Hansen.

2. LICENSE GRANTS

2.1 License Grants By Luna. Subject to the provisions in this Section 2.1 below, Luna hereby grants to Intuitive and its Affiliates a co-exclusive, worldwide, transferable (subject to Section 6.3 below), royalty-free, fully paid-up, perpetual and irrevocable license under the Licensed IP to research, develop, make, have made, use, have used, import, sell, have sold and otherwise commercialize and exploit Products, in each case solely within the Medical Robotics Field. The foregoing license shall be co-exclusive between Intuitive and Hansen, which for purposes of such license means that each of Hansen (and its Affiliates) and Intuitive (and its Affiliates) shall enjoy all the rights of an exclusive licensee (but for the rights of the other), except that: (i) Hansen shall have no right to, and shall not, license or sublicense any Licensed IP in the Medical Robotics Field except that Hansen shall have the right to sublicense (through one or multiple tiers) Licensed IP in the Medical Robotics Field solely (A) in connection with the development, manufacture, use or sale of Hansen Products, (B) with respect to SDOF Medical Robotics for which Hansen will have the sole right to grant naked sublicenses to third parties (without any restrictions or interference from either Intuitive or Luna)and Intuitive has no right to grant such naked sublicenses, and/or (C) as otherwise mutually agreed by Intuitive and Hansen and Luna, (ii) Intuitive shall have no right to, and shall not, license or sublicense any Licensed IP in the Medical Robotics Field except that Intuitive shall have the right to sublicense (through one or multiple tiers) Licensed IP in the Medical Robotics Field solely in connection with the development, manufacture, use or sale of Intuitive Products or as otherwise mutually agreed by Hansen and Intuitive and Luna, and (iii) Luna shall retain no rights to or under any Licensed IP within the Medical Robotics Field except (x) solely to provide services to Hansen as authorized by Hansen and/or services to Intuitive as authorized by Intuitive and (y) solely to perform research and development activities pursuant to contracts with the United States government in the Medical Robotics Field (and to grant licenses to the applicable United States government agency as required in connection therewith) but only with the prior written approval of both Hansen and Intuitive, which approval may be given or withheld in the sole discretion of both Hansen and Intuitive, and Luna shall provide to Hansen and Intuitive for their review a copy of each such proposed United States government contract so that they can each evaluate whether or not to approve such activities and/or license grants. To the extent any Licensed IP or Product has any application or use in both the Medical Robotics Field and any other field, this Section 2.1 shall not, and is not intended to, prohibit, limit or restrict any such application or use (including development, manufacture, use, offer for sale or sale) in such other field(s), subject to the other provisions (including license grants) in the other sections of this Agreement and in the Hansen-Luna License.

2.2 Certain Intellectual Property Matters

(a) Retention of License. Once any Technology, patent rights or other intellectual property of Luna is included within the license granted by this Agreement, such Technology and rights shall remain so included, and shall be and remain subject to the license granted. For example, any Technology, patent rights or other intellectual property of an Affiliate of Luna that is included within the Licensed IP at any given time shall remain so included, and shall be and remain subject to the license granted to Intuitive, even if and after such Affiliate entity ceases at some point to meet the definition of an Affiliate of Luna. As another example, and without limiting the foregoing (or Section 5.4), any assignment of, foreclosure on, or similar action with respect to, any Technology, patent rights or other intellectual property that is included within the Licensed IP shall be subject to the license granted by this Agreement and shall not result in the termination of or restriction on such licenses and such licenses shall survive any such assignment, foreclosure or similar actions.

(b) Intuitive-Luna Agreement Related Matters. The terms of the Intuitive-Luna Agreement shall remain in full force and effect except as modified by the Amendment or by this Agreement. It is intended by the Parties that the Intuitive-Luna Agreement, as amended by the Amendment, be consistent with the licenses granted in Section 2.1 of this Agreement, the corresponding license granted by Luna to Hansen in Section 2.1 of the Hansen-Luna License and the patent enforcement provision of Article 4 herein and Article 5 of the Hansen-Luna License. Accordingly, the Parties agree that the Amendment shall provide that, (i) any exclusive licenses within the Medical Robotics Field granted by Luna to Intuitive under the Intuitive-Luna Agreement (including under Sections 4.1 and 4.2 of the Intuitive-Luna Agreement) shall be modified to the extent required to allow for the co-exclusive license granted by Luna under the Licensed IP to Intuitive in this Agreement and to Hansen in the Hansen-Luna License; (ii) the provisions of the Intuitive-Luna Agreement (including Sections 4.2 and 14.2.1 of the Intuitive-Luna Agreement) shall be modified to eliminate any restrictions or prohibitions on Luna to develop and manufacture products for Hansen and otherwise perform its obligations under the Development Agreement, and (iii) any provisions regarding the enforcement of Licensed Patents within the Intuitive-Luna Agreement (such as Section 9.7) shall be subject to and governed by Article 4 of this Agreement and Article 5 of the Hansen- Luna License with respect to such Licensed Patents. The foregoing matters are and shall be incorporated into the Amended Plan (or, alternatively, into a motion to assume the Amendment) and the Confirmation Order as well as into the Amendment. The Parties agree that they may not amend, rescind or terminate the provisions in the Amendment effectuating the foregoing clauses (i) – (iii) or otherwise amend the Intuitive-Luna Agreement in a manner that amends, rescinds or terminates the foregoing clauses (i) - (iii).

(c) Hansen-Luna Agreement IP. Luna hereby confirms that pursuant to the terms of the Hansen-Luna Agreement (i) Hansen owns all right, title and interest in and to the Hansen-Luna Agreement IP and all Hansen-Luna Agreement IP has been assigned to Hansen pursuant to the Hansen-Luna Agreement as of the date when such Hansen-Luna Agreement IP was first Created By Luna

(d) IP Created By Luna for Third Parties; No Conflicting Third Party Agreements. To the extent any FOSSL Technology (and all patent rights and other intellectual property rights therein) acquired or Created By Luna independently or otherwise prior to the Effective Date (whether or not under agreements with parties other than Hansen or Intuitive), and still owned by (or licensed to) Luna as of the Effective Date, would not otherwise be fully licensable to Hansen and Intuitive in accordance with the terms and conditions of Section 2.1 above, due to some restriction, exclusive grant or other limitation in a third party agreement or otherwise (or due to the lack of some consent or approval not given), such restriction, exclusivity or limitation shall be removed, released and discharged (and such consent or approval shall be deemed given) as of the Effective Date to the maximum extent allowed under Chapter 11 of the Bankruptcy Code or other applicable laws, so that such FOSSL Technology (and all patent rights and other intellectual property rights therein) can be included within the Licensed IP and fully licensed to Hansen and Intuitive in accordance with the terms and conditions hereof. The foregoing is and shall be incorporated into the Amended Plan and the Confirmation Order. The Parties acknowledge and agree to the foregoing. Furthermore, this Agreement and any license or right granted to Intuitive hereunder shall be senior in right and time compared to any lien approved or created pursuant to the Amended Plan and the Confirmation Order, so that no foreclosure under any such lien shall modify or terminate such licenses or rights of Intuitive.

(e) Clarification Regarding Copyrights. With respect to Technology licensed by Luna to Intuitive under this Agreement that includes software, works or authorship or copyrighted materials, such licenses shall include the right to copy, modify and make derivative works thereof (and the right to use any ideas, concepts, algorithms and other information contained therein) within the Medical Robotics

Field. The foregoing shall not be construed to require the delivery or provision of any particular software (or source code), works of authorship or copyrighted materials except to the extent specifically provided in the Intuitive-Luna Agreement.

(f) Clarifications Regarding Rights Outside the Medical Robotics Field. Section 9 of the Intuitive-Luna Agreement is hereby clarified to effect the intent of the Parties. New Intellectual Property under the Intuitive-Luna Agreement does not and never has included Background Intellectual Property (as those terms are defined by the Intuitive-Luna Agreement). New Intellectual Property under the Intuitive-Luna Agreement does not and never has included licenses acquired or Technology created by a party prior to the Development Program (as those terms are defined by the Intuitive-Luna Agreement). Furthermore, Section 9 of the Intuitive-Luna Agreement is hereby clarified as follows. The definition of New Intellectual Property in Section 9.2 of the Intuitive-Luna Agreement does not and has never included an obligation for Intuitive to disclose any invention disclosures, trade secrets and know how, proprietary information, technical data, documentation, concepts, processes, formulae, systems, equipment apparatuses, software, designs, drawings, plans, specifications and the like in which Intuitive has rights or any similar, corresponding or equivalent rights anywhere in the world. To the extent any such information is or was disclosed by Intuitive, the information is subject to Section 12 of the Intuitive-Luna Agreement.

(g) Clarification Regarding Non-Licensed Technology. For purposes of clarity, the combination, incorporation or attachment of any Licensed IP as part of, or to other Technology that is not Licensed IP shall not result in the portion of the amalgamation that consists of the Technology that is not Licensed IP becoming or being transformed into Licensed IP under this Agreement.

2.3 Third Party License Payments and Agreement Terms. Intuitive and Luna acknowledge and restate the provisions of Section 4.4 of their 2007 Development and Supply Agreement with regard to the payment of royalty or other payment obligations to third parties with regard to Intuitive's use of Intellectual Property Rights granted to it by Luna. Section 4.4 recites in relevant part: "To the extent Intellectual Property Rights [as defined by section 1.19] are licensed to Intuitive under this Section 4 are Controlled by Luna not by ownership but by licenses granted to Luna from third-party licensors ("In-Licensed IP"), in the event that Luna incurs royalty or other payment obligations to third-party licensors ("Third- Party Payment Obligations") based on Luna's grant of such rights under this Section 4 or the use or exercise of such licenses by Intuitive or its transferees not attributable to sales of Luna Product to Intuitive, Intuitive shall pay all such amounts to Luna (the "Pass Through Payment Obligations"). For purposes of clarity, any Third-Party Payment Obligations incurred by Luna as a result of the sale of Luna Products to Intuitive by Luna shall not be considered Pass Through Payment Obligations under this Section 4.4. Intuitive shall report all of its activities (and those of its transferees) under the licenses granted under this Section 4 at such times and in such manner as is reasonably required to permit Luna to comply with its reporting and payment obligations." Luna expressly represents that nothing in this provision shall require payments by Intuitive for licenses granted to Luna by Hansen.

2.4 Reservation of Rights. Except for the rights and licenses expressly granted to Intuitive under Section 2.1 of this Agreement and to Hansen under the Hansen-Luna License, Luna retains all right, title and interest in and to the Licensed IP and all of Luna's other intellectual and industrial property rights. Without limitation of the foregoing and subject at all times to the licenses granted to Intuitive under this Agreement, the Parties confirm that Luna retains its rights to use, make and sell (and license) any and all of its intellectual and industrial property rights (i) within technologies, applications and fields that do not involve FOSSL Technology (for example, nanotechnology, secure computing, industrial coating, flame retardants, ultrasonic, and wireless technologies and applications) and (ii) subject to the licenses granted under Section 2.1 and licenses granted to Hansen under the Hansen-Luna License, within technologies, applications and fields outside the Medical Robotics Field that do involve FOSSL Technology, including, for example, industrial application, oil exploration, infrastructure, civil, aeronautics, naval, automotive, telecommunication and consumer products.

2.5 No Disclosure Obligation. Notwithstanding any contrary provision in this Agreement, Intuitive shall have no obligation to Luna or its assignees or licensees under this Agreement to disclose or deliver any Intuitive confidential or proprietary information, know-how, trade secrets, non-copyright or non-patent intellectual or industrial property or proprietary rights that have not prior to the Effective Date been provided to Luna on a non-confidential basis. Notwithstanding any contrary provision in this Agreement, and except as specifically provided in the Intuitive-Luna Agreement, Luna shall have no obligation to Intuitive or its assignees or licensees under this Agreement to disclose or deliver any Luna confidential or proprietary information, know-how, trade secrets, non-copyright or non-patent intellectual or industrial property or proprietary rights.

2.6 Clarification Regarding Rights to Technology. Notwithstanding any contrary or conflicting provision or potential interpretation of any provision in this Agreement regarding the ownership, rights in or to, or licensing of any Licensed IP, this Agreement shall not be interpreted to convey from Intuitive to Luna ownership of or convey from Intuitive to Luna rights in or to any Technology for: [****].

2.7. Certain NASA Sublicense Terms. The following shall apply to any portion of the Licensed IP that is licensed to Luna by the National Aeronautics and Space Administration (**NASA**), an agency of the United States Government, under that certain License Agreement No. DN-982 (the "**NASA License**") by and between the United States of America (NASA) and Luna Innovations Incorporated dated June 10, 2002, including the modification dated 1/23/06, and sublicensed under this Agreement by Luna to Intuitive and its Affiliates (such sublicensed portion of the Licensed IP being the "**NASA IP**"):

(a) The sublicense to the NASA IP granted by Luna to Intuitive and its Affiliates under this Agreement shall be subject to and consistent with the terms and conditions of the NASA License, including any rights retained by the United States Government as provided for in Section 2.4 of the NASA License.

(b) Notwithstanding anything to the contrary in Section 2.1 of this Agreement, the sublicense to the NASA IP granted by Luna to Intuitive and its Affiliates under this Agreement will automatically terminate upon the revocation or termination of the NASA License.

(c) Notwithstanding anything to the contrary in Section 2.1 of this Agreement, the sublicense to the NASA IP granted by Luna to Intuitive and its Affiliates under this Agreement is non-exclusive.

(d) The consent from NASA for the grant of the sublicense to the NASA IP from Luna to Intuitive and its Affiliates under this Agreement does not extend to any other third party referenced herein or to any subsequent sublicense grants by Intuitive of the NASA IP hereunder (which further sublicensing is subject to the consent of NASA in accordance with the NASA License); provided, however, that NASA's consent does include consent for Intuitive to grant sublicenses to the NASA IP hereunder (through one or multiple tiers) solely in connection with the development, manufacture, use or sale of Intuitive Products.

(e) As provided in Section 2.3, the sublicense of the NASA IP hereunder is subject to the royalty payment obligations of Luna to NASA provided for in Section 7.3 of the NASA License as well as the associated reporting requirements set forth in the NASA License.

(f) Notwithstanding anything to the contrary herein, Sections 4.1 and 4.2 of this Agreement do not apply to the NASA IP.

(g) If Intuitive assigns this Agreement in accordance with Section 5.4 of this Agreement, Luna shall provide NASA with notice thereof and copy of the underlying assignment (it being understood that redactions may be made in respect of any other assets being assigned thereby).

For the avoidance of doubt, this Agreement does not modify the NASA License, the NASA License remains in full force and effect in its entirety, and the terms and conditions of the NASA License are in no way modified or superseded by this Agreement. Luna shall provide notice to Intuitive of any notices from NASA claiming breach or termination of the NASA License and keep Intuitive reasonably informed regarding the status of any such claims. Luna shall reasonably cooperate with Intuitive regarding any requests by Intuitive to obtain NASA's consent for the grant of any sublicenses of the NASA IP by Intuitive under this Agreement.

3. REPRESENTATIONS AND WARRANTIES; DISCLAIMERS; INDEMNIFICATION

3.1 By Luna. Luna hereby represents, warrants and covenants as follows:

(a) Luna is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

(b) The execution, delivery and performance of this Agreement by Luna (i) are within its corporate power, (ii) have been duly authorized by all necessary corporate action on Luna's part, and (iii) do not and shall not contravene or constitute a default under any law or regulation, any judgment, decree or order, or any contract, agreement or other undertaking applicable to Luna or the Licensed IP.

(c) Luna has the full right and authority to grant the rights and licenses granted to Intuitive in Section 2.1 herein. Without limiting the foregoing, as of the Effective Date, (i) Luna does not own, have a license to or otherwise control (and did not at any time own, have a license to or otherwise control) any FOSSL Technology (or any patent rights and other intellectual property rights therein) that cannot be fully licensed to Intuitive under the terms and conditions of this Agreement, and (ii) Luna has not granted any right, license, or interest in, to or under the Licensed IP inconsistent with the rights and licenses granted to Intuitive in this Agreement.

(d) Luna has the full right and authority to agree to the modifications and clarifications to the Intuitive-Luna Agreement as provided by Sections 2.2(b), 2.2 (f) and 2.2(g) of this Agreement.

(e) To the best of Luna's knowledge as of the Effective Date, except for the Litigation and the Chapter 11 Case, there are no actions, suits, investigations, claims or proceedings pending or threatened against Luna relating to the Licensed IP and appropriate notices of the Amended Plan and Confirmation Order have been served timely by Luna on any person or entity who might possibly have any such claim.

(f) As of the Effective Date, Luna has obtained all consents from third parties required to sublicense to Intuitive the rights licensed to Luna under the agreements listed on Exhibit D hereto.

3.2 By Intuitive. Intuitive hereby represents, warrants and covenants as follows:

(a) Intuitive is a corporation duly organized, validly existing and in good standing under the laws of the state of Delaware.

(b) The execution, delivery and performance of this Agreement by Intuitive (i) are within its corporate powers, (ii) have been duly authorized by all necessary corporate action on Intuitive's part, and (iii) do not and shall not contravene or constitute a default under any law or regulation, any judgment decree or order, or any contract, agreement or other undertaking applicable to Intuitive.

(c) Intuitive has the full right and authority to grant the rights and licenses granted (and/or confirmed) by Intuitive to Luna under this Agreement.

(d) Intuitive has the full right and authority to agree to the modifications and clarifications to the Intuitive-Luna Agreement as provided by Sections 2.2(b), 2.2 (f) and 2.2(g) of this Agreement.

3.3 Disclaimer. EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS AGREEMENT, NEITHER PARTY MAKES, AND EACH PARTY DISCLAIMS, ANY AND ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND AS TO THE VALIDITY OF LICENSED PATENT CLAIMS, WHETHER ISSUED OR PENDING. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION MADE OR WARRANTY GIVEN BY EITHER PARTY THAT THE PRACTICE BY THE OTHER PARTY OF THE RIGHTS GRANTED BY THIS AGREEMENT WILL NOT INFRINGE THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF ANY THIRD PARTY.

4. INTELLECTUAL PROPERTY

4.1 Prosecution and Maintenance of Licensed Patents. The Parties acknowledge and restate Section 9.3 of the Intuitive-Luna Agreement regarding prosecution and maintenance of Licensed Patents.

4.2 Enforcement of Licensed IP.

(a) In the Medical Robotics Field. Intuitive shall have the right (but not the obligation) (along with Hansen) to institute enforcement actions against infringement or misappropriation or alleged infringement of the Licensed IP solely to the extent within the Medical Robotics Field, in each case at its own expense. If Hansen institutes such enforcement, Hansen shall be the "**Enforcing Party**" and Intuitive shall be the "**Non-Enforcing Party**"; if Intuitive institutes such enforcement Intuitive shall be the "**Enforcing Party**" and Hansen shall be the "**Non-Enforcing Party**." The Enforcing Party shall notify Luna and the Non-Enforcing Party in writing of its decision to institute such enforcement action and shall keep them reasonably apprised of all developments in such enforcement actions and consult with them regarding such enforcement activities, but the Enforcing Party shall not be required to obtain any approvals or consents to take such enforcement actions, subject to Section 4.2(c) below. Each of Luna and the Non-Enforcing Party shall, at the Enforcing Party's expense, reasonably cooperate with the Enforcing Party and provide all reasonable assistance in connection with any such enforcement action, including without limitation agreeing to be named as a party to such action or having such action brought in its name by the Enforcing Party (at the Enforcing Party's expense, including the cost of any fees and court costs) if and to the extent required for the Enforcing Party to have the legal right to initiate such an enforcement action, subject to Section 4.2(c) below, including without limitation as an estate representative pursuant to 11 U.S.C. § 1123(b)(3) and otherwise pursuant to the Amended Plan. The Enforcing Party shall retain all recoveries from such enforcement actions, provided that non-monetary recoveries shall inure to the benefit of both the Enforcing Party and the Non-Enforcing Party as an interested party to the extent of its interest. No settlement, consent judgment or other voluntary final disposition of the action that involves an admission of Luna's (or the Non-Enforcing Party's) liability or wrongdoing, requires Luna (or the Non-Enforcing Party) to take or refrain from taking any action or incur any payment obligations or other liabilities or otherwise binds Luna (or the Non-Enforcing Party) or that involves an admission of the invalidity or unenforceability of the Licensed IP or any other of Luna's (or the Non-Enforcing Party's) intellectual property or that could reasonably be likely to restrict Luna (or the Non-Enforcing Party) from conducting its business, may be entered into without the express written consent of Luna (and, if applicable, the Non-Enforcing Party), which consent shall not be unreasonably withheld.

(b) Under the Intuitive-Luna Agreement. Notwithstanding any of the foregoing to the contrary, enforcement of any patents that are within Intuitive's Intellectual Property Rights under the Intuitive-Luna Agreement shall be governed by Section 9.7 of the Intuitive-Luna Agreement except that for such purpose the definition of "Field" in the Intuitive-Luna Agreement shall be replaced with the above definition of Medical Robotics Field.

(c) Certain Indemnities. In the event a Party brings an enforcement action with respect to the Licensed IP under this Section 4.2 (the "**Indemnifying Party**"), such Indemnifying Party shall indemnify the other Party (the "**Indemnitee**") for any damages, awards, costs and out-of-pocket expenses imposed on or incurred by the Indemnitee as a result of (and to the extent arising from the subject matter of) such enforcement action (including such damages, awards, costs and expenses resulting from such Indemnitee being named as a party to such action or resulting from any court order for costs, fees, penalties, and other amounts (including the posting of bonds, if any) that may be imposed against the Indemnitee in such enforcement proceedings, to the extent such court order does not arise from such Indemnitee's own actions (unless such actions were directed to be taken by the Indemnifying Party)). Notwithstanding any of the foregoing to the contrary, such indemnification by the Indemnifying Party shall exclude any damages, awards, costs or expenses to the extent based on claims (including cross-claims or counterclaims) that are brought against the Indemnitee with respect to subject matter outside of the infringement, misappropriation, validity or enforceability of the Licensed IP asserted in the action (and outside the actions or omissions of the Indemnifying Party in conducting such enforcement action) or with respect to subject matter which concerns actions or omissions of the Indemnitee that were not directed to be taken or omitted by the Indemnifying Party, in each case, so long as the Indemnitee has the sole right to control the actions based on such claims or subject matter.

5. MISCELLANEOUS

5.1 Entire Agreement. This Agreement, the Intuitive-Luna Agreement to the extent not clarified or modified by this Agreement and the Amendment contain the entire agreement and understanding of Intuitive and Luna with respect to the license granted by Luna to Intuitive. For reference purposes, the Amendment shall include the following: [****].

5.2 Amendment. This Agreement shall not be modified, amended or cancelled other than in a writing signed by authorized representatives of Luna and Intuitive.

5.3 No Implied Waiver. Any waiver of any obligation under this Agreement must be in writing. The failure of any Party to enforce at any time any provision of or right under this Agreement shall not be construed to be a waiver of such provision or right or any other provision, and shall not affect the right of such Party to enforce such provision or right or any other provision. No waiver of any breach hereof shall be construed to be a waiver of any other breach.

5.4 Assignment. This Agreement and the rights granted to Intuitive by Luna under this Agreement, and subject to reciprocal obligations assumed by Hansen under the Hansen-Luna License, may not be assigned by Intuitive without the prior written consent of Luna and Hansen; provided, however, this Agreement (along with the rights granted under this Agreement) may be assigned by a Party without consent to an Affiliate or as part of (i) a merger, consolidation, internal reorganization, or acquisition of the Party or (ii) a sale of all or substantially all the assets of the Party. In the event that Luna is acquired by a third party (such third party, hereinafter referred to as an "**Acquiror**"), then the intellectual property of such Acquiror held or developed by such Acquiror (whether prior to or after such acquisition) shall, notwithstanding anything else in this Agreement to the contrary, be excluded from the Licensed IP, and such Acquiror (and Affiliates of such Acquiror which are not Subsidiaries of Luna itself) shall be excluded from the meaning of "Affiliate" solely for purposes of the applicable components of the foregoing intellectual property definitions, in all such cases if and only if: (a) Luna remains a Subsidiary of the Acquiror; (b) substantially all intellectual property of Luna and substantially all research and

development assets and operations of Luna, in each case relating to FOSSL Technology, remain with Luna and are not transferred to the Acquiror or another Affiliate of the Acquiror; and (c) the scientific and development activities with respect to FOSSL Technology of Luna and the Acquiror (if any) are maintained separate and distinct. For clarity, in the event that Luna is acquired by an Acquiror and each of the criteria described in subclauses (a) through (c) is not satisfied, then the intellectual property of such Acquiror created, invented, generated or developed after the date of such acquisition shall be included within Licensed IP (but not any intellectual property of such Acquiror existing prior to or as of the date of such acquisition). Subject to the foregoing, the respective obligations of the Parties hereto shall bind, and the respective rights of the parties shall inure to the benefit of, the Parties' respective permitted assignees and successors. For the avoidance of doubt, any sale or transfer of Licensed IP shall only be made fully subject to the terms and conditions of this Agreement.

5.5 Governing Law; Jurisdiction; Venue.

(a) Choice of Law. This Agreement shall be governed by, and interpreted in accordance with: (i) the Bankruptcy Code, and (ii) in the case of applicable non-bankruptcy law, the laws of the State of Delaware, without regard to conflicts of laws, or applicable federal law as to a particular subject where federal law governs, such as for example, the Patent Act governing patents or the Copyright Act governing copyrights.

(b) Bankruptcy Court Jurisdiction. Except as provided in subsection (c) and subsection (d), any disputes arising under this Agreement, or related to the meaning, effect and interpretation of the Amended Plan, the Confirmation Order or this Agreement (which Agreement is a part of the Amended Plan and Confirmation Order), shall be subject to the jurisdiction of the Bankruptcy Court.

(c) Exceptions to Bankruptcy Court Jurisdiction. In the event: (i) the Bankruptcy Court lacks or declines to exercise jurisdiction over a dispute arising under this Agreement, for any reason; (ii) the reference of jurisdiction to the Bankruptcy Court is withdrawn, for any reason; (iii) the dispute or enforcement of this Agreement is related to any intellectual property rights of Intuitive, Hansen or Luna, including without limitation any alleged infringement or misappropriation or misuse thereof; or (iv) the dispute or enforcement arises from or with respect to any provision of, or incorporated into, any of Sections 2.1, 2.2, 2.3, 2.4, 2.5, 4, or 5 of this Agreement or causes of action relating thereto or arising therefrom, then the state or federal courts for or in New Castle County, Delaware shall have exclusive jurisdiction over any disputes arising under or related to this Agreement.

(d) Consent to Jurisdiction. Each Party hereby (i) consents and submits to the venue and co-exclusive jurisdiction of the Bankruptcy Court and the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware (without prejudice to either the retained rights and jurisdiction of the Bankruptcy Court), (ii) agrees that all claims may be heard and determined in such courts, (iii) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (iv) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the Parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

(e) Resolving Conflicts. If there is any question as to whether the proper jurisdiction or venue for any dispute is in the Bankruptcy Court or in the Delaware Court, the Bankruptcy Court may decide that issue.

5.6 Severability. If for any reason a provision of this Agreement, or portion thereof, is finally determined to be unenforceable under applicable law, that provision, or portion thereof, shall nonetheless be enforced, as to circumstances, persons, places and otherwise, to the maximum extent permissible by applicable law so as to give effect to the intent of the parties, and the remainder of this Agreement shall continue in full force and effect.

5.7 Nature of Rights in Bankruptcy. The Parties agree that the rights granted hereunder are rights in "intellectual property" within the scope of Section 101 (or its successors) of the Bankruptcy Code of the United States. Intuitive, as a licensee of Intellectual Property Rights under this Agreement, shall have and may fully exercise all rights available to a licensee under the Bankruptcy Code of the United States, including under Section 365(n) or its successors.

5.8 Headings. The headings and captions used in this Agreement are for convenience only and shall not be considered in construing or interpreting this Agreement.

5.9 Interpretation. This Agreement has been negotiated by all parties, and each Party has been advised by competent legal counsel. This Agreement shall be interpreted in accordance with its terms and without any construction in favor of or against any Party.

5.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but which collectively shall constitute one and the same instrument.

5.11 Litigation Disclaimer. Because Intuitive was not a party to the Litigation, Intuitive specifically reserves its right to contest and does not acknowledge the validity of any of the factual allegations or legal claims made by Hansen in the course of that proceeding. The foregoing sentence is not intended to limit, condition or modify the express terms and conditions of this Agreement or the 2005 Hansen-Intuitive Cross License.

5.12 Notices. Except as may be otherwise provided herein, all notices, requests, waivers, consents and approvals made pursuant to this Agreement shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to another Party; (b) when sent by facsimile, with receipt confirmation, to the number set forth below if sent between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day, or on the next business day if sent by facsimile to the number set forth below if sent other than between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day; or (c) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the applicable Parties as set forth below with next business day delivery guaranteed, provided that the sending Party receives a confirmation of delivery from the delivery service provider. Each person making a communication hereunder by facsimile shall attempt to promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity or delivery status of any such communication. A Party may change or supplement the addresses given below, or designate additional addresses, for purposes of this Section by giving the other Parties written notice of the new address in the manner set forth above.

If to Luna Innovations Inc. or Luna Technologies, Inc.
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn:
Facsimile:

If to Intuitive Surgical, Inc.
1266 Kifer Road, Building 101
Sunnyvale, CA 94086-5304
Attn: General Counsel
Facsimile:

5.13 Luna Party. For purposes of this Agreement, Luna Innovations Inc. and Luna Technologies, Inc. may be treated by Intuitive as one entity, such that, for example, a notice or consent from Luna Innovations Inc. shall be deemed a valid and effective notice or consent also from Luna Technologies, Inc. (and vice versa). Luna Innovations Inc. and Luna Technologies, Inc. shall exercise their rights jointly under this Agreement, and will not take conflicting positions with respect to its obligations to Intuitive.

5.14 Further Assurances. Luna agrees to take or cause to be taken such further actions, and to execute, deliver and file or cause to be executed, delivered and filed such further documents and instruments, and to obtain such consents, as may be reasonably required or requested by Intuitive (to the extent consistent with this Agreement and at Intuitive's expense) in order to effectuate fully the purposes, terms and conditions of this Agreement. Without limiting the foregoing, Luna shall take such steps reasonably requested by Intuitive to perfect, and provide constructive notice of, the licenses and other rights granted to Intuitive under this Agreement, including without limitation filings in any governmental office where that is customary or appropriate in accordance with applicable law.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent A. Murphy

Name: Kent A. Murphy

Title: CEO

INTUITIVE SURGICAL, INC.

By: /s/ Mark Meltzer

Name: Mark Meltzer

Title: SVP GC

LUNA TECHNOLOGIES, INC.

By: /s/ Scott A. Graeff

Name: Scott A. Graeff

Title: President

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT A
Certain Technology and Intellectual Property in Hansen Luna Agreement IP

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT B
Listed Patents and Patent Applications within Licensed Patents

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT C
Certain Luna Technology within Licensed Technology

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT D
Third Party Licenses

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.9

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

AMENDMENT

TO

DEVELOPMENT AND SUPPLY AGREEMENT

This Amendment ("Amendment") to the Development and Supply Agreement by and between Intuitive Surgical, Inc. ("Intuitive"), and Luna Innovations Incorporated ("Luna", and collectively with Intuitive, the "Parties") dated June 11, 2007 (the "Original Agreement"), is made and entered into as of January 12, 2010.

BACKGROUND

A. The Parties amended the Original Agreement by an Amendment No. X dated May 20, 2008, to replace Exhibit 2.1 to the Original Agreement. The Original Agreement as amended by Amendment No. X shall be referred to as the "Agreement".

B. As a part of settlement of certain litigation between Luna and Hansen Medical, Inc. ("Hansen"), Luna seeks to modify certain provisions of the Agreement such that it may provide Hansen with a co-exclusive (with Intuitive) license to its fiber optic shape sensing/localization technology within a certain field as defined in a License Agreement Between Intuitive and Luna having the same date as this Amendment (the "New Intuitive License").

C. In connection with this settlement, Luna and Intuitive desire to amend the Agreement to allow the co-exclusive license of certain technologies by Luna to Hansen and to permit Luna to engage in certain development work for Hansen, as well as modify the patent enforcement provisions and make various other changes to the Agreement desired by the Parties.

D. On December 11, 2009, Luna met and satisfied the Second Milestone contemplated by the Agreement, thus completing its development obligations. The Parties, however, expect that Intuitive may desire Luna to perform further development work under the Agreement and this Amendment provides for that possibility in the future.

E. All terms not defined in this Amendment shall have the meanings assigned to them in the Agreement or the New Intuitive License (and any defined in both shall have the meaning assigned in the latter).

F. Now, therefore, the Parties hereby agree to the following terms and conditions, the adequate mutual consideration for which is hereby acknowledged.

AGREEMENT

1. **Amendment of Preamble**.

The Preamble of the Agreement is amended in its entirety to read as follows:

> This Development and Supply Agreement (the "Agreement") is made and entered into on June 11, 2007, (the "Effective Date") by and between Intuitive Surgical, Inc., a Delaware corporation, having a principal place of business at 1266 Kifer Road, Building 101, Sunnyvale, California 94086-5304 and its Affiliates (acting jointly and severally, individually and collectively, "Intuitive") and Luna Innovations Incorporated, a Delaware corporation having a principal place of business at 1703 S. Jefferson Street SW, Suite 400, Roanoke, Virginia 24016 and its Affiliates (acting jointly and severally, individually and collectively, "Luna"). As used in this Agreement, each of Intuitive and Luna is a "Party" and collectively they are the "Parties."

2. **Amendment of Definitions**.

2.1 **Affiliates**. Section 1.1 of the Agreement is amended in its entirety to read as follows:

> "Affiliates" means any corporation or other entity that is directly or indirectly controlling, controlled by or under common control with a Party. For purposes of this definition, "control" of an entity means the direct or indirect ownership of securities representing fifty percent (50%) or more of the total voting power entitled to vote in elections of such entity's board of directors or other governing authority, or equivalent interests conferring the power to direct or cause the direction of the governance or policies of such entity.

2.2 **Field**. Section 1.14 of the Agreement is amended in its entirety to read as follows:

> "Field" means the field of [****].

2.3 **Integrated Product**. Section 1.18 of the Agreement is amended in its entirety to read as follows:

> "Integrated Product" means, collectively, the Luna Product and the Intuitive Product as a physically integrated product for commercialization, distribution, or use under this Agreement solely within the Field.

2.4 **Intuitive Product**. Section 1.24 of the Agreement is amended in its entirety to read as follows:

"Intuitive Product" means any Intuitive [****] into which Intuitive may wish to physically integrate the Luna Product for manufacture, use, offer for sale, sale, importation, commercialization or distribution under this Agreement solely within the Field.

2.5 **Milestones**. Section 1.33 of the Agreement is amended in its entirety to read as follows:

"Milestones" means the Development Program Milestones, as set forth in Exhibit 2.1, as may be amended from time to time by the mutual agreement of Luna and Intuitive.

2.6 **Shape-Sensing Product**. Section 1.40 of the Agreement is amended in its entirety to read as follows:

"Shape-Sensing Product" means a device, product or system that makes use of or implements FOSSL Technology.

2.7 **Technology**. Section 1.42 of the Agreement is amended in its entirety to read as follows:

"Technology" means 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, devices, prototypes, substances, components, inventions (whether or not patentable), mask works, ideas, trade secrets and other information or materials, in tangible or intangible form.

2.8 **FOSSL Technology**. Section 1 of the Agreement is amended to add the following new Section 1.46:

1.46 "Fiber Optic Shape Sensing/Localization Technology" or "FOSSL Technology" means [****].

2.9 **New Intuitive License**. Section 1 of the Agreement is amended to add the following new Section 1.47:

1.47 "New Intuitive License" means the License Agreement Between Intuitive and Luna dated as of January 12, 2010.

2.10 **Product.** Section 1 of the Agreement is amended to add the following new Section 1.48:

1.48 "Product" means any device, instrument, diagnostic, therapeutic, product, system, application, or services.

2.11 **Luna Product**. Section 1.31 of the Agreement is amended in its entirety to read as follows:

1.31 "Luna Product" means any Product involving or relating to Fiber Optic Shape Sensing/Localization Technology developed by or for Luna under this Agreement (which Luna Product will in any event include an optical fiber sensor component with a connector ("Sensor") and a device or box containing, among other things, computer software and computer hardware components designed, among other things, to receive, analyze, interpret and output Sensor shape, position, orientation and/or location information ("Interrogator")).

3. **Amendment of Licenses and Patent Enforcement**.

3.1 **Luna to Intuitive**. In acknowledgement of the terms and provisions contained in the New Intuitive License, Sections 4 and 9.4.1 of the Agreement are hereby deleted. For purpose of clarity, nothing in the New Intuitive License shall be considered to prohibit, limit, or otherwise restrict Luna from marketing, selling, or distributing any products or services, including without limitation, any Shape-Sensing Products or services, outside the Field or from developing and manufacturing products for Hansen either within or outside the Field.

3.2 **Intuitive to Luna.** The [****] of the license granted by Intuitive to Luna pursuant to clause (ii) of Section 9.4.2 of the Agreement shall be deemed amended to the limited extent necessary to allow Intuitive to [****].

3.3 **Patent Enforcement.** Section 9.7 of the Agreement shall be subject to Section 4.2 of the New Intuitive License and shall be subject to Section 5.2(a) of the License Agreement Between Hansen and Luna of even date herewith. The first sentence of Section 9.7 of the Agreement shall be amended in its entirety to read as follows:

[****]

The last sentence of Section 9.7 of the Agreement shall be amended in its entirety to read as follows:

[****]

3.4 **Background Intellectual Property.** The following clause beginning Section 9.1 of the Agreement "Subject to the licenses granted under this Agreement, as between the Parties," is amended in its entirety to read as "Subject to the licenses granted under this Agreement and the New Intuitive License, as between the Parties,".

3.5 **New Intellectual Property.** Section 9.2 of the Agreement is clarified to read as follows:

New Intellectual Property. To the extent that one or more Parties acquires, licenses, or creates any Technology in connection with the Development Program, subject to the licenses granted under this Agreement and the New Intuitive License (but without imposing on Intuitive an obligation to disclose any invention disclosures, trade secrets and know how, proprietary information, technical data, documentation, concepts, processes, formulae, systems, equipment apparatuses, software, designs, drawings, plans, specifications and the like in which Intuitive has rights or any similar, corresponding or equivalent rights anywhere in the world), as between the Parties, ownership of Technology and all Intellectual Property Rights therein ("New Intellectual Property") shall be as follows:

3.6 **Intuitive New Intellectual Property.** Section 9.2.2 of the Agreement is clarified to read as follows:

Intuitive shall own all right, title and interest in all New Intellectual Property related to [****]. Luna agrees to reasonably cooperate, at Intuitive's cost, in the preparation, filing, prosecution, and maintenance of any Intuitive New Intellectual Property that are jointly invented by the Parties.

4. **Amendment regarding Development**.

4.1 **Future Development Work.** The Parties agree that Intuitive may request Luna to perform additional development work under Section 2 of the Agreement ("Development Work"). In order to do so, the Parties shall agree upon a new Exhibit 2.1 setting forth Milestones and Luna Product Specifications. Subject to the mutual reasonable agreement on Milestones and Luna Product Specifications and payment for Development Work pursuant to Section 5 below, and further subject to Section 14 of the Agreement, Luna agrees to perform Development Work under Section 2 of the Agreement for a period of [****] from the date of this Amendment.

4.2 **Annual Review.** The following new Section 2.7 shall be added to the Agreement, which shall replace Section 6.5 of the Agreement:

2.7 Annual Review. The Project Managers, or at Intuitive's request, the Chief Technology Officers of the Parties, shall engage in an annual review (including a meeting) of the development of FOSSL Technology for use in or in connection with the [****] Field. Luna shall respond to any reasonable requests by Intuitive for further information in the form of (1) copies of any then-existing reports, summaries, memorandums, articles, invention disclosures, patents and patent applications, in each case (A) to the extent not already disclosed to Intuitive and (B) in any event (i)

excluding inventor notebooks, incomplete draft documents and mere email correspondence (but not excluding attached documents to the extent constituting the foregoing documents), and (ii) excluding any information restricted from disclosure to Intuitive under third party confidentiality obligations, or (2) Luna may prepare a document fulfilling such request that provides the substance of the responsive information that otherwise would be provided pursuant to clause (1). The foregoing shall exclude software source code and related documentation and algorithms designed for the purpose of incorporation into source code (without limiting Section 2.8 below). However, the foregoing obligation shall not require Luna to generate any new documents, reports or other materials that do not already exist (except to the extent Luna elects, in its sole discretion, to pursue (2) above instead of (1)) and shall not require Luna to provide Intuitive with training with respect to any inventions or Technology contained or described by the claims of such Licensed Patents.

4.3 **Source Code Escrow**. The following new Section 2.8 shall be added to the Agreement:

2.8 Source Code Escrow. Luna shall deposit in escrow all source code for software necessary to operate the Luna Product (including source code for software within the Interrogator, as may exist as of the date hereof and as updated), as imaged on a hard drive with all of the files and utilities necessary to compile or synthesize the source code, together with any documentation, libraries, tools, utilities and other related materials reasonably necessary for the installation, testing, deployment, operation, modification or use of such software source code (collectively, "Luna Product Deposit Materials") with [****]. Luna shall periodically update such Luna Product Deposit Materials with the latest versions thereof, but no less frequently than once each calendar quarter. The Luna Product Deposit Materials shall be released to Intuitive in the event any of the following occurs (but not in any other case): (i) refusal of Luna to perform continued development, maintenance, upgrading, or support of the software within the Luna Product Deposit Materials under Luna's standard rates or under other reasonable and customary terms (it being understood that Luna has no obligation to do so hereunder outside of the Development Program or outside of obligations arisen from the triggering of Standby Rights under Section 8.3) or failure of Luna to provide such services after agreeing to do so (following notice and an opportunity to cure such failure within [****], and (ii) the bankruptcy, liquidation or insolvency of Luna or an assignment for the benefit of creditors by Luna. All fees and

expenses payable to [****] for the establishment and maintenance of such escrow arrangement shall be borne and paid by Intuitive. Within [****] days following the date of this Amendment, the Parties shall negotiate and enter into an escrow agreement between the Parties and [****] to establish the escrow arrangement described above under the terms and conditions described above (and other reasonable and customary terms and conditions). Luna shall make the initial deposit of the materials described above into escrow within [****] after such escrow agreement is entered into.

4.4 **Regulatory Requirements.** The following provision shall be added in its entirety after the last sentence of Section 7.3.1 of the Agreement:

Luna shall cooperate with Intuitive to provide any software source code with respect to the Luna Product and the Integrated Product to the extent required by any applicable law, rule or regulation, including regulatory requirements of the FDA and other applicable governmental entities concerning the Luna Product or the Integrated Product within such time periods as reasonably required for compliance with the applicable laws, rules or regulations.

5. **Amendment of Supply Obligations**.

5.1 **No Minimum Annual Commitment**. Section 5.4.2 of the Agreement is hereby deleted. The last two sentences of Section 7.1 of the Agreement are hereby deleted.

5.2 **Purchase of Sensors**. Section 5.4.3 of the Agreement is amended in its entirety to read as follows:

5.4.3. Purchase of Optical Fiber and Sensors. Intuitive shall have the right to purchase optical fiber or Sensors from suppliers other than Luna, and to package, and connectorize optical fiber into individual Sensors, and Luna shall assist Intuitive in identifying such suppliers and answer inquires from Intuitive and/or such suppliers regarding such packaging and/or connectorizing processes. Notwithstanding anything in this Agreement to the contrary, in the event that Intuitive purchases optical fiber or Sensors from a third-party vendor, Luna does not guarantee, represent, or warrant (and affirmatively disclaims any guaranty, representation, or warranty) that the combination of such optical fiber or third-party Sensors will be compatible with the Interrogators or that the integrated Shape-Sensing Product will meet the Luna Product Specifications.

6. **Payment for Development Work[****].**

6.1 **Payment for Development Work.** Subject to Section 5.3 below, Intuitive shall pay Luna for the Development Work performed by Luna personnel at Luna's reasonable commercial hourly rates for development work and other direct development costs (materials at a cost plus normal commercial burden). These rates are subject to annual reasonable adjustment not to exceed [****]. Luna has previously provided Intuitive with its 2010 hourly rates. Luna shall invoice Intuitive for Development Work on a calendar monthly basis.

6.2 **Audit Rights.** Luna shall keep and maintain complete and accurate books, records, and accounts as may be reasonably required to confirm the amounts invoiced by it for Development Work. Intuitive shall have the right once per twelve month period, upon reasonable advance notice and during normal business hours, to have an independent third party auditor (one that is not otherwise engaged by Intuitive for other auditing or tax purposes) audit such books, records, and accounts to verify the accuracy of such invoices. Such audit shall be at Intuitive's expense, except that if such audit concludes that Intuitive made an overpayment of at least the greater of (i) [****] of the actual amount due and (ii) [****], subject to an opportunity by Luna to reasonably contest the conclusions of such audit, such audit shall be at Luna's sole expense. Luna shall promptly refund to Intuitive the amount of any such overpayment.

6.3 **Credit of** [****] **against Development Work and Commercial Transfer Price.** Until an aggregate cumulative credit or discount of [****] has been reached, (i) Intuitive shall be entitled a [****]% discount on all Development Work invoiced by Luna to Intuitive and/or (ii) [****] discount to the Commercial Transfer Price for Luna Products supplied (as used in Section 6.4 of the Agreement). Notwithstanding the foregoing, to the extent any materials are included in the Development Work, the [****]% discount shall only be applied against Luna's mark-up above cost (*i.e.*, [****]% of the mark-up, not [****]% of the cost plus mark-up).

6.4 [****] **Fee.** Section 6.3 of the Agreement is amended in its entirety to read as follows:

> 6.3. [****] Fee. In addition to the Licensing Fee and the Development Fees described in Section 6.1 and 6.2, Intuitive shall pay to Luna a non-refundable (except as provided in Section 14.2.1(a)), [****].

7. **Term and Termination**.

7.1 **Term**. Section 14.1 of the Agreement is amended in its entirety to read as follows:

> Subject to Section 14.2.5, this Agreement shall continue in full force and effect for a [****] period from date of the Amendment, unless earlier terminated pursuant to the other provisions of this Section 14 (the "Term"). [****]. The Term may be extended by mutual written agreement of the Parties prior to the expiration of the initial Term.

7.2 **Termination for Breach of** [****] **License.** Section 14.2.1(a) of the Agreement is amended in its entirety to read as follows:

(a) in the event Luna breaches [****] the license [****] described in Section 14.1, after failure to cure pursuant to the following notice. In the event Intuitive believes that Luna has breached the [****] license [****], Intuitive shall provide Luna with written notice describing same and Luna shall have [****] to cure such breach. In the event of termination by Intuitive pursuant to this Section 14.2.1(a), nothing herein shall be deemed to affect the license granted by Luna to Intuitive pursuant to Section 2.1 of the New Intuitive License [****]. In addition, Intuitive shall have the right to seek additional legal recourse for intentional breach of the [****] license granted pursuant to Section 2.1 of the New Intuitive License.

7.3 **Failure to [****].** Section 14.2.1(b) of the Agreement is amended in its entirety to read as follows:

(b) in the event Luna is unable to satisfy [****], after failure to cure pursuant to the following notice. In the event Intuitive believes that Luna has not [****]. Within ten (10) business days of Intuitive's request, Luna shall make all commercially reasonable efforts to allow Intuitive to [****]. In the event of termination by Intuitive under this Section 14.2.1(b), nothing herein shall be deemed to affect the license granted by Luna to Intuitive pursuant to Section 2.1 of the New Intuitive License [****] and Luna shall be obligated to mitigate future expenditures or commitment of funds. The foregoing shall be Intuitive's sole remedy and Luna's sole liability for [****]. However, Intuitive reserves the right to seek other legal recourse for Luna's intentional breach [****]. Termination pursuant to this Section 14.2.1(b) shall not terminate Intuitive's obligation to pay (i) amounts accrued as of the date of termination [****].

7.4 **Certain Conforming Changes.** The phrase "and shall maintain the licenses [****] granted under Sections 4 and 9." in Section 14.2.1(c) of the Agreement and Section 14.2.1(d) of the Agreement, where such phrase appears twice, shall in each instance be replaced by the following words:

"and shall maintain the license granted by Luna to Intuitive pursuant to Section 2.1 of the New Intuitive License."

7.5 **Termination By Luna**. Section 14.2.2(a) of the Agreement is amended in its entirety to read as follows:

(a) in the event Intuitive breaches a material obligation of the Agreement, after Luna has provided written notice and following a cure period of twenty-one (21) days. In the event of termination by Luna under this Section 14.2.2(a), Luna shall have the right to seek additional legal recourse.

8. **Miscellaneous.** Except as specifically provided for herein, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict or inconsistency between the terms and conditions contained in this Amendment and the Agreement, the provisions herein shall prevail. This Amendment, the Agreement and the New Intuitive License contain the entire agreement and understanding of Intuitive and Luna with subject matter hereof, except to the limited extent another agreement is specifically referenced herein.

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed by their duly authorized representatives as of the date set forth above.

LUNA INNOVATIONS INCORPORATED	**INTUITIVE SURGICAL, INC.**
By: /s/ Kent A. Murphy	By: /s/ Mark Meltzer
Name: Kent A. Murphy	Name: Mark Meltzer
Title: CEO	Title: SVP GC

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

CONFIDENTIAL TREATMENT REQUESTED

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

AMENDMENT No. 2
to the
Intuitive-Luna Development Supply Agreement dated June 11, 2007 ("Original Agreement")
between
INTUITIVE SURGICAL, INC. ("Intuitive")
and
LUNA INNOVATIONS, INC. ("Luna")

This Amendment No. 2 is entered into by and between Intuitive and Luna on April 27, 2010 ("Amendment Date").

BACKGROUND

A. Intuitive and Luna agreed to amend the Original Agreement by Amendment No. X dated May 20, 2008 to replace Exhibit 2.1 of the Original Agreement. The Original Agreement as amended by Amendment No. X shall be referred to as the "Agreement".

B. As part of settlement of certain litigation between Luna and Hansen Medical, Inc. ("Hansen"), Intuitive and Luna agreed to amend the Agreement by Amendment dated January 12, 2010 ("Amendment No. 1"). The Agreement as amended by the Amendment No.1 shall be referred to as the "Amended Agreement".

C. On December 11, 2009, Luna met and satisfied the Second Milestone contemplated by the Amended Agreement, thus completing its development obligations. Intuitive now desires Luna to perform further development work under the Amended Agreement and this Amendment No. 2 represents the agreement between Intuitive and Luna regarding the new development work for 2010.

D. Section 6 of Amendment No. 1 provides that Intuitive shall pay Luna for further development work at its previously provided 2010 hourly rates and other direct development costs (materials at a cost plus normal commercial burden), subject to a [****]% discount until Intuitive has received a $[****] cumulative credit or discount.

E. Intuitive now desires for Luna to perform $[****] of development work in 2010. [****]

Intuitive and Luna agree to amend the Amended Agreement as follows:

1. Terms not defined in this Amendment No. 2 shall have the meaning assigned to them in the Amended Agreement.

2. Milestones and Luna Product Specifications (Exhibit 2.1) to the Amended Agreement are hereby deleted in their entirety and replaced by new Milestones and Luna Product Specifications (Exhibit 2.1) attached to this Amendment.

3. In 2010, Intuitive hereby requests that Luna perform up to $[****] of Development Work pursuant to Exhibit 2.1 attached hereto. [****] Per Section 6.1 of Amendment No. 1, Intuitive shall pay Luna for this requested Development Work based on monthly invoices, which will be on net 30 payment terms. [****]

4. Except as specifically provided for herein, all of the terms and conditions of the Agreement shall remain in full force and effect. In the event of a conflict or inconsistency between the terms and conditions contained in this Amendment No. 2 and the Amended Agreement, the provisions herein shall prevail.

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to be executed as of the Amendment Date.

INTUITIVE SURGICAL, INC.		**LUNA INNOVATIONS, INC.**	
Sign:	/s/ David Rosa	Sign:	/s/ Kent A. Murphy
Name:	David Rosa	Name:	Kent A. Murphy
Title:	VP, Product Development	Title:	CEO
Date:	4/20/10	Date:	April 27, 2010

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

EXHIBIT 2.1
MILESTONES AND LUNA PRODUCT SPECIFICATIONS

[****]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 24B-2 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED.

Exhibit 10.10

SECURED PROMISSORY NOTE

U.S. $5,000,000.00 Dated: January 12, 2010

FOR VALUE RECEIVED, the undersigned, **Luna Innovations Incorporated,** a Delaware corporation, and **Luna Technologies, Inc.**, a Delaware corporation (individually and collectively, called the "**Borrower**"), HEREBY UNCONDITIONALLY JOINTLY AND SEVERALLY PROMISE TO PAY to the order of **Hansen Medical, Inc.**, a Delaware corporation (the "**Lender**"), the principal sum of FIVE MILLION UNITED STATES DOLLARS (U.S. $5,000,000.00), in sixteen (16) equal consecutive installments, commencing on April 12, 2010, with subsequent installments payable on the last Business Day of each July, October, January and April (each a "**Payment Date")** of each calendar year thereafter in accordance with the amortization schedule set forth on Exhibit A attached hereto, and with the last such installment to be due and payable on January 31, 2014 (as the same may be accelerated as provided herein, the "**Maturity Date")** and in the amount necessary to repay in full the unpaid principal balance hereof.

The Borrower further promises jointly and severally, as primary obligors and not as secondary obligors, sureties, guarantors or accommodation makers, to pay interest on the outstanding principal amount of this Promissory Note (this "**Note**") from the date hereof until the Maturity Date, at a rate per annum equal at all times to eight and one half percent (8.5%) per annum, payable quarterly in arrears on each Payment Date, on the date of any prepayment of the Note, and on the Maturity Date in accordance with the amortization schedule set forth in Exhibit A attached hereto.

Upon the occurrence and during the continuance of an Event of Default hereunder, interest hereon shall accrue at a rate per annum which is 5% higher than the rate of interest set forth above; provided that payment of any such interest at such rate shall not constitute a waiver of any Event of Default and shall be without prejudice to the right of the Lender to exercise any of its rights and remedies hereunder. All computations of interest shall be made on the basis of a year of 365 days for the actual number of days (including the first day but excluding the last day) occurring in the period for which such interest is payable.

All payments hereunder shall be made in lawful money of the United States of America and in same day or immediately available funds, prior to 3:00 p.m. (Eastern time), to Lender into the account specified in Exhibit B, or such other account as is designated in writing by Lender to the Administrative Borrower not less than 5 Business Days prior to any date scheduled for payment hereunder. Borrower shall be entitled to pay such amounts to the last account designated by Lender (or as specified in Exhibit B if there has been no designation following the date of this Note) in the absence of any subsequent re-designation. For the purposes of this Secured Promissory Note, "**Administrative Borrower**" shall mean Luna Innovations Incorporated.

Whenever any payment hereunder shall be due on a day other than a Business Day (as defined below), then, except as otherwise provided herein, such payment shall be made, and such interest payment date or other date shall occur, on the next succeeding Business Day,

and such extension of time shall in such case be included in the computation of payment of interest hereunder. As used herein, "**Business Day**" means a day other than a Saturday or a Sunday on which banks are open for business in California and Virginia.

The Borrower agrees to make all payments under this Note and under any Collateral Document (as defined below) without setoff or deduction. Notwithstanding anything to the contrary herein, to the extent the Lender receives any payment on this Note that it later has to disgorge, remit, pay over or otherwise part, such amount shall be deemed to have never been paid under this Note.

Notwithstanding anything to the contrary herein, in no event shall the Borrower be obligated to pay the Lender interest, charges or fees at a rate in excess of the highest rate permitted by applicable law, including the Bankruptcy Code applicable pursuant to the Amended Plan of Reorganization.

The Borrower may at any time and from time to time, prepay the outstanding amount hereof in whole or in part, without premium or penalty. Partial prepayments shall be in an aggregate principal amount of at least $50,000 or a greater amount which is an integral multiple of $5,000. Prepayment may also be made under Section 4.1.4 of the Development and Supply Agreement between Borrower and Lender of even date herewith. Partial prepayments shall first be applied to the outstanding principal balance hereunder (and Exhibit A shall be amended accordingly).

Together with any prepayment hereunder, the Borrower shall pay accrued interest to (but excluding) the date of such prepayment on the principal amount prepaid.

As used herein, "**GAAP**" means generally accepted accounting principles in the United States as in effect from time to time; "**Guarantor**" means any guarantor hereof; "**Guaranty**" means any guaranty hereof provided by a Guarantor; "**Indebtedness**" means any indebtedness or obligation for borrowed money, the deferred purchase price of property or leases which would be capitalized in accordance with GAAP, any reimbursement and other payment obligations in respect of letters of credit and surety or performance bonds, and all net payment obligations in respect of derivative products; and any payment liability as a surety, guarantor, accommodation party or otherwise for or upon the indebtedness or obligation of any other Person of the nature described above; "**Lien**" means any mortgage, deed of trust, pledge, security interest, charge or real estate encumbrance, lien (statutory or other), or other similar preferential arrangement (such as, any conditional sale or other title retention agreement, any financing lease having substantially the same economic effect as any of the foregoing or any agreement to give any security interest); "**Person**" means an individual, corporation, partnership, limited liability company, joint venture, trust, unincorporated organization or any other entity of whatever nature, including any governmental agency or authority; and "**Subsidiary**" means any corporation, association, partnership, limited liability company, joint venture or other business entity of which more than 50% of the voting stock or other equity interest is owned directly or indirectly by any Person or one or more of the other Subsidiaries of such Person or a combination thereof.

Unless otherwise defined or the context otherwise requires, all accounting terms used herein shall be construed, and all accounting determinations and computations required hereunder shall be made, in accordance with GAAP, consistently applied.

Any of the following events which shall occur shall constitute an "**Event of Default**":

1. The Borrower shall fail to pay when due any amount of principal or interest hereunder or other amount due and payable under this Note or any Collateral Document, and, in the case of any such non-payment, the continuation of such failure for five (5) Business days after such amount was due and payable.

2. Any material representation or warranty by the Borrower in this Note or in the Collateral Documents shall prove to have been breached in any material respect when made.

3. The Borrower shall admit in writing its inability to, or shall fail generally to, pay its debts (including its payrolls) as such debts become due, or shall make a general assignment for the benefit of creditors; or the Borrower shall file a voluntary petition in bankruptcy or a petition or answer seeking reorganization, to effect a plan or other arrangement with creditors or any other relief under the Bankruptcy Reform Act of 1978, as amended or recodified from time to time (the "**Bankruptcy Code**") or under any other state or federal law relating to bankruptcy or reorganization granting relief to debtors, whether now or hereafter in effect, or shall file an answer admitting the jurisdiction of the court and the material allegations of any involuntary petition filed against the Borrower pursuant to the Bankruptcy Code or any such other state or federal law; or the Borrower shall be adjudicated a bankrupt, or shall make an assignment for the benefit of creditors, or shall apply for or consent to the appointment of any custodian, receiver or trustee for all or any substantial part of the Borrower's property, or shall take any action to authorize any of the actions or events set forth above in this paragraph; or an involuntary petition seeking any of the relief specified in this paragraph shall be filed against the Borrower and shall not be dismissed within 60 days, provided that Borrower is seeking to dismiss such involuntary petition; or any order for relief shall be entered against the Borrower in any involuntary proceeding under the Bankruptcy Code or any such other state or federal law referred to in this paragraph 3.

4. The Borrower shall (i) liquidate, wind up or dissolve (or suffer any liquidation, wind-up or dissolution), except to the extent expressly permitted by this Note, (ii) suspend or terminate its operations other than in the ordinary course of business, or (iii) take any action to authorize any of the actions or events set forth above in this paragraph 4.

5. The Borrower shall (i) fail to make any payment of any principal of, or interest or premium on any Indebtedness (other than the Qualified Loan or in respect of this Note) in an aggregate amount (including undrawn committed or available amounts) of at least $250,000 when due (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise) and such failure shall continue after the applicable grace period, if any, specified in the agreement or instrument relating to such Indebtedness as of the date of such failure, or (ii) there shall be an event of default under the Qualified Loan which has been recognized by the lender or is otherwise obvious and unambiguous under the Qualified Loan and has not been waived in writing or is not the subject to a written forbearance agreement within the applicable cure period under the Qualified Loan.

6. A final judgment or order for the payment of money in excess of $250,000 which is not fully covered by third-party insurance shall be rendered against the Borrower, or any non-monetary judgment or order shall be rendered against the Borrower, any Guarantor or any such Subsidiary which has or would reasonably be expected to have a Material Adverse Effect, and in each case there shall be any period of thirty (30) consecutive days during which such judgment continues unsatisfied or during which a stay of enforcement of such judgment or order, by reason of a pending appeal or otherwise, shall not be in effect.

7. The Borrower shall fail to perform or observe (a) any covenant set forth in Sections 5(b)(ii), 5(b)(iii), or 5(b)(v) of the Security Agreement or (b) any other material term, covenant or agreement contained in the Collateral Documents on its part to be performed or observed and the failure described in subsection (b) hereof has or is reasonably likely to have an adverse impact on Borrower or any Guarantor of at least $250,000 and which remains unremedied or uncured until the earlier of ten (10) days after notice from Lender or sixty (60) days after Borrower first has knowledge of such failure to perform or observe.

8. Any levy upon, seizure or attachment of any of the Collateral with a value of at least $250,000 individually or $500,000 in the aggregate which shall not have been rescinded or withdrawn.

If any Event of Default shall occur and be continuing, the Lender may (i) with written notice to the Administrative Borrower, declare the entire unpaid principal amount of this Note, all interest accrued and unpaid hereon and all other amounts payable hereunder to be forthwith due and payable, whereupon all unpaid principal under this Note, all such accrued interest and all such other amounts shall become and be forthwith due and payable, without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived by the Borrower, provided that upon the occurrence of an actual or deemed entry of an order for relief with respect to the Borrower under the Bankruptcy Code, the result which would otherwise occur only upon giving of notice by the Lender to the Borrower as specified above shall occur automatically, without the giving of any such notice; and (ii) whether or not the actions referred to in clause (i) have been taken, exercise any or all of the Lender's rights and remedies under the Collateral Documents and any Guaranty, and proceed to enforce all other rights and remedies available to the Lender under applicable law.

No amendment or waiver of any provision of this Note or any other Collateral Document, nor any consent to any departure by the Borrower therefrom, shall in any event be effective unless the same shall be in writing and signed by the Lender and then such amendment, waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

All notices and other communications provided for hereunder shall, unless otherwise stated herein, be in writing and delivered by hand or sent by a nationally recognized overnight courier service (with tracking capability) to the respective parties hereto at or to the following addresses (or at or to such other address as shall be designated by any party in a written notice to the other parties hereto):

If to the Lender: Hansen Medical, Inc.
800 E. Middlefield Road
Mountain View, CA 94043
Attn: Arthur Hsieh

If to the Borrower: Luna Innovations Incorporated
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn: Fourd Kemper

All such notices and communications shall be effective when received.

This Note and the Collateral Documents reflect the entire agreement between Borrower and Lender with respect to the matters set forth therein and supersede any prior agreements, commitments, drafts, communication, discussions and understandings, oral or written, with respect thereto.

No failure on the part of the Lender to exercise, and no delay in exercising, any right, remedy, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, remedy, power or privilege preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege. The rights and remedies under this Note, or any other Collateral Document are cumulative and not exclusive of any rights, remedies, powers and privileges that may otherwise be available to the Lender.

Time is of the essence for the performance of each and every obligation under this Note.

Whenever possible, each provision of this Note shall be interpreted in such manner as to be effective and valid under all applicable laws and regulations. If, however, any provision of this Note shall be prohibited by or invalid under any such law or regulation in any jurisdiction, it shall, as to such jurisdiction, be deemed modified to conform to the minimum requirements of such law or regulation, or, if for any reason it is not deemed so modified, it shall be ineffective and invalid only to the extent of such prohibition or invalidity without affecting the remaining provisions of this Note, or the validity or effectiveness of such provision in any other jurisdiction.

The Borrower agrees to pay on demand all reasonable costs and expenses of the Lender, and the fees and disbursements of counsel, in connection with (i) any Events of Default (including enforcement of this Note and the Collateral Documents, and (ii) any out-of-court workout or restructuring or in any bankruptcy case, including, without limitation, any and all reasonable costs and expenses sustained by the Lender as a result of any failure by the Borrower to perform or observe in a material respect its obligations contained herein. In addition, the Borrower agrees to indemnify the Lender against and hold it harmless from any and all present and future stamp, transfer, documentary and other such taxes, levies, fees, assessments and other

charges, not including any income taxes, imposed by any jurisdiction upon the Secured Party by reason of the execution, delivery, performance and enforcement of this Note or any other Collateral Document.

This Note shall be binding upon, inure to the benefit of and be enforceable by the Borrower, the Lender and their respective permitted successors and assigns.

The Borrower will maintain a register in which it will record the initial ownership of this Note and any changes in ownership of this Note which occur as permitted by and in compliance with the terms hereof.

The Borrower shall not have the right to assign its rights and obligations in connection with this Note and any Collateral Document or any interest herein or therein without the prior written consent of the Lender.

This Note is secured by certain collateral (the "**Collateral**") more specifically described in the Security Agreement (the "**Security Agreement**") and the Patent and Trademark Security Agreement between the Borrower and the Lender of even date herewith, any control agreement for the purposes of perfecting the Lender's security interest in any deposit or securities accounts of the Borrower and any other agreement pursuant to which the Borrower, any Guarantor or any other Person provides a Lien on its assets in favor of the Lender (all collectively called the "**Collateral Documents**").

THIS NOTE SHALL BE GOVERNED BY, AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE, WITHOUT REGARD TO CONFLICTS OF LAWS, OR APPLICABLE FEDERAL LAW AS TO A PARTICULAR SUBJECT WHERE FEDERAL LAW GOVERNS, SUCH AS FOR EXAMPLE, THE PATENT ACT GOVERNING PATENTS OR THE COPYRIGHT ACT GOVERNING COPYRIGHTS.

Each Party hereby (i) consents and submits to the venue and exclusive jurisdiction of the Bankruptcy Court and the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware (without prejudice to either the retained rights and jurisdiction of the Bankruptcy Court), (ii) agrees that all claims may be heard and determined in such courts, (iii) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (iv) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

THE BORROWER AND, BY ITS ACCEPTANCE HEREOF, THE LENDER, HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS NOTE.

IN WITNESS WHEREOF, the Borrower has duly executed this Note, as of the date first above written.

LUNA INNOVATIONS INCORPORATED

By 

Name: Kent A. Murphy
Title: CEO

LUNA TECHNOLOGIES INC.

By 

Name: Scott A. Graeff
Title: President

Exhibit 10.11

SECURITY AGREEMENT

THIS SECURITY AGREEMENT (this "**Agreement**"), dated as of January 12, 2010, is made by and among **Luna Innovations Incorporated,** a Delaware corporation ("**LII**"), **Luna Technologies, Inc.**, a Delaware corporation ("**LTI**", and, together with LII, individually as a "**Debtor**" and collectively as "**Debtors**") and **Hansen Medical, Inc.**, a Delaware corporation ("**Secured Party**").

For valuable consideration, the receipt and adequacy of which is hereby acknowledged, each Debtor and Secured Party hereby agree as follows:

1. Definitions; Interpretation.

(a) All capitalized terms used in this Agreement and not otherwise defined herein shall have the meanings assigned to them in the Note.

(b) As used in this Agreement, the following terms shall have the following meanings:

"**Affiliate**" has the same meaning as "affiliate" under Title XI of the United States Code.

"**Amended Plan of Reorganization**" means the Debtors' joint Chapter 11 plan of reorganization, as amended, in their respective Chapter 11 cases pending in the Western District of Virginia.

"**Collateral**" has the meaning set forth in Section 2.

"**Collateral Documents**" means this Agreement, the Note, the Patent and Trademark Security Agreement, copyright or other security agreements related to the Intellectual Property, and any control agreements delivered to Secured Party under the Note.

"**Confirmation Order**" means the order of the Western District of Virginia in Debtors' Chapter 11 case confirming the Amended Plan of Reorganization.

"**Event of Default**" has the meaning set forth in Section 8.

"**Intellectual Property**" has the meaning set forth in Section 2.

"**Intuitive**" means Intuitive Surgical, Inc., the owner of and licensee of certain intellectual property relating to the medical robotics field.

"**Intuitive Development and Supply Agreement**" means the Development and Supply Agreement between Intuitive and LII, dated June 11, 2007, and the Amended Development and Supply Agreement between Intuitive and LII dated January 12, 2010.

"**Intuitive IP Rights**" means the intellectual property rights owned by Intuitive or Intuitive confidential or proprietary information provided to the Debtor pursuant to the Intuitive Development and Supply Agreement and/or other license agreements.

"**IP Proceeds**" or "**Proceeds**" has the meaning set forth in Section 2.

"**Note**" means that certain Secured Promissory Note dated January 12, 2010 made by Debtors in favor of Secured Party, as amended, modified, renewed, extended or replaced from time to time.

"**Obligations**" means the indebtedness, payment liabilities and other payment obligations of each Debtor to Secured Party under or in connection with this Agreement and the other Collateral Documents, including, without limitation, all unpaid principal of the Note, all interest accrued thereon, all claims, fees and all other amounts payable by each Debtor to Secured Party thereunder or in connection therewith, whether now existing or hereafter arising, and whether due or to become due, absolute or contingent, liquidated or unliquidated, determined or undetermined, and including interest that accrues after the commencement by or against any Debtor of any bankruptcy or insolvency proceeding naming such Person as the debtor in such proceeding, including without limitation all rights and claims in connection with each Amended Plan of Reorganization and the Confirmation Order entered by the Bankruptcy Court for the Western District of Virginia in the Debtors' Chapter 11 cases pending therein.

"**Partnership and LLC Collateral**" has the meaning set forth in Section 5.

"**Patent and Trademark Security Agreement**" means that certain Patent and Trademark Security Agreement dated January 12, 2010 made by each Debtor in favor of Secured Party, as amended, modified, renewed, extended or replaced from time to time.

"**Pledged Collateral**" means each Debtor's (i) investment property, (ii) the stock or other equity interests in any Subsidiary of other Affiliates, and (iii) Partnership and LLC Collateral, including any ownership interests in any Subsidiaries of Debtor.

"**Pledged Collateral Agreements**" means any shareholders agreement, operating agreement, partnership agreement, voting trust, proxy agreement or other agreement or understanding with respect to any Pledged Collateral.

"**Settlement Documents**" means the "Hansen Settlement Documents" to which the Secured Party is a party as described in each Amended Plan of Reorganization.

"**UCC**" means the Uniform Commercial Code as the same may, from time to time, be in effect in the State of Delaware.

(a) Where applicable and except as otherwise defined herein, terms used in this Agreement shall have the meanings assigned to them in the UCC and in the Bankruptcy Code, including in the latter case, the definitions of "claim," "transfer" and "interest".

(b) In this Agreement, (i) the meaning of defined terms shall be equally applicable to both the singular and plural forms of the terms defined; and (ii) the captions and headings are for convenience of reference only and shall not affect the construction of this Agreement.

2. Security Interest.

(a) As security for the payment and performance of the Obligations, each Debtor hereby grants to Secured Party a first-priority security interest (subject to Section 22) in all of such Debtor's right, title and interest in, to and under all of its personal property, wherever located and whether now existing or owned or hereafter acquired or arising, including all accounts, chattel paper, commercial tort claims, payment intangibles, deposit accounts, documents, equipment (including all fixtures), general intangibles, instruments, inventory, investment property, letter-of-credit rights, other goods, money and all products, accessions, proceeds and supporting obligations of any and all of the foregoing (collectively, the "**Collateral**").

(b) The Collateral includes, without limitation, the following property (the "**Intellectual Property**") of the Debtors at any time, whether now existing or hereafter arising, (i) all patents, trademarks, trade secrets, copyrights, software, mask works, know-how, inventions, and other general intangibles of every kind besides payment intangibles and those that do not relate to inventions, ideas, business methods, scientific discoveries, or other things characterized in any business or legal context as "intellectual property", together with all improvements, enhancements, additions or accessions thereto; (ii) all applications or registrations therefor or relating thereto, all government-approvals, permits or rights therefor, relating thereto or associated therewith, and all amendments or supplements thereto; (iii) all drawings, samples, embodiments, code, physical manifestations of or relating to or describing, creating or evidencing any of the foregoing, together with all books and records relating thereto; (iv) all licenses, sublicenses, other rights or defenses, and other contracts or obligations at law or in equity constituting or relating to any Intellectual Property, including all agreements signed by any third party protecting, promising or otherwise assuring confidentiality, nondisclosure, nonuse or non-reverse engineering or decompiling or other misuse of any Intellectual Property; (v) all contracts or obligations of employees, consultants or other persons or entities to assign or transfer to or otherwise share with a Debtor any Intellectual Property or otherwise regulate their conduct with respect to any Intellectual Property; and (vi) all rights and claims of either Debtor to ownership or other interests in any asset claimed to be owned or controlled by a third party, but which such Debtor contends to be its Intellectual Property.

With reference to the "Intellectual Property", the following part of the Collateral, whether now existing or hereafter acquired, are called "Proceeds" herein:

(i) all payment intangibles and other general intangibles consisting of commercial tort claims or other claims or causes of action for infringement, misappropriation, conversion, misuse or other torts of wrongful conduct by any person or entity with respect to any Intellectual Property;

(ii) all royalties, general intangibles, letters of credit rights, instruments, chattel paper and other rights to payment and proceeds of every kind arising from or relating to any Intellectual Property or to any other Proceeds of Intellectual Property;

(iii) any breach of contract or other legal or equitable relief relating to any Intellectual Property, including any breach of any contract for confidentiality, nonuse, nondisclosure, not to reverse engineer or decompile or otherwise regulate the handling or dealing with any Intellectual Property;

(iv) any rights to indemnification, defense or reimbursements for or against third party claims alleging infringement or other wrongs by or relating to any Intellectual Property; and

(v) any other rights, claims or defenses that would exist in favor of a purchaser of any Intellectual Property, if there were a transfer, whether constituting general intangibles, payment intangibles, accounts, commercial torts, or otherwise.

(c) Anything herein to the contrary notwithstanding, (i) each Debtor shall remain liable under any Pledged Collateral Agreements and any other contracts, agreements and other documents included in the Collateral, to the extent set forth therein, to perform all of its duties and obligations thereunder to the same extent as if this Agreement had not been executed, (ii) the exercise by Secured Party of any of the rights hereunder shall not release any Debtor from any of its duties or obligations under any Pledged Collateral Agreements or other such contracts, agreements and other documents, and (iii) Secured Party shall not have any obligation or liability under any Pledged Collateral Agreements or other such contracts, agreements and other documents solely by reason of this Agreement, nor shall Secured Party be obligated to perform any of the obligations or duties of any Debtor thereunder or to take any action to collect or enforce any Pledged Collateral Agreements or other such contract, agreement or other document.

(d) Anything herein to the contrary notwithstanding, in no event shall the Collateral include, and no Debtor shall be deemed to have granted a security interest in, any of a Debtor's right, title or interest in any of the outstanding voting capital stock or other ownership interests of a Controlled Foreign Corporation (as defined below) in excess of 65% of the voting power of all classes of capital stock or other ownership interests of such Controlled Foreign Corporation entitled to vote; provided that (i) immediately upon the amendment of the Internal Revenue Code to allow the pledge of a greater percentage of the voting power of capital stock or other ownership interests in a Controlled Foreign Corporation without adverse tax consequences, the Collateral shall include, and the applicable Debtor shall be deemed to have granted a security interest in, such greater percentage of capital stock or other ownership interests of each Controlled Foreign Corporation; and (ii) if no adverse tax consequences to such Debtor shall arise or exist in connection with the pledge of any Controlled Foreign Corporation, the Collateral shall include, and such Debtor shall be deemed to have granted a security interest in, such Controlled Foreign Corporation. As used herein, "**Controlled Foreign Corporation**" shall mean a "controlled foreign corporation" as defined in the Internal Revenue Code.

(e) Anything herein to the contrary notwithstanding, Secured Party acknowledges that Intuitive has denied LII the right to encumber, assign or grant a security interest in, any of a Debtor's right, title or interest in the Intuitive Development and Supply Agreement or any of the Intuitive IP Rights, except that the Debtors have arranged for Intuitive to accept the effect of UCC Sections 9406 and 9408 as allowing such security interests to the extent of the payment intangibles, accounts and other Proceeds arising from or under any such

contract or rights of the Debtors, and Secured Party retains its security interests in such payment intangibles, accounts and Proceeds of or from such Intuitive IP Rights. For clarity, Secured Party understands that it steps into such Debtor's shoes only to collect such payment intangibles, accounts and Proceeds from Intuitive as a secured party, but Secured Part does not succeed to such Debtor's role as a licensee or party to the contract or license with Intuitive.

(f) Secured Party agrees that, notwithstanding the terms of any account control agreements, while no Event of Default exists, (i) Debtor (A) shall have any and all rights to exert control over any deposit or securities accounts subject to such deposit account control agreements, and (B) shall control in all respects the assets and proceeds in such deposit accounts, including each Debtor's ability to withdraw from, or otherwise direct the disposition of funds from, deposit accounts for the payment of such Debtor's obligations to third parties as they become due and payable, and including each Debtor's ability to withdraw from, designate investments in, or otherwise direct activities in its securities accounts, and (ii) Secured Party shall not send a "Notice of Exclusive Control" (or similar notice pursuant to which Secured Party purports to exert control over any deposit or securities account of Debtor) to the applicable bank, broker or other securities intermediary party to an account control agreement.

(g) This Agreement shall create a continuing security interest in the Collateral which shall remain in effect until terminated in accordance with Section 19 hereof.

3. Financing Statements and Other Action.

(a) Each Debtor hereby authorizes Secured Party to file at any time and from time to time any financing statements describing the Collateral, and each Debtor shall execute and deliver to Secured Party, and each Debtor hereby authorizes Secured Party to file (with or without such Debtor's signature), at any time and from time to time, all amendments to financing statements, assignments, continuation financing statements, termination statements, account control agreements, and other documents and instruments, in form reasonably satisfactory to Secured Party, as Secured Party may reasonably request, to perfect and continue perfected, maintain the priority of or provide notice of the security interest of Secured Party in the Collateral and to accomplish the purposes of this Agreement.

(b) Each Debtor will cooperate with Secured Party in obtaining control (as defined in the UCC) of Collateral consisting of deposit accounts, investment property, letter of credit rights and electronic chatter paper.

(c) Each Debtor will join with Secured Party in notifying any third party who has possession of any Collateral of Secured Party's security interest therein and obtaining an acknowledgment from the third party that it is holding the Collateral for the benefit of Secured Party.

(d) Upon request of Secured Party, each Debtor shall cause any securities intermediaries of Debtor or any of its Subsidiaries to show on their books that Secured Party is the entitlement holder with respect to any Pledged Collateral.

(e) Each Debtor will not create any chattel paper without placing a legend on the chattel paper reasonably acceptable to Secured Party indicating that Secured Party has a security interest in the chattel paper.

4. Representations and Warranties. Each Debtor represents and warrants to Secured Party that:

(a) Such Debtor is duly organized, validly existing and in good standing under the law of Delaware and has all requisite corporate power and corporate authority to execute, deliver and perform its obligations under the Collateral Documents. Such Debtor is qualified to do business in each jurisdiction where such qualification is required, except as would not have a Material Adverse Effect.

(b) The execution, delivery and performance by such Debtor of the Collateral Documents have been duly authorized by all necessary action of such Debtor, and the Collateral Documents constitute the legal, valid and binding obligations of Debtor, enforceable against such Debtor in accordance with its terms, subject to approval of the Amended Plan of Reorganization and do not and will not (i) contravene the terms of the Amended Plan of Reorganization or the Confirmation Order or the articles or certificate of incorporation, or bylaws, or other applicable organizational documents, of Debtor, or result in a breach of or constitute a default under any material lease, instrument, contract or other agreement to which Debtor is a party or by which it or its properties may be bound or affected; or (ii) violate any provision of any law, rule, regulation, order, judgment, decree or the like binding on or affecting Debtor.

(c) No authorization, consent, approval, license, exemption of, or filing or registration with, any governmental authority or agency, or approval or consent of any other Person, is required for the due execution, delivery or performance by such Debtor of the Collateral Documents, except for any filings necessary to perfect any Liens on any Collateral, and subject to approval of the Amended Plan of Reorganization.

(d) Such Debtor's principal place of business (as of the date of this Agreement) is located at the address set forth in Schedule 1; such Debtor's jurisdiction of organization and organizational identification number are set forth in Schedule 1; such Debtor's exact legal name is as set forth in the first paragraph of this Agreement, and has not been changed in the preceding five years; and all other locations where such Debtor conducts business or material Collateral is kept (as of the date of this Agreement) are set forth in Schedule 2.

(e) Such Debtor has rights in or the power to transfer the Collateral, free from any Lien other than Permitted Liens.

(f) All of such Debtor's U.S. and foreign patents and patent applications, copyrights (whether or not registered), applications for copyright, trademarks, service marks and trade names (whether registered or unregistered), and applications for registration of such trademarks, service marks and trade names, are set forth in Schedule 2.

(g) Such Debtor is not and will not become a lessee under any real property lease or other agreement governing the location of Collateral at the premises of another Person pursuant to which the lessor or such other Person may obtain any ownership or possessory rights

in any of the Collateral without obtaining a waiver of such Person's rights in the Collateral, and no such lease or other such agreement now prohibits, restrains, impairs or will prohibit, restrain or impair such Debtor's right to remove any Collateral from the premises at which such Collateral is situated, except for the usual and customary restrictions contained in such leases of real property.

(h) No control agreements exist with respect to any Collateral other than control agreements in favor of Secured Party.

(i) Such Debtor does not have or hold any chattel paper, letter-of-credit rights in excess of $100,000 or material commercial tort claims subject to pending litigation except as disclosed to Secured Party.

(j) The names and addresses of all financial institutions and other Persons at which such Debtor maintains its deposit and securities accounts, and the account numbers and account names of such accounts, are set forth in Schedule 1.

(k) Schedule 3 lists such Debtor's ownership interests in each of its Subsidiaries as of the date hereof.

(l) Such Debtor is and will be the legal record and beneficial owner of all Pledged Collateral, and has and will have good and marketable title thereto.

(m) Except as disclosed in writing to Secured Party, there are no Pledged Collateral Agreements which affect or relate to the voting or giving of written consents with respect to any of the Pledged Collateral. Each Pledged Collateral Agreement contains the entire agreement between the parties thereto with respect to the subject matter thereof, has not been amended or modified, and is in full force and effect in accordance with its terms. To the best knowledge of such Debtor, there exists no material violation or material default under any Pledged Collateral Agreement by such Debtor or the other parties thereto. Such Debtor has not knowingly waived or released any of its material rights under or otherwise consented to a material departure from the terms and provisions of any Pledged Collateral Agreement.

5. Covenants. So long as any of the Obligations remain unsatisfied, each Debtor agrees that:

(a) It shall furnish to Secured Party, prompt notice after the Debtor has knowledge or becomes aware of the occurrence of any breach of this Agreement or a Collateral Agreement, or becomes aware of any other condition or event that has resulted, or that would reasonably be expected to result, in each case, in (i) a material adverse change in the business, results of operations or financial condition of the Debtor and its Subsidiaries taken as a whole or (ii) a material adverse effect on Secured Party's Liens on the Collateral that results in a loss in value of at least $500,000, other than any condition, event, change, occurrence or development to the extent attributable to (A) any condition generally affecting (I) the industries in which the Debtor or any of its Subsidiaries participate that do not have a materially disproportionate effect (relative to other industry participants) on the Debtor and its Subsidiaries, (II) the U.S. economy as a whole, or (III) the capital markets generally, and (B) any action taken by the Debtor or any of its Subsidiaries in connection with this Agreement or the Collateral Documents (as defined in the Note) (each a "**Material Adverse Effect**").

(b) So long as any amount payable by the Borrower under the Note shall remain unpaid or any Obligations remain outstanding, each Debtor agrees that it shall not, and with respect to paragraphs (i) through (iii) below, shall not permit any of its Subsidiaries to:

(i) Create, incur, assume or suffer to exist any Lien (as defined below) upon or with respect to, any of the Collateral, other than Liens in favor of the Lender, and any of the following ("**Permitted Liens**"): (i) the existing Liens as of the date hereof disclosed in writing to the Lender or incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by such existing Liens, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced does not increase; (ii) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings and which are adequately reserved for in accordance with GAAP; (iii) Liens of materialmen, mechanics, warehousemen, carriers or employees or other like Liens arising in the ordinary course of business and securing obligations either not delinquent or being contested in good faith by appropriate proceedings which are adequately reserved for in accordance with GAAP and which do not in the aggregate materially impair the use or value of the property or risk the loss or forfeiture of title thereto; (iv) Liens consisting of deposits or pledges to secure the payment of worker's compensation, unemployment insurance or other social security benefits or obligations, or to secure the performance of bids, trade contracts, leases, public or statutory obligations, surety or appeal bonds or other obligations of a like nature incurred in the ordinary course of business (other than for Indebtedness or any Liens arising under ERISA); (v) easements, rights of way, servitudes or zoning or building restrictions and other minor encumbrances on real property and irregularities in the title to such property which do not in the aggregate materially impair the use or value of such property or risk the loss or forfeiture of title thereto; (vi) statutory landlord's Liens under real estate leases to which any Debtor or any of its Subsidiaries is a party; (vii) Liens in favor of a Qualified Lender (as defined in the Security Agreement), and (viii) any other Liens on Collateral with a value of less than $250,000.

(ii) Sell, transfer, license, sublicense, lease, or otherwise dispose of, or part with control of (whether in one transaction or a series of transactions) assets with a value in excess of $250,000 individually or $500,000 in the aggregate (including any shares of stock in any Subsidiary or other Person) except in the ordinary course of business or for reasonable consideration.

(iii) Declare or pay any dividends in respect of any Debtor's capital stock, or purchase, redeem, retire or otherwise acquire for value any of its capital stock now or hereafter outstanding, return any capital to its shareholders as such, or make any distribution of assets to its shareholders as such, or permit any of its Subsidiaries to purchase, redeem, retire, or otherwise acquire for value any stock of any Debtor, except that a Debtor may (i) declare and deliver dividends and distributions payable only in common stock of such Debtor and (ii) purchase, redeem, retire, or otherwise acquire shares of its capital stock with the proceeds received from a substantially concurrent issue of new shares of its capital stock; except that such

Debtor may also repurchase stock owned by employees, directors and consultants of such Debtor under the terms of any employment, consulting or other stock restriction agreements at such time as any such employee, director or consultant dies or terminates his or her affiliation with such Debtor, provided that no Event of Default exists either immediately prior to or after giving effect to such repurchase, and provided further that the total amount paid in connection therewith by any Debtor does not exceed $100,000 in any calendar year.

(iv) Engage, directly or indirectly, or permit to exist any material transaction with any Affiliate of any Debtor, except for transactions that are in the ordinary course of such Debtor's business, upon fair and reasonable terms that are no less favorable to such Debtor than would be obtained in an arm's length transaction with a non-affiliated Person as demonstrated by clear and convincing evidence.

(v) Merge with or consolidate into any other Person, provided that a Subsidiary may merge into the Debtor so long as any security interests remain perfected.

As used herein, "**GAAP**" means generally accepted accounting principles in the United States as in effect from time to time; "**Guarantor**" means any guarantor hereof; "**Guaranty**" means any guaranty hereof provided by a Guarantor; "**Indebtedness**" means any indebtedness or obligation for borrowed money, the deferred purchase price of property or leases which would be capitalized in accordance with GAAP, any reimbursement and other payment obligations in respect of letters of credit and surety or performance bonds, and all net payment obligations in respect of derivative products; and any payment liability as a surety, guarantor, accommodation party or otherwise for or upon the indebtedness or obligation of any other Person of the nature described above; "**Lien**" means any mortgage, deed of trust, pledge, security interest, charge or real estate encumbrance, lien (statutory or other), or other similar preferential arrangement (such as, any conditional sale or other title retention agreement, any financing lease having substantially the same economic effect as any of the foregoing or any agreement to give any security interest); "**Person**" means an individual, corporation, partnership, limited liability company, joint venture, trust, unincorporated organization or any other entity of whatever nature, including any governmental agency or authority; and "**Subsidiary**" means any corporation, association, partnership, limited liability company, joint venture or other business entity of which more than 50% of the voting stock or other equity interest is owned directly or indirectly by any Person or one or more of the other Subsidiaries of such Person or a combination thereof. Unless otherwise defined or the context otherwise requires, all accounting terms used herein shall be construed, and all accounting determinations and computations required hereunder shall be made, in accordance with GAAP, consistently applied.

(c) Such Debtor shall appear in and defend any action, suit or proceeding which may affect to a material extent its title to, or right or interest in, or Secured Party's right or interest in, the Collateral, and shall do and perform all commercially reasonable acts that may be necessary and appropriate to maintain, preserve and protect the Collateral where the failure to take the actions set forth in this Section 5(c) would reasonably likely result in a Material Adverse Effect.

(d) Such Debtor shall comply in all material respects with all laws, regulations and ordinances, and all policies of insurance, relating in a material way to the possession, operation, maintenance and control of the Collateral except to the extent failure to comply would not result in a Material Adverse Effect.

(e) Such Debtor shall give prompt written notice to Secured Party (and in any event not later than 30 days following any change described below in this subsection) of: (i) any change in the location of such Debtor's chief executive office or principal place of business; (ii) any change in the locations set forth in Schedule 1 to the extent the value of the Collateral at such new location is in excess of $250,000 individually or $500,000 in the aggregate; (iii) any change in its name; (iv) any changes in its identity or structure in any manner which might make any financing statement filed hereunder incorrect or misleading; (v) any change in its registration as an organization (or any new such registration); or (vi) any change in its jurisdiction of organization; provided that such Debtor shall not locate any Collateral outside of the United States nor shall such Debtor change its jurisdiction of organization to a jurisdiction outside of the United States.

(f) Such Debtor shall carry and maintain in full force and effect, at its own expense and with financially sound and reputable insurance companies, insurance with respect to the Collateral in such amounts, with such deductibles and covering such risks as is customarily carried by companies engaged in the same or similar businesses (including size) and owning similar properties in the localities where such Debtor operates. Insurance on the Collateral shall name Secured Party as additional insured and as loss payee. All insurance policies required under this subsection (f) shall provide that they shall not be terminated or cancelled by Debtor nor shall any such policy be materially changed by Debtor without at least 20 days' prior written notice to such Debtor and Secured Party. Receipt of notice of termination or cancellation of any such insurance policies or reduction of coverages or amounts thereunder shall entitle Secured Party to renew any such policies, cause the coverages and amounts thereof to be maintained at levels required pursuant to the first sentence of this subsection (f) or otherwise to obtain similar insurance in place of such policies, in each case at the expense of such Debtor.

(g) Upon the occurrence and during the continuance of an Event of Default, all insurance policies shall provide that any losses payable thereunder be payable directly to Secured Party unless written authority to the contrary is obtained. Upon the occurrence and during the continuance of an Event of Default, in the event that such Debtor shall receive any proceeds of any insurance (other than in respect of third party liability insurance) it shall immediately cause such proceeds to be paid over to Secured Party. If the Collateral shall be materially damaged or destroyed, in whole or in part, by fire or other casualty, such Debtor shall give prompt notice thereof to Secured Party. Additionally, such Debtor shall in any event promptly give Secured Party notice of all reports made to insurance companies in respect of any claim in excess of $250,000. Upon the occurrence and during the continuance of an Event of Default, in its sole discretion Secured Party may apply all or any portion of such insurance proceeds to the payment of Obligations or may release all or any portion thereof to such Debtor.

(h) Such Debtor shall keep separate, accurate and complete books and records with respect to the Collateral, disclosing Secured Party's security interest hereunder.

(i) Such Debtor shall not surrender or lose possession of (other than to Secured Party), sell, lease, rent, or otherwise dispose of or transfer any of the material Collateral

or any right or interest therein, except in the ordinary course of business, as permitted in the Note or this Agreement (including, without limitation, Section 2(e)) or unless such Collateral is replaced by comparable Collateral of similar value; provided that no such disposition or transfer of Collateral consisting of Pledged Collateral shall be permitted while any Event of Default exists.

(j) Such Debtor shall keep the Collateral free of all Liens except Permitted Liens.

(k) Such Debtor shall pay and discharge all taxes, fees, assessments and governmental charges or levies imposed upon it with respect to the Collateral prior to the date on which penalties attach thereto, except to the extent such taxes, fees, assessments or governmental charges or levies are being contested in good faith by appropriate proceedings.

(l) Such Debtor shall maintain and preserve its legal existence, and shall maintain and preserve except where the failure to do so would not cause a Material Adverse Effect, its rights to transact business and all other rights, franchises and privileges necessary or desirable in the normal course of its business and operations and the ownership of the Collateral, except in connection with any transactions expressly permitted by the Note or any other Collateral Documents.

(m) Upon the request of Secured Party, such Debtor shall (i) promptly deliver to Secured Party, or an agent designated by it, appropriately endorsed or accompanied by appropriate instruments of transfer or assignment, all documents and instruments, all certificated securities with respect to any Pledged Collateral with a value in excess of $100,000 or in the aggregate $250,000, all letters of credit and all accounts and other rights to payment at any time evidenced by promissory notes, trade acceptances or other instruments, and (ii) provide such notice, obtain such acknowledgments and take all such other action, with respect to any chattel paper, documents and letter-of credit rights, as Secured Party shall reasonably specify.

(n) Upon the occurrence and during the continuation of an Event of Default, upon reasonable prior written request of Secured Party, such Debtor shall at any reasonable time and from time to time permit Secured Party or any of its agents or representatives to visit the premises of such Debtor and inspect the Collateral and to examine and make copies of and abstracts from the records and books of account of such Debtor solely in connection with the enforcement of its rights under this Agreement, and provided that such rights are not prohibited by any applicable confidentiality or non-disclosure obligations with respect to such Collateral.

(o) Such Debtor shall: (i) upon the occurrence and during the continuance of an Event of Default with such frequency as Secured Party may reasonably require, furnish to Secured Party such lists of customers and other information relating to the accounts and other rights to payment as Secured Party shall reasonably request; and (ii) upon the occurrence and during the continuance of an Event of Default, upon Secured Party’s request, notify the account debtors and other obligors on the accounts and other rights to payment or any designated portion thereof that payment shall be made directly to Secured Party or to such other Person or location as Secured Party shall specify.

(p) Upon the occurrence and during the continuance of an Event of Default, such Debtor shall, at such times as Secured Party shall reasonably request, prepare and deliver to Secured Party a report of all Inventory, in form and substance satisfactory to Secured Party.

(q) Such Debtor shall (i) notify Secured Party of any material claim made or asserted against the Collateral by any Person and of any material change in the composition of the Collateral or other event, in each case, that will reasonably likely result in a Material Adverse Effect; (ii) furnish to Secured Party such statements and schedules further identifying and describing the Collateral and such other reports and other information in connection with the Collateral as Secured Party may reasonably request, all in reasonable detail; and (iii) upon reasonable request of Secured Party, make such demands and requests for information and reports as such Debtor is entitled to make in respect of the Collateral.

(r) If and when such Debtor shall obtain rights to any material new patents, trademarks, service marks, trade names, copyrights or other Intellectual Property or Proceeds, or otherwise acquire or become entitled to the benefit of, or apply for registration of, any of the foregoing, such Debtor (i) shall promptly notify Secured Party thereof and (ii) hereby authorizes Secured Party to modify, amend, or supplement Schedule 2 and from time to time to include any of the foregoing and make all necessary or appropriate filings with respect thereto.

(s) Without limiting the generality of subsection (r), such Debtor shall not register with the U.S. Copyright Office any unregistered copyrights (whether in existence on the date hereof or thereafter acquired, arising, or developed) unless such Debtor provides Secured Party with written notice of its intent to register such copyrights not less than 10 days prior to the date of the proposed registration.

(t) At Secured Party's request, such Debtor will use commercially reasonable efforts to obtain from each Person from whom such Debtor leases any premises, and from each other Person at whose premises any Collateral with a value in excess of $250,000 in the aggregate is at any time present (including any bailee, warehouseman or similar Person), any such collateral access, subordination, landlord waiver, bailment, consent and estoppel agreements as Secured Party may require, in form and substance reasonably satisfactory to Secured Party.

(u) Such Debtor shall give Secured Party immediate notice of the acquisition of any instruments or securities to the extent such Collateral has a value of at least $10,000 individually or $25,000 in the aggregate, or the establishment of any new deposit account or any new securities account with respect to any Pledged Collateral.

(v) Such Debtor shall immediately notify Secured Party if such Debtor holds or acquires (i) any material commercial tort claims subject to pending litigation, (ii) any chattel paper, including any interest in any electronic chattel paper, or (iii) any letter-of-credit rights, in each case, to the extent such Collateral has a value of at least $100,000 individually or $250,000 in the aggregate.

(w) Such Debtor shall comply with all of its material obligations under any Pledged Collateral Agreements to which it is a party and shall enforce all of its material rights thereunder.

(x) Such Debtor will take all actions necessary to cause each Pledged Collateral Agreement relating to Collateral consisting of any and all limited, limited liability and general partnership interests and limited liability company interests of any type or nature ("**Partnership and LLC Collateral**") to provide specifically at all times that: (A) no Partnership and LLC Collateral shall be a security governed by Article 8 of the applicable Uniform Commercial Code; and (B) no consent of any member, manager, partner or other Person shall be a condition to the admission as a member or partner of any transferee that acquires ownership of the Partnership and LLC Collateral as a result of the exercise by Secured Party of any remedy hereunder or under applicable law. Additionally, such Debtor agrees that no Partnership and LLC Collateral (A) shall be dealt in or traded on any securities exchange or in any securities market, (B) shall constitute an investment company security, or (C) shall be held by such Debtor in a securities account.

(y) Such Debtor shall not vote to enable or take any other action to amend or terminate, or waive compliance with any of the material terms of, any Pledged Collateral Agreement, certificate or articles of incorporation, bylaws or other organizational documents, or otherwise cast any vote or grant or give any consent, waiver or ratification in respect of the Pledged Collateral, in any way that materially changes the rights of such Debtor with respect to any Pledged Collateral in a manner adverse to the Secured Party or that adversely affects the validity, perfection or priority of Secured Party's security interest therein.

(z) Debtor shall not create any Subsidiary without the prior written consent of Secured Party, which consent shall not be unreasonably withheld provided that the Subsidiary executes customary guarantee agreements and such other documents as Secured Party reasonably requests to protect its security interest. In the event that such Debtor acquires rights in any Subsidiary after the date hereof, it shall deliver to Secured Party a completed supplement to Schedule 3, reflecting such new Subsidiary. Notwithstanding the foregoing, it is understood and agreed that the security interest of Secured Party shall attach to any such Subsidiary immediately upon such Debtor's acquisition of rights therein and shall not be affected by the failure of such Debtor to deliver any such supplement to Schedule 3.

(aa) Without limiting the foregoing provisions of this Section 5, such Debtor shall send to Secured Party, within fifteen (15) calendar days following the beginning of each calendar quarter, an Update Certificate in the form substantially attached hereto as Exhibit A.

(bb) If at any time such Debtor or any Subsidiary shall become the owner of any real property, Debtor shall notify Secured Party and if requested by Secured Party shall (and shall cause any of its Subsidiaries to) promptly, and in any event within thirty 30 days following acquisition of such real property, execute and deliver to Secured Party a deed of trust or mortgage in respect of such property, in form and substance reasonably satisfactory to Secured Party, together with such title insurance polices, evidence of insurance, insurance certificates and endorsements, surveys, appraisals, consents, estoppels, subordination agreements and other documents and other instruments related thereto, as Secured Party shall reasonably request so that such real property becomes Collateral hereunder (subject to the rights of any existing liens thereon), in form and substance reasonably satisfactory to Secured Party.

(cc) Additionally, such Debtor and such Subsidiary shall execute and deliver to Secured Party such other items as reasonably requested by Secured Party in connection with the foregoing.

(dd) Notwithstanding the foregoing provisions, subsections (bb) thru (ee) of this Section shall not be deemed to be implied consent by Secured Party to any such organization, creation or acquisition of any additional Subsidiary otherwise prohibited by the terms and conditions of the Note or any other Collateral Document.

(ee) No Debtor shall maintain any deposit accounts, securities accounts or other accounts with any bank or financial institution which are not subject to a control agreement or other appropriate instrument in favor of Secured Party to perfect Secured Party's Lien in such Collateral and each Debtor shall provide Secured Party at least 10 days' prior written notice before establishing any other accounts.

(ff) For the purpose of preparing Secured Party's financial statements in accordance with GAAP, such Debtor shall provide Secured Party with (i) copies of quarterly, or monthly if reasonably requested, unaudited financial statements of Debtor within twenty-five (25) days of the end of such month or quarter, as applicable, subject to audit adjustments in accordance with Debtor's quarterly and annual review process, certified by a responsible financial officer of such Debtor as complete and accurate and fairly presenting such Debtor's financial condition and results of such Debtor's operations in all material respects, in each case subject to any such adjustments, and (ii) such other financial information as Secured Party may reasonably request for the foregoing purpose, including audited annual financial statements within ninety (90) days of the end of Debtor's fiscal year.

6. Rights of Secured Party.

(a) At the request of Secured Party, upon the occurrence and during the continuance of any Event of Default, all remittances in respect of each Debtor's accounts, payment intangibles, Proceeds and other rights to the Collateral received by any Debtor shall be held in trust for Secured Party and, in accordance with Secured Party's instructions, remitted to Secured Party or deposited to an account of Secured Party in the form received (with any necessary endorsements or instruments of assignment or transfer).

(b) At the request of Secured Party, upon the occurrence and during the continuance of any Event of Default, Secured Party shall be entitled to receive all distributions and payments of any nature with respect to any Pledged Collateral or instrument Collateral, and all such distributions or payments received by each Debtor shall be held in trust for Secured Party and, in accordance with Secured Party's instructions, remitted to Secured Party or deposited to an account designated by Secured Party in the form received (with any necessary endorsements or instruments of assignment or transfer). Further, upon the occurrence and during the continuance of any Event of Default any such distributions and payments with respect to any Pledged Collateral held in any securities account shall be held and retained in such securities

account, in each case as part of the Collateral hereunder and Secured Party shall have the right, following prior written notice to each Debtor, to vote and to give consents, ratifications and waivers with respect to any Pledged Collateral and instruments, and to exercise all rights of conversion, exchange, subscription or any other rights, privileges or options pertaining thereto, as if Secured Party were the absolute owner thereof; provided that Secured Party shall have no duty to exercise any of the foregoing rights afforded to it and shall not be responsible to either Debtor or any other Person for any failure to do so or delay in doing so.

7. Authorization; Secured Party Appointed Attorney-in-Fact.

Secured Party shall have the right to, in the name of each Debtor, or in the name of Secured Party or otherwise, upon notice to but without the requirement of assent by each Debtor, and each Debtor hereby constitutes and appoints Secured Party (and any of Secured Party's officers, employees or agents designated by Secured Party) as such Debtor's true and lawful attorney-in-fact, with full power and authority to: (i) sign and file any of the financing statements and other documents and instruments which must be executed or filed to perfect or continue perfected, maintain the priority of or provide notice of Secured Party's security interest in the Collateral (including any notices to or agreements with any securities intermediary); (ii) assert, adjust, sue for, compromise or release any claims under any policies of insurance; (iii) give notices of control, default or exclusivity (or similar notices) under any account control agreement or similar agreement with respect to exercising control over deposit accounts or securities accounts; and (iv) execute any and all such other documents and instruments, and do any and all acts and things for and on behalf of such Debtor, which Secured Party may deem reasonably necessary or advisable to maintain, protect, enforce, realize upon and preserve the Collateral and Secured Party's security interest therein and to accomplish the purposes of this Agreement. Secured Party agrees that, except upon and during the continuance of an Event of Default, it shall not exercise the power of attorney, or any rights granted to Secured Party, pursuant to clauses (ii), (iii) and (iv). The foregoing power of attorney is coupled with an interest and irrevocable so long as the Obligations have not been paid and performed in full. Each Debtor hereby ratifies, to the extent permitted by law, all that Secured Party shall lawfully and in good faith do or cause to be done by virtue of and in compliance with this Section 7.

8. Events of Default. An Event of Default under the Note shall constitute an "**Event of Default**" hereunder.

9. Remedies.

(a) Upon the occurrence and during the continuance of any Event of Default, Secured Party may declare any of the Obligations to be immediately due and payable and shall have, in addition to all other rights and remedies granted to it in this Agreement, the Note or any other Collateral Document, all rights and remedies of a secured party under the UCC and other applicable laws. Without limiting the generality of the foregoing, in furtherance of the exercise of its rights and remedies upon the occurrence and during the continuation of an Event of Default (i) Secured Party may peaceably and without notice enter any premises of either Debtor, take possession of any of the Collateral, remove or dispose of all or part of the Collateral on any premises of such Debtor or elsewhere, or, in the case of equipment, render it nonfunctional, and otherwise collect, receive, appropriate and realize upon all or any part of the Collateral, and

demand, give receipt for, settle, renew, extend, exchange, compromise, adjust, or sue for all or any part of the Collateral, as Secured Party may determine; (ii) Secured Party may require either Debtor to assemble all or any part of the Collateral and make it available to Secured Party at any reasonable place and reasonable time designated by Secured Party; (iii) Secured Party may secure the appointment of a receiver of the Collateral or any part thereof (to the extent and in the manner provided by applicable law); (iv) Secured Party may sell, resell, lease, use, assign, license, sublicense, transfer or otherwise dispose of any or all of the Collateral in its then condition or following any commercially reasonable preparation or processing (utilizing in connection therewith any of either Debtor's assets, without charge or liability to Secured Party therefor) at public or private sale, by one or more contracts, in one or more parcels, at the same or different times, for cash or credit, or for future delivery without assumption of any credit risk, all as Secured Party reasonably deems advisable; provided, however, that each Debtor shall be credited with the net proceeds of sale only when such proceeds are finally collected by Secured Party. Each Debtor recognizes that Secured Party may be unable to make a public sale of any or all of the Pledged Collateral, by reason of prohibitions contained in applicable securities laws or otherwise, and expressly agrees that a private sale to a restricted group of purchasers for investment and not with a view to any distribution thereof shall be considered a commercially reasonable sale, provided, that such sale was negotiated and entered into on an arms-length basis. Secured Party shall have the right upon any such public sale, and, to the extent permitted by law, upon any such private sale, to purchase on an arms-length basis the whole or any part of the Collateral so sold, free of any right or equity of redemption, which right or equity of redemption each Debtor hereby releases, to the extent permitted by law. Secured Party shall give each Debtor such notice of any private or public sales as may be required by the UCC or other applicable law.

(b) For the sole purpose of enabling Secured Party to exercise its rights and remedies under this Section 9, upon the occurrence and solely during the continuation of an Event of Default, each Debtor hereby grants to Secured Party an irrevocable, non-exclusive and assignable license (exercisable without payment or royalty or other compensation to such Debtor) to use, license or sublicense any intellectual property Collateral.

(c) Secured Party shall not have any obligation to clean up or otherwise prepare the Collateral for sale. Secured Party has no obligation to attempt to satisfy the Obligations by collecting them from any other Person liable for them, and Secured Party may release, modify or waive any Collateral provided by any other Person to secure any of the Obligations, all without affecting Secured Party's rights against either Debtor. Each Debtor waives any right it may have to require Secured Party to pursue any third Person for any of the Obligations. Secured Party may comply with any applicable state or federal law requirements in connection with a disposition of the Collateral and compliance will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. Secured Party may sell the Collateral without giving any warranties as to the Collateral. Secured Party may specifically disclaim any warranties of title or the like. This procedure will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. If Secured Party sells any of the Collateral upon credit, such Debtor whose Collateral has been sold will be credited only with payments actually made by the purchaser thereof, received by Secured Party and applied to the indebtedness of the purchaser of such Collateral. In the event the purchaser fails to pay for the Collateral, Secured Party may resell the Collateral and such Debtor shall be credited with the proceeds of the sale.

(d) The cash proceeds actually received from the sale or other disposition or collection of Collateral, and any other amounts received in respect of the Collateral the application of which is not otherwise provided for herein, shall be applied first, to the payment of the reasonable costs and expenses of Secured Party in exercising or enforcing its rights hereunder and in collecting or attempting to collect any of the Collateral, and to the payment of all other amounts payable to Secured Party pursuant to Section 13 hereof; and second, to the payment of the Obligations. Any surplus thereof which exists after payment and performance in full of the Obligations shall be promptly paid over to such Debtor whose Collateral has been sold or otherwise disposed of in accordance with the UCC or other applicable law. Each Debtor shall remain liable to Secured Party for any deficiency which exists after any sale or other disposition or collection of Collateral.

(e) Notwithstanding anything contained in this Section 9, including without limitation Section 9(b), Secured Party is not vested with any right or powers described herein with respect to any of the Intuitive IP Rights, including without limitation any confidential or proprietary information of Intuitive, it being the understanding and agreement of the Secured Party that it will not be entitled to exercise dominion and/or control over such Intuitive IP Rights, nor shall it have access to Intuitive's confidential or proprietary information, but instead Secured Party shall only have the right to receive the payment intangibles, accounts and Proceeds of the Intuitive IP Rights or generated from the Intuitive Development and Supply Agreement.

10. Certain Waivers. Each Debtor waives, to the fullest extent permitted by law, (i) any right of redemption with respect to the Collateral, whether before or after sale hereunder, and all rights, if any, of marshalling of the Collateral or other collateral or security for the Obligations; (ii) any right to require Secured Party (A) to proceed against any Person, (B) to exhaust any other collateral or security for any of the Obligations, (C) to pursue any remedy in Secured Party's power, or (D) to make or give any presentments, demands for performance, notices of nonperformance, protests, notices of protests or notices of dishonor in connection with any of the Collateral; and (iii) all claims, damages, and demands against Secured Party arising out of the repossession, retention, sale or application of the proceeds of any sale of the Collateral

11. Notices. All notices or other communications hereunder shall be in writing and delivered by hand or sent by a nationally recognized overnight courier service (with tracking capability) to the respective parties hereto at or to their respective addresses set forth below their names on the signature pages hereof, or at or to such other address, as shall be designated by any party in a written notice to the other parties hereto. All such notices and communications shall be effective when received. Electronic mail may be used only for routine communications, such as distribution of informational documents or documents for execution by the parties thereto, and may not be used for any other purpose.

12. No Waiver; Cumulative Remedies. No failure on the part of Secured Party to exercise, and no delay in exercising, any right, remedy, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right, remedy, power or privilege preclude any other or further exercise thereof or the exercise of any other

right, remedy, power or privilege. The rights and remedies under this Agreement are cumulative and not exclusive of any rights, remedies, powers and privileges that may otherwise be available to Secured Party.

13. Costs and Expenses; Indemnification.

(a) Each Debtor agrees to pay on demand:

(i) for the period beginning after the execution and effectiveness of this Agreement, the reasonable out-of-pocket costs and expenses of Secured Party, and the reasonable fees and disbursements of counsel to Secured Party, incurred with respect to any amendments, modifications or waivers of the terms of this Agreement, and the custody, protection or defense of any of the Collateral;

(ii) for the period beginning after the execution and effectiveness of this Agreement, all filing and similar costs, fees and expenses incurred or sustained by Secured Party in connection with this Agreement or any of the Collateral; and

(iii) for the period beginning after the execution and effectiveness of this Agreement, all costs and expenses of Secured Party, and the fees and disbursements of counsel, incurred with respect to the enforcement or attempted enforcement of, and preservation, protection or defense of any rights or interests under any of this Agreement or any Collateral Document, including in any out-of-court workout or restructuring or in any bankruptcy case, and the protection, sale or collection of, or other realization upon, any of the Collateral, including all expenses of taking, collecting, holding, sorting, handling, preparing for sale, selling, or the like, and other such expenses of sales and collections of any of the Collateral.

(b) Each Debtor hereby agrees to indemnify Secured Party, any affiliate thereof, and their respective directors, officers, employees, agents, counsel and other advisors (each an "**Indemnified Person**") against, and hold each of them harmless from, any and all liabilities, obligations, losses, claims, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever, including the reasonable fees and disbursements of counsel to an Indemnified Person, which may be imposed on or incurred by any Indemnified Person, or asserted against any Indemnified Person by any third party or by such Debtor as a result of the exercise of Secured Party's remedies under Section 9 of this Agreement or any Collateral Document (the "**Indemnified Liabilities**"); provided that such Debtor shall not be liable to any Indemnified Person for any portion of such Indemnified Liabilities to the extent they are found by a final decision of a court of competent jurisdiction to have resulted from such Indemnified Person's negligence or willful misconduct. If and to the extent that the foregoing indemnification is for any reason held unenforceable, each Debtor agrees to make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law.

(c) Any amounts payable to Secured Party under this Section 13 or otherwise under this Agreement if not paid upon demand shall bear interest from the date of such demand until paid in full, at the default rate of interest set forth in the Note.

14. Binding Effect. This Agreement shall be binding upon, inure to the benefit of and be enforceable by each Debtor, Secured Party and their respective successors and assigns and shall bind any Person who becomes bound as a debtor to this Agreement. Neither Debtors nor Secured Party may assign, transfer, hypothecate or otherwise convey its rights, benefits, obligations or duties hereunder without the prior express written consent of the other party hereto; provided, that, a party may assign all of its rights and obligations hereunder without any other party's consent in connection with an acquisition of such assigning party (whether by merger, consolidation, other business combination, acquisition of all or substantially all of the assets of such assigning party, or otherwise). Any such purported assignment, transfer, hypothecation or other conveyance by either party without the prior express written consent of the other party shall be void.

15. Governing Law; Jurisdiction; Venue.

(a) Choice of Law. This Agreement shall be governed by, and interpreted in accordance with the laws of the State of Delaware, without regard to conflicts of laws, or applicable federal law as to a particular subject where federal law governs, such as for example, the Patent Act governing patents or the Copyright Act governing copyrights.

(b) Alternative Dispute Resolution. Notwithstanding subsections (c) below, in the event some provision of a Settlement Document expressly creates an alternative dispute resolution provision as to a particular type of dispute, then such disputes shall be resolved as so specified in the Agreement.

(c) Consent to Jurisdiction. Each Party hereby (i) consents and submits to the venue and co-exclusive jurisdiction of the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware, (ii) agrees that all claims may be heard and determined in such courts, (iii) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (iv) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

16. Entire Agreement; Amendment. This Agreement, the Note, the Collateral Documents and the Settlement Documents contain the entire agreement of the parties with respect to the subject matter hereof and shall not be amended except by the written agreement of the parties.

17. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under all applicable laws and regulations. If, however, any provision of this Agreement shall be prohibited by or invalid under any such law or regulation in any jurisdiction, it shall, as to such jurisdiction, be deemed modified to conform to the minimum requirements of such law or regulation, or, if for any reason it is not deemed so modified, it shall be ineffective and invalid only to the extent of such prohibition or invalidity without affecting the remaining provisions of this Agreement, or the validity or effectiveness of such provision in any other jurisdiction.

18. Counterparts. This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute but one and the same agreement.

19. Termination. Upon payment and performance in full of all Obligations, the security interest created under this Agreement shall terminate and Secured Party shall promptly execute and deliver to each Debtor such documents and instruments reasonably requested by such Debtor as shall be necessary to evidence termination of all security interests given by such Debtor to Secured Party hereunder.

20. Joint and Several Liability. If either Debtor consists of more than one Person, the liability of each Person comprising such Debtor shall be joint and several, and each reference herein to "Debtor" shall mean and be a reference to each such Person comprising such Debtor. Each Debtor agrees that any and all of their obligations hereunder shall be the joint and several responsibility of each of them notwithstanding any absence herein of a reference such as "jointly and severally" with respect to any such obligation. The compromise of any claim with, or the release of, either Debtor shall not constitute a compromise with, or a release of, the other Debtor.

21. Conflicts. In the event of any conflict or inconsistency between this Agreement, any other Collateral Documents and the Note, the terms of this Agreement shall control.

22. Subordination Arrangement

(a) If there is a Subordinated Trigger Event, Secured Party shall execute a Responsive Subordination Agreement hereto, in favor of a Qualified Lender as to one and only one Qualified Loan outstanding at any time within ten (10) days following a written request being received by Secured Party, so long as there then exists no Event of Default.

(b) As used herein a "Qualified Lender" means Silicon Valley Bank, Comerica or another similar bank, depository institution or commercial lending business entity; provided however, that no Affiliate or competitor, or any other entity owned or controlled by, or joint venturing or allying itself with a competitor or Affiliate, of Debtor, whether directly or through a competing Affiliate, shall be eligible as a Qualified Lender.

(c) As used herein "Qualified Loan" means a working capital loan or venture debt facility not to exceed $5 million principal amount in the aggregate and that is effective no earlier than immediately following the Effective Date of that certain License Agreement, by and between Luna Innovations Incorporated together with Luna Technologies, Inc. and Hansen Medical, Inc., attached as Exhibit C-4 to the Amended Plan of Reorganization.

(i) As used herein "Responsive Subordination Agreement" means an agreement for the purpose of subordinating Secured Party's rights under the Note and this Agreement, as required by Qualified Lender, in favor of a Qualified Lender as security for a Qualified Loan, provided that such agreement contains provisions substantially conforming to (I)

below, and further it being agreed and acknowledged that Debtor shall use its commercially reasonable efforts, and shall cooperate with Secured Party's reasonable requests, to negotiate with the Qualified Lender that the Responsive Subordination Agreement contain the provisions in Sections (II) through (IV) below:

(I) in the event of an event of default under the Qualified Loan that is a payment default that has not been cured or waived by the Qualified Lender within the cure period provided under the Qualified Loan, Secured Party will have a right to purchase the Qualified Loan and related security and loan documentation from the Qualified Lender on reasonable terms and conditions for a purchase price equal to the amount of the outstanding principal amount, accrued interest, prepayment penalties, and other costs and expenses payable to Qualified Lender thereunder;

(II) upon and during the continuation of an Event of Default, (A) the Qualified Lender will not make any additional lending under the Qualified Loan or otherwise, (B) Secured Party may exercise its rights and remedies under this Security Agreement, the Collateral Documents and its rights in bankruptcy with respect to a material portion of the Collateral (including the Intellectual Property), and (C) there shall be an event of default under the Qualified Loan and a termination of the Qualified Lender's lending obligation or commitment;

(III) to the extent that the Qualified Lender shall have a security interest in any Intellectual Property or Proceeds, such Qualified Lender shall make a commercially reasonable effort both (A) to marshal and to collect all of its rights to payment collateral (other than Intellectual Property Proceeds), and (B) to marshal and to sell all of its Collateral (other than Intellectual Property and Proceeds), prior to exercising any remedy as to its Intellectual Property and Proceeds collateral; and

(IV) to the extent that the Qualified Lender shall have a security interest in any Intellectual Property or Proceeds, such Qualified Lender shall only sell the same at a public sale at which Secured Party shall be duly noticed and have an opportunity to bid (and to credit bid after paying any balance owing on the Qualified Loan), unless the Qualified Lender conducts a private sale to Secured Party or to another buyer to whom Secured Party consents in its sole discretion to such sale.

For the avoidance doubt, the refusal of a Qualified Lender to include any of the foregoing provisions in (II) through (IV) shall not be a basis for Secured Party to refuse to execute a Responsive Subordination Agreement.

As used herein "Intellectual Property" and "Proceeds" shall have the meanings defined above in the definition of Collateral.

Each Debtor shall use its commercially reasonable best efforts to persuade any Qualified Lender not to require a security interest in Intellectual Property or Proceeds thereof. The Responsive Subordination Agreement shall only include Intellectual Property and Proceeds thereof, if and to the extent that no such Qualified Loans are reasonably available from any Qualified Lender without such additional Collateral.

(d) “Subordinated Trigger Events” means when any Debtor has made a written request for the execution of a Responsive Subordination Agreement by Secured Party and the following additional events or conditions have occurred:

(i) The Amended Plan of Reorganization has been duly confirmed and this Agreement and the Note are in full force and effect, including this Agreement and the Note pursuant to a Confirmation Order approved by Secured Party.

(ii) The Qualified Lender and each Debtor have tendered to Secured Party for its evaluation the loan and security documentation for the Qualified Loan.

[Remainder of page left intentionally blank.]

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement, as of the date first above written.

Luna Innovations Incorporated

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

One Riverside Circle, Suite 400
Roanoke, VA 24016

Attn: _____
Fax: _____
Email: _____

Luna Technologies, Inc.

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

One Riverside Circle, Suite 400
Roanoke, VA 24016

Attn: _____
Fax: _____
Email: _____

Hansen Medical Inc.

By: /s/ Fred Moll
Name: Fred Moll
Title CEO

800 East Middlefield Road
Mountain View CA 94043

Attn:
Fax:
Email:

SIGNATURE PAGE 2 TO SECURITY AGREEMENT

SCHEDULE 1
to the Security Agreement

Jurisdiction of Organization and Organizational Identification Number of each Debtor:

Name	Jurisdiction	Fed. Employer ID No.
Luna Innovations Incorporated	**Delaware**	**54-1560050**
Luna Technologies, Inc.	**Delaware**	**54-1930845**
Luna Quest, Inc.	**Delaware**	**20-264002**
Luna Nanomaterials, Inc.	**Virginia**	**54-1971913**
Luna Analytics	**Virginia**	**54-1959542**

Chief Executive Office and Principal Place of Business of each Debtor:

Luna Innovations Incorporated, 1 Riverside Circle, Suite 400, Roanoke, VA

Other locations where each Debtor conducts business or Collateral is kept;

1 Riverside Circle, Suite 400, Roanoke, VA 24016
3157 State St, Blacksburg, VA 24060
706 Forest St, Suite A, Charlottesville, VA 22903
521 Bridge St, Danville, VA 24541

Any former names of any Debtor in the past five years:

N/A

SCHEDULE 2
to the Security Agreement

Patents and Patent Applications.

Luna Innovations Incorporated:

See Exhibit B

Luna Technologies, Inc.:

N/A

Copyrights (Registered and Unregistered) and Copyright Applications.

Luna Innovations Incorporated:

N/A

Luna Technologies, Inc.:

N/A

Trademarks, Service Marks and Trade Names and Trademark, Service Mark and Trade Name Applications.

Luna Innovations Incorporated:

U.S. Registered Trademarks of Debtor

See Exhibit C

Pending U.S. Trademark Applications of Debtor

N/A

Luna Technologies, Inc.:

N/A

SCHEDULE 3
to the Security Agreement

SUBSIDIARIES

1. Interests in each limited liability company that is a Subsidiary of Debtor as follows:

   N/A

2. Interests in each general partnership, limited partnership, limited liability partnership or other partnership that is a Subsidiary of Debtor as follows:

   N/A

3. Capital stock of each corporate Subsidiary of Debtor, and the stock certificates with respect thereto, as follows:

Debtor Name	Subsidiary	Certificate No.	Certificate Date	No. and Class of Shares
Luna Innovations	Luna Quest	C-07	03/12/2003	1,440,000
Luna Innovations	Luna nanoMaterials	C-004	05/01/2005	337,500
Luna Innovations	Luna Analytics	002	03/1/2001	300,000
Luna Innovations	Luna Technologies	CS-001	9/25/2005	1,000

EXHIBIT A
to the Security Agreement

UPDATE CERTIFICATE

for the Reporting Period ended , 20

Date:

Hansen Medical, Inc.
800 East Middlefield Road
Mountain View, CA 94043
Ladies and Gentlemen:

Reference is made to the Security Agreement referred to below (as amended from time to time, the **"Security Agreement"**), by and among each Debtor identified below and the Secured Party identified below Capitalized terms used and not defined herein shall have the meanings assigned to such terms in the Security Agreement, as applicable.

This Update Certificate is provided pursuant to the Security Agreement without limiting each Debtor's ongoing reporting obligations under the Security Agreement with respect to the matters covered by this Update Certificate.

The undersigned hereby certifies to Secured Party as to each Debtor and each of its Subsidiaries (the "**Companies**") that, during the period referred to below to the date hereof (the "**Reporting Period**"), there has not been (i) any change in its corporate name, in its registration as an organization (or new registration) or in its jurisdiction of organization, (ii) any change in the location of its chief executive office, its principal place of business, any office in which it maintains books or records relating to Collateral owned by it or any office or facility at which Collateral owned by it is located (including the establishment of any new such office or facility), (iii) any securities account, bank account or other deposit account opened by a Company or any change in the names or locations of any other persons in possession of Collateral, (iv) any new lease of real property entered into by a Company, (v) the creation or acquisition of any Subsidiary by a Company, (vi) any creation or acquisition by a Company of any new patent or trademark rights, or copyrights, owned or maintained by a Company, (vii) any acquisition of any right to payment or performance under a letter of credit, or (viii) any new claims of any Company against any third person for damages (whether or not suit has been filed), except as follows:

1. Names; Jurisdiction of Organization.

(a) During the Reporting Period, a Company changed its corporate name as follows:

(b) During the Reporting Period, a Company changed its jurisdiction of organization as follows:

(c) During the Reporting Period, a Company changed its registration as an organization or obtained a new registration as follows:

2. Locations.

(a) During the Reporting Period, a Company changed the location of its chief executive office as follows:

(b) During the Reporting Period, a Company changed the location of its principal place of business as follows:

(c) During the Reporting Period, a Company changed the location of any office in which it maintains books and records relating to the Collateral owned by it or any office or facility at which Collateral owned by it is located (including the establishment of any such new office or facility and any new co-location of Collateral or other third party site) as follows, **and the value of the Collateral at any such new location is also identified**:

3. New Names and Locations of Persons Possessing Collateral (including New Deposit Accounts). During the Reporting Period, the names and locations of any persons other than a Company that have possession of any Collateral of a Company changed as follows (include the location of any new bank accounts, securities custody accounts, or similar accounts opened by a Company during the Reporting Period):

4. Real Property Leases. During the Reporting Period, a Company entered into new real property leases as follows:

5. Subsidiaries. During the Reporting Period, a Company created or acquired the following direct or indirect Subsidiaries:

6. Intellectual Property. During the Reporting Period, a Company created or acquired, or otherwise become entitled to the benefit of, intellectual property consisting of any patents, trademarks, or copyrights (or any renewals, extensions or applications with regard to the foregoing), as follows:

7. Letter-of-Credit Rights. During the Reporting Period, a Company acquired right to payment or performance under a letter of credit as follows:

8. Commercial Tort Claims. During the Reporting Period, new claims of a Company against any third person for damages (whether or not suit has been filed) arose as follows:

IN WITNESS WHEREOF, the undersigned has executed this Update Certificate on behalf of the Companies.

Luna Innovations Incorporated

By: _____
Name:
Title:

Luna Technologies, Inc.

By: _____
Name:
Title:

Re: Security Agreement dated as of January 12, 2010, made by and among Luna Innovations Incorporated, a Delaware corporation ("**LII**"), Luna Technologies, Inc., a Delaware corporation ("**LTI**" and together with LII, each a "**Debtor**", and collectively, the "**Debtors**") and Hansen Medical, Inc., a Delaware corporation ("**Secured Party**").

Start date of Reporting Period: , 20

Exhibit 10.12

THIS WARRANT AND THE SHARES PURCHASABLE HEREUNDER HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR QUALIFIED UNDER ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR QUALIFICATION OR AN EXEMPTION THEREFROM UNDER SAID ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

Dated: January 12, 2010

WARRANT TO PURCHASE

COMMON STOCK OF

LUNA INNOVATIONS INCORPORATED

This certifies that Hansen Medical, Inc. (the "Holder"), for value received, and contingent upon the satisfaction of the conditions set forth in Section 1 below, is entitled to purchase, at a purchase price of $0.01 per share (the "Stock Purchase Price"), from Luna Innovations Incorporated, a Delaware corporation (the "Company"), up to that number, if any, of fully paid and nonassessable shares of the Company's Common Stock, par value $0.001 per share (the "Common Stock"), equal to the Warrant Shares, as determined in accordance with the following calculation:

number of shares of Common Stock issuable upon exercise of the Warrant (the "Warrant Shares")	=	((0.099 x Total Shares of Outstanding Common Stock of the Company) – number of Shares (as defined below)) / 0.901

For the purposes hereof, "Shares" at any given time means the number of shares of Common Stock issued to Hansen Medical, Inc. pursuant to the Settlement Agreement plus the aggregate number of shares of Common Stock issued upon exercises of this Warrant prior to such time, if any. Within fifteen business days following the end of each fiscal quarter of the Company, and within ten business days after receipt of any request from the Holder, the Company shall provide the Holder a certificate signed by the Company's Chief Financial Officer specifying the total number of shares of Common Stock issued and outstanding as of the end of such fiscal quarter or, as applicable, the date of such request (the "Total Shares of Outstanding Common Stock of the Company") and the total number of Shares as of the end of such fiscal quarter or, as applicable, the date of such request. For purposes of calculating the number of Warrant Shares, the Holder shall be entitled to rely on such certification.

1. Exercise; Issuance of Certificates; Acknowledgement. This Warrant shall not be exercisable unless and until the Company has issued any shares of Common Stock after the Effective Date. To the extent there exists any Warrant Shares during the Term, this Warrant shall be exercisable at any time from time to time from and after the Effective Date (as defined in that certain Confidential Settlement Agreement, dated December 11, 2009, by and between Luna Innovations, Inc. and Luna Technologies, Inc., and Hansen Medical, Inc. (the "Agreement")) up to and including 5:00 p.m. (Pacific Time) on the three (3) year anniversary of the Effective Date (such duration being the "Term"), upon delivery to the Company in accordance with Section 9 below of (i) the Form of Subscription attached hereto duly completed and executed, and (ii) payment pursuant to Section 2 of the aggregate Stock Purchase Price for the number of Warrant Shares for which this Warrant is being exercised determined in accordance with the provisions hereof.

This Warrant is exercisable at the option of the Holder for all or any part of the Warrant Shares (but not for a fraction of a share) which may be purchased hereunder from time to time, if any. The Company agrees that the shares of Common Stock purchased under this Warrant shall be and are deemed to be issued to the Holder hereof as the record owner of such shares as of the close of business on the date on which the duly completed and executed Form of Subscription is delivered in accordance with Section 9 and payment is received for such shares. Certificates for the shares of the Common Stock so purchased, together with any other securities or property to which the Holder hereof is entitled upon such exercise, shall be delivered to the Holder hereof by the Company at the Company's expense within a reasonable time after the rights represented by this Warrant have been so exercised and in any event no later than three (3) business days. Any shares of Common Stock issued pursuant to this Warrant shall have the following legend; provided that such legend will be removed from such issued shares when such shares may be sold without applicable volume limits under Rule 144:

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AND HAVE BEEN ACQUIRED FOR INVESTMENT AND NOT WITH A VIEW TO, OR IN CONNECTION WITH, THE SALE OR DISTRIBUTION THEREOF."

Each Certificate so delivered shall be in such denominations of the Warrant Shares as may be requested by the Holder hereof and shall be registered in the name of such Holder. Notwithstanding anything to the contrary contained herein, unless the Holder otherwise notifies the Company, this Warrant shall be deemed to be automatically exercised using the Net Issuance Method pursuant to Section 2 hereof immediately prior to the date on which this Warrant ceases to be exercisable.

2. Payment for Shares. The aggregate purchase price for Warrant Shares being purchased hereunder may be paid either (i) by cash or wire transfer of immediately available funds, (ii) if the fair market value of one (1) share of the Warrant Shares on the date of exercise is greater than the Stock Purchase Price, by surrender of a number of Warrant Shares which have a fair market value equal to the aggregate purchase price of the Warrant Shares being purchased ("Net Issuance") as determined herein, or (iii) any combination of the foregoing. If the Holder elects the Net Issuance method of payment, the Company shall issue to Holder upon exercise a number of shares of Warrant Shares determined in accordance with the following formula:

$$X = \frac{Y(A-B)}{A}$$

where: X = the number of Warrant Shares to be issued to the Holder;

Y = the number of Warrant Shares with respect to which the Holder is exercising its purchase rights under this Warrant;

A = the fair market value of one (1) share of the Warrant Shares on the date of exercise; and

B = the Stock Purchase Price.

No fractional shares arising out of the above formula for determining the number of shares to be issued to the Holder shall be issued, and the Company shall in lieu thereof make payment to the Holder of cash in the amount of such fraction multiplied by the fair market value of one (1) share of the Warrant Shares on the date of exercise. For purposes of the above calculation, the fair market value of each share of Common Stock shall be deemed to be the average of the closing prices of one share of common stock on the national securities exchange or other nationally recognized trading system on which the shares of Common Stock are traded over the five (5) day period ending one (1) day prior to the date of exercise.

3. Shares to be Fully Paid; Reservation of Shares. The Company covenants and agrees that all Warrant Shares will, upon issuance, be duly authorized, validly issued, fully paid and nonassessable and free from all preemptive rights of any stockholder and free of all liens and encumbrances with respect to the issue thereof except for (i) restrictions on transfer provided for herein or under applicable federal and state securities laws and (ii) liens and encumbrances created by Holder. The Company further covenants and agrees that during the Term, the Company will at all times have authorized and reserved, for the purpose of issue, a sufficient number of authorized but unissued shares of Common Stock when and as required to provide for the exercise of the rights represented by this Warrant.

4. Adjustments.

4.1 Reclassification. If any reclassification of the capital stock of the Company shall be effected in such a way that holders of Common Stock shall be entitled to receive stock, securities, or other assets or property, then, as a condition of such reclassification, lawful and adequate provisions shall be made whereby the Holder hereof shall thereafter have the right to purchase and receive (in lieu of the shares of the Common Stock purchasable and receivable upon the exercise of the rights represented hereby) such shares of stock, securities or other assets or property as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock purchasable and receivable upon the exercise of the rights represented hereby as if Holder had so exercised such rights immediately prior to such reclassification. In any reclassification described above, appropriate provision shall be made with respect to the rights and interests of the Holder of this Warrant to the end that the provisions hereof shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise hereof.

4.2 Notice of Adjustment. Upon any adjustment contemplated in this Section 4, the Company shall give written notice thereof in accordance with Section 9. The notice shall be signed by the Company's chief financial officer and shall set forth in reasonable detail the method of calculation of such adjustment and the facts upon which such calculation is based.

4.3 Other Notices. If at any time:

(a) the Company shall declare any cash dividend upon its Common Stock;

(b) there shall be any capital reorganization or reclassification of the capital stock of the Company; or consolidation or merger of the Company with, or sale of all or substantially all of its assets to, another person; or

(c) there shall be a voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, in any one or more of said cases, the Company shall give by notice in accordance with Section 9: (a) at least ten (10) days prior written notice of the date on which the books of the Company shall close or a record shall be taken for such dividend or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding-up, and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution (except to the extent involuntary), liquidation, winding-up or public offering, notice on the earlier of (X) the date on which notice is given to the Company's stockholders or (Y) at least ten (10) days prior written notice of the date when the same shall take place. Any notice given in accordance with the foregoing clause (a) shall also specify, in the case of any such dividend, the date on which the holders of Common Stock shall be entitled thereto. Any notice given in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation, winding-up, conversion or public offering, as the case may be.

4.5 Acquisition. In the event of any reorganization, consolidation or merger of the Company other than a mere reincorporation transaction (an "Acquisition"), then, as a condition of such Acquisition, lawful and adequate provisions shall be made whereby the Holder hereof shall thereafter have the right to purchase and receive (in lieu of the shares of the Common Stock purchasable and receivable upon the exercise of the rights represented hereby), at the same exercise price, such shares of stock, securities or other assets or property as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock purchasable and receivable upon the exercise of the rights represented hereby as if Holder had so exercised such rights immediately prior to such Acquisition. In any Acquisition described above, appropriate provision shall be made with respect to the rights and interests of the Holder of this Warrant to the end that the provisions hereof shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise hereof.

5. No Voting or Dividend Rights. Nothing contained in this Warrant shall be construed as conferring upon the Holder hereof the right to vote or to consent to receive notice as a stockholder of the Company or any other matters or any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby or the shares purchasable hereunder until, and only to the extent that, this Warrant shall have been duly exercised and the applicable Warrant Shares received by Holder.

6. Warrant Non Transferable. This Warrant and all rights hereunder may not be transferred, in whole or in part, without Company's prior written consent. Notwithstanding the foregoing, Holder may transfer or assign this Warrant in connection with a merger, consolidation or sale of substantially all of the assets of Holder, provided that Holder provides the Company with written notice of such transfer or assignment.

7. Lost Warrants. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction, or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon receipt of an indemnity reasonably satisfactory to the Company, or in the case of any such mutilation upon surrender and cancellation of such Warrant, the Company, at Holder's expense, will make and deliver a new Warrant, of like tenor, in lieu of the lost, stolen, destroyed or mutilated Warrant.

8. Modification and Waiver. Any term of this Warrant may be amended and the observance of any term of this Warrant may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and the Holder.

9. Notices. Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Warrant shall be in writing and shall be conclusively deemed to have been duly given (a) when hand delivered to the other party; (b) when sent by facsimile, with receipt confirmation, to the number set forth below if sent between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day, or on the next business day if sent by facsimile to the number set forth below if sent other than between 8:00 a.m. and 5:00 p.m. recipient's local time on a business day; or (c) the next business day after deposit with a national overnight delivery service, postage prepaid, addressed to the applicable parties as set forth below with next business day delivery guaranteed, provided that the sending party receives a confirmation of delivery from the delivery service provider. Each person making a communication hereunder by facsimile shall promptly confirm by telephone to the person to whom such communication was addressed each communication made by it by facsimile pursuant hereto but the absence of such confirmation shall not affect the validity of any such communication. A party may change or supplement the addresses given below, or designate additional addresses, for purposes of this Section 9 by giving the other party written notice of the new address in the manner set forth above.

If to the Holder: Hansen Medical, Inc.
800 E. Middlefield Road
Mountain View, CA 94043
Attn: Arthur Hsieh
Facsimile: 650-404-5901
Email: Arthur_Hsieh@hansenmedical.com

If to the Company: Luna Innovations Inc.
One Riverside Circle, Suite 400
Roanoke, VA 24016
Attn: _____
Facsimile: _____

10. Governing Law; Jurisdiction; Venue.

(a) Choice of Law. This Warrant shall be governed by, and interpreted in accordance with the laws of the State of Delaware, without regard to conflicts of laws, or applicable federal law as to a particular subject where federal law governs, such as for example, the Patent Act governing patents or the Copyright Act governing copyrights.

(b) Alternative Dispute Resolution. Notwithstanding subsections (c) below, in the event some provision of a Settlement Document expressly creates an alternative dispute resolution provision as to a particular type of dispute, then such disputes shall be resolved as so specified in the Agreement.

(c) Consent to Jurisdiction. Each Party hereby (i) consents and submits to the venue and co-exclusive jurisdiction of the courts of New Castle County in the State of Delaware and the Federal courts of the United States sitting in such part of the District of Delaware, (ii) agrees that all claims may be heard and determined in such courts, (iii) irrevocably waives (to the extent permitted by applicable law) any objection that it now or hereafter may have to the laying of venue of any such action or proceeding brought in any of the foregoing courts, and any objection on the ground that any such action or proceeding in any such court has been brought in an inconvenient forum, and (iv) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner permitted by law. Each of the parties hereby consents to service of process by any party in any suit, action or proceeding in accordance with such applicable law.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by an officer, thereunto duly authorized as of the date first above written.

LUNA INNOVATIONS INCORPORATED

By: /s/ Kent Murphy
Name: Kent Murphy
Title: CEO

Agreed and Acknowledged:

HANSEN MEDICAL, INC.

By: /s/ Fred Moll
Name: Fred Moll
Its: CEO

FORM OF SUBSCRIPTION

(To be signed only upon exercise of Warrant)

To: _____

The undersigned, the holder of a right to purchase shares of Common Stock of Luna Innovations Incorporated, a Delaware corporation (the "Company"), pursuant to that certain Warrant to Purchase Common Stock of Luna Innovations Incorporated (the "Warrant"), dated as of January 12, 2010, hereby irrevocably elects to exercise the purchase right represented by such Warrant for, and to purchase thereunder, ( ) shares of Common Stock of the Company, it being agreed that the foregoing shares shall not exceed the number of Warrant Shares as of the date hereof, and herewith makes payment of Dollars ($) therefor by the following method:

(Check one of the following):

_____ (check if applicable) The undersigned hereby elects to make payment of Dollars ($) therefor in cash.

_____ (check if applicable) The undersigned hereby elects to make payment for the aggregate exercise price of this exercise using the Net Issuance method pursuant to Section 2 of the Warrant.

The undersigned represents that it is acquiring such securities for its own account for investment and not with a view to or for sale in connection with any distribution thereof and that the undersigned is an accredited investor as defined in Rule 501 under the Securities Act of 1933, as amended.

DATED: _____

HANSEN MEDICAL, INC.

By: _____

Name: _____

Its: _____

Exhibit 10.13

CONFIDENTIAL MUTUAL RELEASE

This Confidential Mutual Release ("Release") is entered into as of the Effective Date (defined below) by and between Luna Innovations, Inc. ("Luna") and Luna Technologies, Inc. ("Luna Technologies") (collectively, the "Debtors"), and Hansen Medical, Inc. ("Hansen") (together with the Debtors, the "Parties").

This Agreement is made with respect to the following recitals:

A. Hansen and Luna are parties to the California Action, and Hansen and the Debtors are parties to the Bankruptcy Case, as respectively defined below.

B. The Parties have entered into a Confidential Settlement Agreement dated December 11, 2009 (the "Settlement Agreement") to resolve the disputes between them in the California Action and Bankruptcy Case.

C. This Agreement is one of the "Settlement Documents" for purposes of the First Amended Joint Plan of Reorganization of Luna Innovations Incorporated and Luna Technologies, Inc. (the "Amended Plan"), as described in the First Amended Disclosure Statement in Support of First Amended Joint Plan of Reorganization of Luna Innovations Incorporated, et al. under Chapter 11 of the Bankruptcy Code (the "Disclosure Statement") and the "Confirmation Order" entered by the U.S. Bankruptcy Court" for the Western District of Virginia (the "Bankruptcy Court") in the Bankruptcy Case.

NOW, THEREFORE, in consideration of all of the terms and conditions of this Agreement, the Parties agree as follows:

1. **Definitions.** The following words and phrases shall have the meanings set forth below for purposes of this Agreement.

1.1 **"Affiliates"** shall mean any corporation or other entity that is directly or indirectly controlling, controlled by or under common control with a party. For purposes of this definition, "control" of an entity means the direct or indirect ownership of securities representing fifty percent (50%) or more of the total voting power entitled to vote in elections of such entity's board of directors or other governing authority, or equivalent interests conferring the power to direct or cause the direction of the governance or policies of such entity.

1.2 **"Bankruptcy Case"** means *In Re Luna Innovations, et al.*, Case No. 09-71811 (WFS), United States Bankruptcy Court for the Western District of Virginia, Roanoke Division.

1.3 **"California Action"** means the civil action entitled *Hansen Medical Inc. v. Luna Innovations Inc.*, Case No. 07-088551, Superior Court of the State of California, County of Santa Clara.

1.4 **"Claims"** means any and all claims, actions, causes of action, demands, costs, and charges of whatever nature. This definition of "claims" applies only to this Release and is not intended to the change the definition of "claims" as used in the Amended Plan for bankruptcy purposes.

1.5 **"Defendant"** means Luna Innovations, Inc.

1.6 **"Defendant Released Parties"** means Luna and Luna Technologies, and each of their respective current and former officers, directors, employees, agents, attorneys, and representatives solely in their capacity as such. "Defendant Released Parties" does not include third parties such as business partners and parties with contractual relationships with Luna other than those listed in the preceding sentence.

1.7 **"Effective Date"** means the Effective Date of the Amended Plan after entry of the Confirmation Order by the Bankruptcy Court.

1.8 **"Legal Proceeding"** means any lawsuit or any other civil or administrative proceeding of any kind in any court, tribunal, agency or governmental entity.

1.9 **"Party"** means Luna, Luna Technologies or Hansen, and when used in the plural shall mean all of them.

1.10 **"Person"** means an individual, trust, corporation, partnership, joint venture, limited liability company, association, unincorporated organization or other legal or governmental entity, including those defined as "persons" in 11 U.S.C. § 101.

1.11 **"Plaintiff"** means Hansen Medical, Inc.

1.12 **"Plaintiff Released Parties"** means Hansen and its Affiliates, and each of their respective current and former officers, directors, employees, agents, attorneys, and representatives in their capacity as such. "Plaintiff Released Parties" does not include third parties such as business partners and parties with contractual relationships with Hansen other than those listed in the preceding sentence.

1.13 **"Third Party"** means a Person other than a Party to this Agreement or any of such Parties' Affiliates.

2. **Releases and Dismissals**. As of the Effective Date,

2.1 **Release by Hansen**. Hansen, on behalf of itself and its predecessors, successors, assigns, and Affiliates, does hereby now and forever release and discharge the Defendant Released Parties from any and all Claims that were made or that could have been made by Hansen in the California Action and all of the approximately $36.1 million jury verdict in the California Action, as well as from any and all Claims (as defined herein or as in the Amended Plan, whichever definition is broader) that Hansen made or could have made in the Bankruptcy Case. This release does not extend to third parties other than those specifically identified as Defendant Released Parties in those capacities; provided that nothing herein releases any rights that Hansen may have to injunctions against future violations of Hansen's ownership or nonmonetary rights to property, to specific performance against future violations of confidentiality or other nonmonetary rights of Hansen or to declaratory relief as to future

violations of Hansen's ownership or other nonmonetary rights. In particular, without limiting the generality of the foregoing, nothing herein shall be deemed to release any of Hansen's rights to nonmonetary relief to protect against future violations of Hansen's rights in what Hansen identifies as its intellectual property and other nonmonetary rights.

2.2 **Release by Luna**. Luna, on behalf of itself and its predecessors, successors, assigns, and Affiliates, does hereby now and forever release and discharge the Plaintiff Released Parties from any and all Claims that were made or that could have been made by Luna in the California Action, as well as from any and all Claims (as defined herein or as in the Amended Plan, whichever definition is broader) that Luna made or could have made in the Bankruptcy Case. This release does not extend to third parties other than those specifically identified as Plaintiff Released Parties in those capacities; provided that nothing herein releases any rights that Luna may have to injunctions against future violations of Luna's ownership or nonmonetary rights to property, to specific performance against future violations of confidentiality or other nonmonetary rights of Luna or to declaratory relief as to future violations of Luna's ownership or other nonmonetary rights. In particular, without limiting the generality of the foregoing, nothing herein shall be deemed to release any of Luna's rights to nonmonetary relief to protect against future violations of Luna's rights in what Luna identifies as its intellectual property and other nonmonetary rights.

2.3 **Waiver of Unknown Claims**. Each of the Parties, releasing claims by this Agreement, for its respective predecessors, successors, assigns, and Affiliates, hereby expressly waives and relinquishes the provisions, rights and benefits of Section 1542 of the California Civil Code, which statute provides:

> **A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR**

and any and all provisions, rights and benefits of any similar statute or law of California or of any other jurisdiction. Each of the Parties, on its own behalf and on behalf of its respective predecessors, successors, assigns, and Affiliates, acknowledges that it is familiar with Civil Code Section 1542 and the terms hereof and is aware that such party or person may hereafter discover facts in addition to or different from those which it now knows or believes to exist or be true with respect to the subject matter of this release, but that such Party on its own behalf and on behalf of its respective predecessors, successors, assigns, and Affiliates intends to, and does hereby, fully, finally and forever settle, release and discharge each and all of the Claims released by such Party pursuant to this Agreement, without regard to the subsequent discovery or existence of different or additional facts.

2.4 **Dismissal of Litigation**. Not later than ten court days after the Effective Date, the parties shall file a joint motion and agreed order, substantially in the form of Exhibit A attached hereto, requesting the Santa Clara County Superior Court to dismiss the California Action with prejudice.

3. **Additional Provisions**. The provisions of Section 4, 5, 6, 8 (other than 8.3) and 9 (other than 9.12) of the Settlement Agreement are hereby incorporated by reference into this Release and shall as if stated herein.

4. **Execution in Counterparts**. This Release may be executed and delivered in any number of counterparts. When each Party has signed and delivered at least one counterpart to all other Parties, each counterpart shall be deemed an original and all counterparts, taken together, shall constitute one and the same agreement, which shall be binding and effective on the Parties hereto. This Agreement shall not become binding on the Parties hereto unless it has been executed by authorized representatives of all Parties.

IN WITNESS WHEREOF, the Parties have approved and executed this Confidential Release as of the Effective Date.

HANSEN MEDICAL, INC.

By: _____

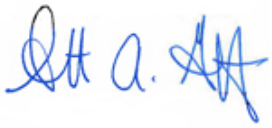
Its: CEO

LUNA INNOVATIONS, INC.

By: _____

Its: CEO

LUNA TECHNOLOGIES, INC.



By: _____

Its: President

EXHIBIT A

JOINT MOTION AND AGREED ORDER

HAROLD J. MCELHINNY (BAR NO. 66781)
Email: HMcElhinny@mofo.com
ARTURO J. GONZALEZ (BAR NO. 121490)
Email: AGonzalez@mofo.com
MORRISON & FOERSTER LLP
425 Market Street
San Francisco, California 94105-2482
Telephone: 415.268.7000
Facsimile: 415.268.7522

BRYAN WILSON (BAR NO. 138842)
Email: BWilson@mofo.com
JANA G. GOLD (BAR NO. 154246)
Email: JGold@mofo.com
CHRISTOPHER L. ROBINSON (BAR NO. 260778)
Email: CRobinson@mofo.com
MORRISON & FOERSTER LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: 650.813.5600
Facsimile: 650.494.0792

Attorneys for Plaintiff and Cross-Defendant
HANSEN MEDICAL, INC.

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SANTA CLARA

HANSEN MEDICAL, INC., Plaintiff, v. LUNA INNOVATIONS INCORPORATED, and Does 1-10, Defendants.	Case No. 107CV088551 UNLIMITED JURISDICTION **STIPULATION AND ORDER OF DISMISSAL**
LUNA INNOVATIONS INCORPORATED, Cross-Complainant, v. HANSEN MEDICAL, INC., Cross- Defendant.	Date: * Time: * Dept: 8C (Complex Civil Litigation) Hon. Joseph H. Huber

Whereas, plaintiff Hansen Medical, Inc. (“Hansen”) filed this action on June 22, 2007, and

Whereas, defendant Luna Innovations, Inc. (“Luna) filed cross claims in this action on October 4, 2007, and

Whereas, the case was tried to a jury, which rendered a verdict in Hansen’s favor on April 21, 2009, and

Whereas, Luna filed for bankruptcy under Chapter 11 of the United States on July 17, 2009, staying all proceedings in this court, including entry of judgment on the jury verdict and

Whereas, Hansen and Luna have resolved their disputes and wish to dismiss all claims in this action,

Now Therefore, Hansen and Luna each hereby stipulate and agree that the complaint and the counterclaims in this action are dismissed with prejudice, each party to bear its own costs.

Dated: January 12, 2010

MORRISON & FOERSTER LLP

By: _____

Attorneys for Plaintiff and Cross-Defendant
HANSEN MEDICAL, INC.

Dated: January 12, 2010

MUNGER TOLLES & OLSON LLP

By: _____

Attorneys for Defendant and Cross
Plaintiff LUNA INNOVATIONS, INC.

IT IS SO ORDERED.

Dated:

_____

JUDGE OF THE SUPERIOR COURT

Exhibit 10.14

INDUSTRIAL LEASE AGREEMENT

BETWEEN

LUNA INNOVATIONS INCORPORATED

AS TENANT

AND

THE INDUSTRIAL DEVELOPMENT AUTHORITY
OF MONTGOMERY COUNTY, VIRGINIA
AS LANDLORD

INDUSTRIAL LEASE AGREEMENT

THIS LEASE (the "Lease" or "Agreement") is made and effective as of this 21st day of March, 2006, by and between The Industrial Development Authority of Montgomery County, Virginia ("Landlord"), a public body corporate, having a principal place of business at 755 Roanoke Street, Suite 2 H, Christiansburg, Virginia 24073, and Luna Innovations Incorporated, ("Tenant"), a Virginia Corporation having a principal place of business at 10 South Jefferson Street, Suite 130, Roanoke, Virginia 24011.

WHEREAS, Landlord is the owner of certain real property located in the Town of Blacksburg, Virginia, upon which Landlord has built a 109,000 sq. ft Technology Manufacturing Building (the "Building"), containing fifteen (15) acres situated in the Blacksburg Industrial Park, 3150 State Street, Blacksburg, VA 24060;

WHEREAS, Tenant desires to lease and occupy 31,300 square feet of the Building as shown on the attached diagram identified as Exhibit A entitled "Luna Innovations Lease Floor Plan Technology Manufacturing Building (Leased area in Red & Common Area in Blue)" (the "Premises") if the Landlord is willing to lease the said Premises to the Tenant; and

WHEREAS, Landlord is willing to lease the said Premises to the Tenant subject to and in accordance with the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the rents, covenants and agreements herein set forth, and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. PREMISES AND TERM.

1.1 Premises. In consideration of the obligations of Landlord and Tenant set forth herein, Landlord leases to Tenant, and Tenant hereby takes from Landlord the Premises identified on Exhibit A situated on real property owned by the Landlord within the Town of Blacksburg, County of Montgomery, State of Virginia more particularly described on Exhibit B attached hereto and incorporated herein by reference (the "Property") together with all rights, privileges, easements, appurtenances, and amenities belonging to or in any way pertaining to the Premises, to have and to hold, subject to the terms, covenants and conditions of this Lease. Without limiting the foregoing, Tenant shall have the right, as appurtenant to the Premises, to use the driveways, parking, rear drive through door in the warehouse area of the Building and other common areas on the Property. As used in this Lease, Tenant's "Proportionate Share" shall mean a fraction the numerator of which shall be the square footage of the Premises (31,300 s.f.) and the denominator of which shall be the square footage of the Building (109,000 s.f.).

1.2 Term. The term of this Lease (the "Term") shall commence on the later of (i) May 1, 2006 or (ii) the first day of the month following the completion of the improvements described in Sections 1.3 and 1.4, and reflected on Exhibit C and Exhibit D attached hereto (the "Commencement Date"), and shall expire as of September 30, 2012, unless terminated sooner, renewed or extended as provided herein. Notwithstanding the fact that the Commencement Date is subsequent to the effective date of this Lease, the parties agree that each

have vested rights hereunder and that this Lease constitutes a binding and valid obligation of each as of the date this Lease is fully executed. In the event the Term has not commenced by December 31, 2006 ("Completion Deadline Date") because the improvements reflected on Exhibit C and Exhibit D have not been completed, Tenant may terminate this Lease and receive an immediate return of the Letter of Credit, as defined in Section 3.1.4; provided that for each day the completion of the improvements on Exhibit C and Exhibit D is delayed due to the actions of Tenant, the Completion Deadline Date shall be extended by the same number of days.

1.3 Acceptance of the Premises. By taking possession of the Premises, Tenant acknowledges that: (i) it has inspected the Premises; (ii) it accepts the Premises as is, except for the separation improvements as indicated on Exhibit C to be installed by Landlord at Landlord's cost prior to the Commencement Date, in order to provide separate boundaries between the different tenants in the Building and the agreed upon Upfits in Section 1.4 which are indicated on Exhibit D attached hereto, (iii) the Premises are suitable for the purpose for which the Premises are leased; and (iv) except as otherwise set forth in this Lease (including all exhibits and attachments), no representations or warranties have been made by Landlord with respect to the Premises. Prior to the Commencement Date, it is acknowledged and agreed by Landlord that Tenant may take possession of and use the administrative offices; provided that in the event the Tenant occupies all the administrative offices, installs telephone and internet services and begins conducting permanent business from said offices, Tenant shall pay Landlord rent on the administrative office space at the annual rate of $6.00 per sq. ft.

1.4 Upfit Allowance. The Landlord shall provide the Tenant with an improvement allowance of $15.00 per sq. ft. for a maximum Up-fit allowance of Four Hundred Sixty Nine Thousand Five Hundred Dollars ($469,500) (the "Up-fit Allowance"). Landlord and Tenant agree that should the Tenant's desired improvements exceed the Up-fit Allowance, the Tenant shall provide to the Landlord the additional funds required to pay for the additional improvements. Should the desired improvements by the Tenant exceed the Up-fit Allowance, the Landlord shall have no obligation to enter into any contract for the agreed upon Up-fit work until such time that the Tenant provides the additional funds in excess of the Up-fit Allowance. Should the Tenant not provide the Landlord with the additional funds in excess of the Up-fit Allowance within five (5) calendar days of receiving written notice from the Landlord that the funds are due, the Landlord may deem the Tenant in default and the Landlord may, in addition to any other remedy available, use the deposit money and/or Letter of Credit to pay all the architectural and engineering fees incurred up to the date of default. The list of improvements to be preformed by the Landlord prior to Commencement Date are indicated on Exhibit D and are incorporated herein as a part of this Lease.

2. RENEWAL; EXTENSION; SURRENDER

2.1 Renewal.

2.1.1 Tenant shall have the option to renew this Lease for an additional term of five (5) years on the same terms, covenants and conditions set forth herein (the "Renewal Term"); provided (i) that this Lease is in full force and effect immediately prior to the date of the commencement of the Renewal Term and that the Tenant is not in default, beyond applicable cure periods, under any of the provisions of this Lease at the time option to renew is exercised by Tenant, (ii) that the Base Rent for the first year of the Renewal Term shall be increased by the percentage increase in the CPI (as defined hereinafter) during the period from October 1, 2007 to September 30, 2012, and the Base Rent for each lease year thereafter during the Renewal Term shall

increase by the percentage increase in the CPI (as defined hereinafter) during the preceding lease year, and (iii) the Common Area Maintenance Fee shall be subject to adjustment as provided in Section 8.1.1 The term "CPI" shall mean the Consumer Price Index published by the Bureau of Labor Statistics of the United States Department of Labor, U.S. City Average, All Items and Major Group Figures for Urban Wage Earners and Clerical Workers (1982-84 = 100), or if such index is not available, a comparable index selected by Landlord and Tenant which is published by a governmental institution or a nationally recognized publisher of statistical information.

2.1.2 Tenant's desire to renew this Lease for the Renewal Term set forth above shall be expressed, if at all, by delivery of written notice (the "Renewal Notice") to Landlord no later than 240 days prior to expiration of the initial term. Time shall be of the essence with respect to Tenant's Renewal Notice.

2.2 Extension By Mutual Consent. If Tenant lawfully occupies the Premises after the end of the Term or the Renewal Term, after having requested and obtained Landlord's written consent to do so, this Lease and all its terms, provisions, conditions, covenants, waivers, remedies and any and all of Landlord's rights herein specifically given and agreed to, shall be in force for one month thereafter and thereafter from month-to-month until either party gives the other thirty (30) days written notice of its desire to terminate this Lease.

2.3 Surrender. At the expiration of this Lease (including any renewal or extension) or the sooner termination thereof, Tenant shall surrender the Premises to Landlord, together with all additions, alterations and improvements thereto, in broom clean condition and in good order and repair except for ordinary wear and tear, casualty damage not caused by Tenant, and Landlord's maintenance obligations. Nothing herein, however, shall prohibit Tenant from removing any of its computers, voice and data network components, phone system components, phone switch, TV's and other video equipment, satellite antennae, office equipment, furniture, office supplies, storage racks compressors, vacuum, wastewater and manufacturing equipment and other personal property (collectively "Tenant Equipment") in accordance with the terms of this Lease. Tenant shall repair any damage to the Premises caused by the removal of such Tenant Equipment. Any Tenant Equipment not removed by Tenant as permitted herein shall be deemed abandoned thirty (30) days after the expiration or earlier termination of the Lease, and may be stored, removed and disposed of by Landlord in its discretion, and Tenant waives all claims against Landlord for any damages resulting from Landlord's retention or disposal of same. Tenant shall be entitled to no payment or offset for the value of any abandoned property (even if sold by Landlord) and Tenant shall pay on demand all reasonable costs incurred by Landlord in connection with such removal or disposal. No retention, disposal or sale of such abandoned property shall limit remedies otherwise available to Landlord hereunder for a breach of this Agreement by Tenant. All obligations of Tenant hereunder not fully performed as of the termination or expiration of the Lease shall survive such termination or expiration, until they are performed.

2.4 Holding Over. If Tenant occupies the Premises beyond the Term of this Lease or the properly exercised Renewal Term, without Landlord's written consent (a "Hold Over"), Tenant shall be deemed to occupy the Premises as a tenant at sufferance, and all of the terms and provisions of this Lease shall be applicable during that period, except that Tenant shall pay Landlord a rental equal to one hundred twenty-five percent (125%) of the monthly Base Rent applicable hereunder at the expiration of the Term or applicable Renewal Term, prorated for the number of days of such holding over. If Tenant refuses to vacate, Landlord

may institute a forcible detainer or similar action against Tenant or any other party in possession of the Premises or pursue any other remedy available at law or in equity.

3. PAYMENT OF RENT

3.1 Payment; Proration.

3.1.1 Payment. Beginning on the Commencement Date and for each month thereafter until September 30, 2007, Tenant shall pay to Landlord base rent for the Premises ("Base Rent") in advance, without demand or set-off, in the amount of Fifteen Thousand Six Hundred Fifty Dollars ($15,650), based on an annual rent of $6.00 per sq. ft., on or before the first day of each successive calendar month during the Term in lawful money of the United States of America, without prior notice or demand, at such place or places as may be designated in writing from time to time by Landlord. Beginning on October 1, 2007 for each of the next 59 calendar months thereafter, the Tenant shall pay to Landlord Base Rent for the Premises in advance, without demand or set-off, in the amount of Thirty-Three Thousand Nine Hundred Eight and 33/100 Dollars ($33,908.33), based on an annual rent of $13.00 per sq. ft., on or before the first day of each successive calendar month during the Term in lawful money of the United States of America, without prior notice or demand, at such place or places as may be designated in writing from time to time by Landlord. In addition to the Base Rent for the Premises, Tenant shall pay to Landlord a Utilities Fee and a Common Area Maintenance Fee for the Premises as indicated in Sections 4 and 8.1.1. The Tenant's proportionate share of the real estate taxes on the Premises have been included in the Base Rent, and the payment of the real estate taxes for the Property and the Building, of which the Premises are a part, shall be the sole responsibility of Landlord.

3.1.2 Proration. In the event that the date on which a payment obligation: (i) begins on a date other than the first day of a calendar month; or (ii) ends on a date other than the last day of a calendar month then the amount of the payment shall be prorated, based upon the number of days during said month that the obligation was effective.

3.1.3. Deposit. The Tenant shall pay the Landlord $10,000, at the time of signing this Lease, as deposit against damages, unpaid bills, and future lease payments. Landlord shall refund the deposit within 60 days of Tenant vacating the Building less any charges for damage, unpaid bills, or unpaid lease payments.

3.1.4 Letter of Credit. In addition to the required deposit, the Tenant shall cause to be put in place within five (5) business days following written notice from Landlord that construction of the improvements shown on Exhibit C and Exhibit D is ready to commence and shall remain continuously in place until the fifth anniversary of the Commencement Date, unless otherwise provided herein or agreed by the Landlord, a letter of credit issued by a Bank in the area that is acceptable to the Landlord in the amount of Four Hundred Sixty Nine Thousand Five Hundred Dollars ($469,500), against which the Landlord may draw upon the occurrence of an Event of Default, as defined in Section 13.1, by Tenant under this Lease (the "Letter of Credit"). Landlord agrees that the Letter of Credit may be issued and renewed on an annual basis; provided that in the event Tenant fails to provide Landlord with a renewal Letter of Credit within ten (10) days prior to the termination of any then existing Letter of Credit, an Event of Default as defined in Section 13.1 shall be

deemed to have occurred. The Letter of Credit shall be provided in a satisfactory form to the Landlord and be governed by the "Uniform Customs and Practices for Commercial Documentary Credits" promulgated by the XIII Congress of the International Chamber of Commerce (International Chamber of Commerce Brochure No. 500, 1993 revision) and the provisions of the Uniform Commercial Code-Letters of Credit—Title 8.5 of the Code of Virginia, 1950, as amended. The Landlord agrees that so long as the Tenant is in good standing with the Lease, the amount of the Letter of Credit shall automatically be reduced at each anniversary of the Commencement Date by the amount of Ninety Two Thousand One Hundred Dollars ($92,100), provided the Letter of Credit shall automatically terminate on the fifth anniversary of the Commencement Date.

4. UTILITIES Landlord shall be responsible for providing water, sewer, electricity and natural gas to the Premises and shall promptly pay all costs and expenses associated therewith. Tenant shall be responsible for obtaining, and paying for directly, telephone, internet and all other utilities and services desired by the Tenant in connection with the Premises not provided by Landlord under this Lease. In the event that any of the utilities provided by Landlord are interrupted or stopped by the action or inaction of Landlord, its employees, agents or contractors, Landlord shall, upon notice from Tenant, immediately notify the affected utility company and use its best efforts to cause repairs to be commenced. In the event that there is a utility interruption or stoppage for more than one (1) business day, the Base Rent due hereunder shall be abated until such interruption or stoppage is corrected. In addition to the Base Rent, the Tenant shall pay Tenant's Proportionate Share of the utilities provided by Landlord (the "Utility Fee"). For the first six months following the Commencement Date, Tenant shall pay $3,390.83 per month based on an annual Utility Fee equal to $1.30 per square foot. At the end of the six month period following the Commencement Date (the "Reallocation Date"), the Landlord shall determine the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the six month period and shall provide Tenant with a copy of readings and costs to Tenant. In the event the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the six month period exceeds the $1.30 per square foot amount, Tenant shall pay Landlord the difference within thirty (30) days following Tenant's receipt of evidence of the difference. In the event the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the six month period following the Commencement Date is less than the annual $1.30 per square foot amount, Landlord shall reimburse Tenant the difference within thirty (30) days following Landlord's determination that the amount is less. For the twelve (12) month period following the Reallocation Date, Tenant shall pay a Utility Fee based on the monthly average during the preceding six month period. At the end of the twelve (12) month period, Tenant shall pay to Landlord any increase in the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period or Landlord shall reimburse Tenant the decrease in the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period. For each twelve month (12) month period thereafter, Tenant shall pay a monthly Utility Fee based on the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period. At the end of each period, Landlord shall determine the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period, and either Tenant shall pay to Landlord any increase in the actual amount of Tenant's Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period or Landlord shall reimburse Tenant the decrease in the actual amount of Tenant's

Proportionate Share of the water, sewer, electric, and natural gas utility usage provided by Landlord during the preceding twelve (12) month period. It is acknowledged and agreed by Landlord that Tenant shall not share in the cost and expense of the water, sewer, electric and natural gas utility usage which is separately metered to any other tenant in the Building.

5. USE

5.1 Tenant agrees that it will use and occupy the Premises as a manufacturing, research and development facility and for such other lawful purposes as may be incident thereto and for no other purpose without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed. Tenant shall comply with all governmental laws, rules, ordinances and regulations applicable to its particular use of the Premises, and promptly comply with all governmental orders and directives for the correction and abatement of nuisances in or upon the Premises caused by Tenant, all at Tenant's sole expense. Tenant recognizes and agrees that Landlord is making no warranties, expressed or implied, as to the suitability of the Premises for any particular use.

5.2 Landlord represents and warrants that it has not and will not, during the Term of this Lease, enter into an agreement which limits Tenant's ability to use the Premises for the uses set forth in Section 5.1, except by operation of law.

6. ALTERATIONS

6.1 Tenant shall not make any alterations, additions or improvements to the Premises, except for non-structural alterations that cost less than $50,000 per project without the prior written consent of Landlord, which shall not be unreasonably withheld, conditioned or delayed. Tenant, at its own cost and expense, may erect shelves, bins, machinery and trade fixtures as it desires provided that (a) such items do not alter the basic character of the Premises or the Building; (b) such items do not overload or damage the same; (c) such items may be removed without material injury to the Premises; and (d) the construction, erection or installation thereof complies with all applicable governmental laws, ordinances, regulations and all provisions of this Lease. All alterations, additions, improvements and partitions erected by Tenant shall be and remain the property of Tenant during the Term of this Lease and shall be the property of Landlord upon the expiration or earlier termination of this Lease provided that nothing herein shall prohibit Tenant from removing the Tenant Equipment or other items, in accordance with Section 2.3, above. All shelves, bins, machinery and trade fixtures installed by Tenant shall be removed in accordance with Section 2.3 within 30 days following the expiration or earlier termination of this Lease, at which time Tenant shall repair any damage caused thereby, ordinary wear and tear excepted. All alterations, installations, removals and restoration shall be performed in a good, workmanlike and lien free manner.

6.2 Mechanics Liens. Tenant shall promptly pay all contractors and material men, and will use reasonable commercial efforts to prevent any lien from attaching to the Premises or any part thereof. If any lien is filed purporting to be for labor or material furnished or to be furnished at the request of Tenant, Tenant shall do all acts necessary to discharge such lien within twenty (20) days of filing; or if Tenant desires to contest any lien, then Tenant shall bond off the lien. In the event Tenant fails to discharge the lien or fails to pay any lien claim after entry of final judgment in favor of the claimant, Landlord shall have the right to expend

all sums reasonably necessary to discharge the lien claim, and Tenant shall pay all sums expended by Landlord in discharging said lien, including reasonable attorney's fees within thirty (30) days of receipt of the invoice. Tenant has no express or implied authority to create or place any lien or encumbrance of any kind upon, or in any manner to bind the interest of Landlord in the Premises or to charge the rentals payable hereunder for any claim in favor of any person dealing with Tenant, including, without limitation, those who may furnish materials or perform labor for any construction or repairs requested by Tenant.

7. SIGNAGE Tenant shall not place or permit on any exterior door or window or any exterior wall of the Premises any sign, awning, canopy, advertising matter or lettering or at the entrance to the Property without the written consent of the Landlord, which shall not be unreasonably withheld, conditioned or delayed. It shall not be unreasonable for Landlord to withhold its consent to the placement of any sign that does not comply with any federal, state or local law or ordinance.

8. MAINTENANCE

8.1 Tenant's Maintenance Responsibilities. Tenant shall at all times keep the Premises and all partitions, fixtures, equipment and appurtenances thereof and all parts of the Premises not required in Section 8.2 to be maintained by Landlord in good order, condition and repair, and in compliance with all applicable laws, rules, ordinances and regulations, damage by casualty excepted. If replacement of equipment, fixtures and appurtenances thereto are necessary, Tenant shall replace the same with equipment, fixtures and appurtenances of the same quality, and shall repair all damages done in or by such replacement.

8.1.1 Common Area Maintenance Fee: Tenant shall pay, in addition to the Base Rent, a fixed monthly fee in the amount of $912.91, based on an annual charge of $0.35 per sq. ft, to cover the cost incurred by Landlord to maintain the common areas (which includes all restrooms, hallways, conference rooms, cafeteria, shipping and other common areas in the Building designated on Exhibit A) and exterior areas of the Building in good condition and repair, including snow removal from sidewalks and parking lots, landscaping, and grass cutting (the "Common Area Maintenance Fee"). In the event Tenant elects to renew the term of this Lease, Landlord shall provide Tenant written evidence showing the actual costs paid by Landlord to maintain the common and exterior areas of the Building for the twelve month period preceding the first day of the Renewal Term. The Common Area Maintenance Fee to be paid annually by Tenant during the Renewal Term shall be adjusted to equal Tenant's Proportionate Share of the actual costs paid by Landlord to maintain the common and exterior areas of the Building for the twelve month period preceding the first day of the Renewal Term, provided that the Common Area Maintenance Fee for the Renewal Term shall not exceed an annual charge of $0.45 per sq. ft.

8.2 Landlord's Maintenance Responsibilities. Landlord shall provide and keep or cause to be kept, at Landlord's sole cost and expense, the HVAC, electrical, and plumbing systems (including any portion of the systems and the equipment related thereto located within the Premises) and all structural portions of the Building, including without limitation, the foundation, roof, and all load bearing and exterior walls, in good order, condition and repair, except for damage thereto due to the negligence of Tenant, Tenant's employees or invitees. The term "exterior walls" as used herein shall include windows, glass or plate glass, doors or overhead doors, special store fronts, dock bumpers and dock plates or levelers. Landlord shall keep or cause to be kept the parking area(s), and sidewalks in good order, condition and repair; provided Tenant shall be

responsible for repairing any damage caused by Tenant, its employees or invitees. Tenant shall immediately give Landlord written notice of defect or need for repairs, after which Landlord shall commence such repairs as soon as reasonably practicable.

If the parties so agree, Tenant may perform any maintenance or repair that is Landlord's responsibility hereunder, and Landlord shall pay the cost for the maintenance or repair within thirty (30) days following receipt of an invoice from the Tenant.

8.3 Landlord's Failure to Make Repairs. If Landlord fails to commence any repair as required under Section 8.2 within ten (10) days after notification of the need for such repair, and fails to complete such repairs within a reasonable period of time, Tenant may, in addition to any other remedies it may have, make such repairs at the expense of Landlord and Landlord shall pay to Tenant all costs and expenses reasonably incurred as a result of such repairs within thirty (30) days of receipt of invoice thereof. In the event of a bona fide emergency which may result in damage or injury to persons or Tenant's property, damage which has a material impact on Tenant's ability to conduct business as contemplated under this Agreement, or damage which otherwise exposes Tenant (in Tenant's reasonable judgment) to liability, Tenant may, unless Landlord commences and diligently pursues such repairs within five (5) days after receipt of written notice (or such shorter period as would reasonably be expected under the given circumstances), make such repairs on behalf of Landlord and Landlord shall pay to Tenant all costs and expenses reasonably incurred in making such repairs within thirty (30) days of receipt of invoice thereof.

9. ASSIGNMENT AND SUBLETTING

9.1 Assignment or Subletting by Tenant. Tenant shall not, either voluntarily or by operation of law, assign, transfer, mortgage, pledge, hypothecate or encumber this Lease, or any interest therein, and shall not sublet the Premises, or any part thereof, without obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. In connection with any such assignment or sublease, Tenant or the assignee or subtenant of Tenant shall pay to Landlord any legal and administrative costs incurred by Landlord in approving such assignment or subletting, not to exceed $750.00. The acceptance of rent from any other party shall not be deemed to be a waiver of any of the provisions of this Lease, or deemed consent to the assignment or subletting of the Premises. Consent to any assignment or subletting shall not be deemed consent to any future assignment or subletting. Notwithstanding the foregoing, Tenant shall have the absolute right (without obtaining Landlord's prior written consent which shall not be required) to assign this Lease in whole or in part or to sublet all or any portion of the Premises to: any affiliate controlling, controlled by or under common control with Tenant; an entity into which Tenant merges or consolidates; or to a purchaser of all or substantially all of the assets of Tenant, if the assignee or sublessee agrees, in writing delivered to Landlord, to abide by all the provisions under this Lease.

9.2 Assignment by Landlord. Landlord may assign this Lease, in whole or in part, without the prior written consent of Tenant, provided that such assignment does affect or impair the rights granted to Tenant herein, or adversely affect Tenant's possession of the Premises. Notwithstanding the foregoing, if this Lease is assigned, in whole or in part, by The Industrial Development Authority of Montgomery County,

Virginia, any subsequent assignment of this Lease, in whole or in part, shall require the prior written consent of Tenant.

9.3 Assignment pursuant to Provision of the Bankruptcy Code. If this Lease is assigned to any person or entity pursuant to the provisions of the Bankruptcy Code (11 U.S.C. sec. 101 et seq), any and all monies or other considerations payable or otherwise to be delivered in connection with such assignment shall be paid or delivered to the Landlord and shall be and remain the exclusive property of the Landlord and shall not constitute the property of the Tenant or the estate of the Tenant, within the meaning of the Bankruptcy Code.

10. RIGHT OF ENTRY Landlord, its employees and agents, shall have the right to enter the Premises with a designated representative of Tenant upon reasonable notice during regular business hours for the purpose of examining or inspecting the same, showing the same to prospective purchasers, mortgagees or tenants of the Premises, and to perform its maintenance obligations under Section 8.2, above. In the case of a bona fide emergency, Landlord shall use its best efforts to provide Tenant with the greatest possible notice under the circumstances prior to entering the Premises and in the event that representatives of Tenant are not present to accompany Landlord or to open and permit entry into the Premises during the course of a bona fide emergency, then Landlord may enter the Premises forcibly and without being accompanied by a representative of Tenant without such entry constituting an eviction of Tenant or termination of this Lease. Except in the case of a bona fide emergency, Landlord, its employees and agents shall abide by all reasonable security and safety procedures established for the Premises by Tenant.

11. INSURANCE

11.1 Landlord's Obligations. Throughout the Term of this Lease, including any renewals or extensions thereof, Landlord shall maintain the following insurance coverage: (i) standard all risk coverage in an amount equal to the replacement cost of the Building; (ii) Commercial General Liability of not less than $1,000,000 per occurrence and $2,000,000 aggregate, naming Tenant as an additional insured; (iii) boiler insurance with coverage and in an amount reasonably satisfactory to Tenant: and (iv) at Landlord's discretion, such other insurance policies as may be deemed normal and customary for substantially similar buildings, including but not limited to coverage for loss of rent. All insurance coverage shall be primary and non-contributory and issued by insurers licensed to do business in the state in which the Premises are located. The insurance required of Landlord hereunder may be maintained by a blanket or master policy, which includes properties other than the Premises.

11.2 Tenant's Obligations.

11.2.1 Tenant shall keep in effect at Tenant's expense during the term of this Lease: (i) all risk property insurance covering the full replacement cost of Tenant's Equipment and all other property and improvements installed or placed in the Premises by Tenant at Tenant's expense; (ii) worker's compensation insurance with no less than the minimum limits required by law; (iii) employer's liability insurance with such limits as required by law; and (iv) commercial general liability insurance with a minimum limit of $1,000,000 per occurrence and $2,000,000 aggregate. All such policies and coverage shall be primary and non-contributory, issued by insurers, licensed to do business in the state in which the Premises are located and which are rated A- or better

by Best's Key Rating Guide, endorsed to include Landlord as additional insured (Commercial General Liability only), and endorsed to provide at least 30-days prior notification of cancellation or material change in coverage to said Landlord. Tenant may comply with its insurance obligations hereunder in whole or in part through a company-wide program of self-insurance and may maintain company-wide levels of deductibles provided the Tenant provides Landlord with an appropriate self-insurance certificate.

11.2.2 Fire and Casualty Insurance. Tenant shall not do or suffer to be done any act, matter or thing whereby the fire and casualty insurance carried by Landlord on the Building of which the Premises are a part shall be suspended or rated as more hazardous than at the commencement of this Lease. In case of breach of this covenant, Tenant agrees to pay, within thirty (30) days of receipt of written demand, any and all increase of premium for fire and casualty insurance carried by Landlord caused directly by the actions or occupancy of Tenant.

12. DAMAGE OR DESTRUCTION OF LEASED PREMISES

12.1 If the Premises are damaged by fire or any other cause which renders the Premises completely untenantable, in Tenant's reasonable determination, then Tenant by a notice in writing sent no later than thirty (30) days after such damage may terminate this Lease as of the date of such damage, and any Base Rent or other amounts for the unexpired period paid in advance beyond the date of such damage, shall be refunded by Landlord to Tenant and the original Letter of Credit shall be returned promptly to Tenant.

12.2 If Tenant does not elect to terminate this Lease as provided in Section 12.1 or if the Premises are not rendered completely untenantable, Landlord shall diligently commence restoration and restore the Premises to a condition equal to its condition before the damage; provided that Landlord's obligation to repair and restore the Premises is contingent upon its receipt of insurance proceeds sufficient to make such repairs. In the event any mortgagee or lender requires any insurance proceeds to be applied to any debt, Landlord shall not be deemed to have received the proceeds, in which event Tenant may terminate this Lease unless Landlord agrees to fund the repairs. If Landlord completes such repairs, then Tenant shall promptly repair or replace its trade fixtures, furnishings, furniture, carpeting, wall covering, floor covering, drapes and equipment to the same condition as they were in immediately prior to the casualty. The Base Rent and other amounts owed hereunder, according to the extent that such damage and its repair shall interfere with the full enjoyment and use of the Premises, shall be suspended and abated from the date of such damage until Landlord's repairs have been completed. In the event that the Premises have not been restored to a condition equal to their condition before the damage within ninety (90) days after Landlord's receipt of the proceeds, then Tenant may, by a notice in writing sent prior to completion of restoration, terminate this Lease as of the date of such termination, and any Base Rent or other amounts for the unexpired period paid in advance beyond the date of such damage, shall be refunded by Landlord to Tenant and the original Letter of Credit shall be returned promptly to Tenant.

13. REMEDIES OF LANDLORD UPON TENANT'S DEFAULT

13.1 Tenant's Default Defined. The following shall be considered an "Event of Default" and a breach of this Lease: (a) any failure of Tenant to pay any Base Rent, the Utility Fee, the Common Area Maintenance Fee, the money in the excess of the Up-fit Allowance or other amounts due hereunder for more than five (5) business days after receipt of written notice of non-payment; (b) any failure by Tenant to perform

or observe any of the other terms, provisions, conditions and covenants of this Lease for more than thirty (30) days after receipt of written notice of such failure provided, however, that if the event for which the notice is given is of a nature that may not be reasonably cured within said thirty (30) day period, Tenant shall not be in default for so long as Tenant commences to cure the default within the thirty (30) day period and diligently pursues it to conclusion; (c) Tenant files a voluntary or involuntary petition in bankruptcy which is not dismissed within thirty (30) days of the filing or makes a general assignment for the benefit of its creditors; (d) a receiver of any property of Tenant in or upon the Premises is appointed in any action, suit, or proceeding by or against Tenant and such appointment shall not be vacated or annulled within sixty (60) days; or (e) this Lease, Tenant's interest herein or in the Premises, any improvements thereon, or any property of Tenant is executed upon or attached.

13.2. Landlord's Remedies. Upon the occurrence of any Event of Default specified in Section 13.1, Landlord, in addition to all other rights or remedies Landlord may have for such default at law or in equity, shall have the right to pursue any one or more of the following remedies.

13.2.1 Terminate this Lease and, without prejudice to any other remedy which it may have for possession or arrearages in Base Rent or other amounts owed hereunder, enter upon and take possession of the Premises by summary dispossession proceedings or any other method authorized by law and recover from Tenant through the Deposit money paid pursuant to Paragraph 3.1.3 and/or the Letter of Credit provided pursuant to Paragraph 3.1.4 or by other legal means: (i) all Base Rent and other amounts due and unpaid up to the time of re-entry; (ii) the costs of repairing or otherwise putting the Premises into the condition required by this Lease; and (iii) Tenant shall continue to be liable to pay the Base Rent and other amounts owed hereunder as they become due, reduce by Landlord's net re-letting proceeds.

13.2.2 Without terminating this Lease, enter upon and take possession of the Premises, by summary dispossession proceedings or any other remedy authorized by law and re-let the Premises, or any part thereof, for such term or terms (which may extend beyond the term of this Lease), for the highest rent reasonably obtainable (even if such rent is below market value) and to recover from Tenant the difference between the Base Rent reserved by this Lease and the amount obtained through such re-letting plus the following costs, if reasonably incurred by Landlord in such re-letting: (a) brokerage fees and/or leasing commissions; (b) the costs of removing and storing Tenant's or any other occupant's property; and (c) the costs of repairing or otherwise putting the Premises into the condition required by this Lease together with the costs of alterations reasonably necessary to re-let the Premises. No such re-letting shall relieve Tenant from its obligations hereunder. In no event shall Tenant be entitled to any excess rent obtained by re-letting the Premises over and above the Base Rent reserved herein.

13.3 If the Tenant shall continue in default in the performance of any of the covenants or agreements herein contained, after any applicable cure period, Landlord may perform the same for the account of Tenant. Any amount incurred by Landlord in the performance of any such matter for the account of Tenant shall be payable by Tenant to Landlord within thirty (30) days after written demand and evidence that the same has been paid.

13.4 No re-entry or taking possession of the Premises by Landlord shall be construed as an election to terminate this Lease unless Landlord sends a written notice of termination to Tenant. Pursuit of any of the

foregoing remedies shall not preclude pursuit of any of the other remedies herein provided or any other remedies provided by at law or in equity, nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any Base Rent, or other amounts due to Landlord hereunder or of any damages accruing to Landlord.

14. REMEDIES OF TENANT UPON LANDLORD'S DEFAULT

14.1 Landlord shall be in default of this Lease (a "Landlord Default") if it shall fail to perform any duty or obligation imposed upon it by this Lease and such failure shall continue for a period of thirty (30) days after written notice, provided, however, that if the event for which the notice is given is of a nature that may not reasonably be performed within said thirty (30) day period, Landlord shall not be in default for so long as Landlord commences its performance within said thirty day period and diligently pursues it to conclusion. Upon the occurrence of a Landlord Default, Tenant, in addition to all other rights or remedies Tenant may have for such default at law or in equity, shall have the right to exercise any self-help measures as may be reasonably necessary to cure such default. Landlord shall reimburse any costs and expenses incurred by Tenant in order to cure a Landlord Default within thirty (30) days after written demand and evidence that the same has been paid. In addition, if Landlord fails to cure any default within thirty (30) days after receiving written notice of the default, Tenant shall have the right, upon written notice to Landlord, to terminate this Lease without penalty or further obligation to Landlord, its employees, officers, agents or lenders.

14.2 All obligations of Landlord under this Lease will be deemed binding upon Landlord only during the period of its ownership of the Premises and not thereafter; provided that Landlord or any subsequent owner of the Premises shall not be released from any liability arising under this Lease during such parties' ownership of the Premises.

15. EMINENT DOMAIN In the event that the Premises, in whole or in part, are taken by paramount governmental authority or in any way condemned or appropriated by the exercise of the right of eminent domain or a deed or conveyance in lieu of eminent domain (each a "Taking") such that Tenant's is unable to use the Premises for the purposes set forth herein, Tenant shall have the right, at its option, within sixty (60) days after said Taking, to terminate this Lease upon thirty (30) days written notice to the Landlord. In the event Tenant elects to terminate the Lease, the Base Rent and other amounts owed under this Lease shall be abated from the date of the Taking, and Tenant's liability therefore will cease as of the date of such termination, and any prepaid Base Rent or other amounts shall be returned to Tenant, along with the original Letter of Credit. If this Lease is not terminated as provided in this Section 15 then it shall continue in full force and effect (provided no Base Rent or other amounts shall be owed by Tenant until the remainder of the Premises are restored, however, Tenant shall pay prorata Base Rent on any space Tenant occupies prior to the restoration of the Premises), and Landlord shall within a reasonable time after possession is physically taken by the condemning authority restore the remaining portion of the Premises to render it reasonably suitable for the uses permitted by this Lease and the Base Rent and other amounts owed hereunder shall be proportionately and equitably reduced. If the proceeds received in connection with the Taking are not sufficient to restore the remaining portion of the Premises to render it suitable for the uses permitted by this Lease and the Landlord is unwilling to pay the difference, Tenant may terminate this Lease. In the event any mortgagee or lender requires that all or any portion of the proceeds received from the condemning authority be applied to any debt, Landlord will not be deemed to have received such proceeds. All compensation awarded in connection with or

as a result of a Taking shall be the property of the Landlord, except that Tenant may apply for and keep as its property a separate award for: (i) the value of Tenant's leasehold interest; (ii) the value of Tenant Equipment or Tenant's trade fixtures or personal property; (iii) Tenant's moving expenses; (iv) Tenant's business relocation expenses; and (v) damages to Tenant's business incurred as a result of such Taking.

16. SUBORDINATION OF LEASE

16.1 This Lease is and shall remain subordinate and subject to any mortgage or mortgages or deed of trust which are now, or at any time hereafter shall be placed, upon the interest of Landlord in the Premises or any part thereof or to any assignment of the interest of Landlord in this Lease; provided that the holder thereof shall execute and deliver to Tenant a non-disturbance agreement in form reasonably acceptable to Tenant. Tenant agrees to execute and deliver to Landlord, without cost, any instrument that may be deemed necessary by Landlord to further effect the subordination of this Lease to any such mortgage, mortgages or assignments in form reasonably acceptable to Tenant.

16.2 In the event of a foreclosure of any such mortgage, Landlord and Tenant hereby agree that this Lease shall not terminate by reason thereof, and Tenant further agrees to recognize as Landlord hereunder the mortgagee or purchaser at a foreclosure sale for the balance of the Term, the Renewal Term or an extension of either, subject to all the terms and provisions hereof; provided, however, that any such mortgagee or purchaser at a foreclosure sale, which shall become the Landlord hereunder, shall not be:

(a) liable for acts or omissions of Landlord occurring prior to its ownership of the Premises (but such mortgagee or purchaser shall perform any unperformed obligations under this Lease existing at the time it becomes Landlord);

(b) subject to any offsets or defenses which Tenant might have against Landlord that accrue prior to its ownership of the Premises, except as provided in this Lease;

(c) bound by any Base Rent or other amounts which Tenant may have paid to Landlord more than thirty days in advance (other than the security deposit); or

(d) bound by any amendment or modifications of said Lease made after Tenant receives written notice of such foreclosure.

17. ESTOPPEL CERTIFICATE Either party shall, at any time and from time to time within twenty (20) days following receipt of written request from the other party, execute, acknowledge and deliver to the requesting party a written statement certifying that this Lease is in full force and effect and unmodified (or, if modified, stating the nature of such modification), certifying the date to which the Base Rent reserved hereunder has been paid, and certifying that there are not, to the responding party's knowledge, any uncured defaults on the part of the party requesting the certificate, or specifying such defaults if any are claimed. Such a statement may be relied upon by any prospective purchaser, mortgagee or subtenant of all or any portion of the Premises. The responding party's failure to deliver such statement within said twenty-day period shall be conclusive upon such party that this Lease is in full force and effect and unmodified, and that there are no uncured defaults in the requesting party's performance hereunder.

18. RULES AND REGULATIONS Tenant and Tenant's agents, employees and invitees shall faithfully observe and comply with all reasonable, uniform rules and regulations promulgated by Landlord from time to time for the safety, care or cleanliness of the Premises and for the preservation of good order therein, provided that such rules and regulations do not materially increase Tenant's duties or obligations under this Lease. In the event of any conflict or inconsistency between the terms and conditions of this Lease and any rules and regulations promulgated by Landlord, the conflict or inconsistency shall be resolved by giving precedence to the terms and conditions of this Lease.

19. QUIET ENJOYMENT Landlord represents and warrants that it has the authority to enter into this Lease. Landlord further represents, warrants and covenants that so long as Tenant pays all amounts due hereunder and performs all other material covenants and conditions of this Lease to be performed by the Tenant hereunder, Landlord and its successors and assigns shall not interfere, nor permit interference, with Tenant's quiet use and enjoyment of the Premises and that, subject to the terms and conditions of this Lease, Tenant shall peaceably and quietly have, hold and enjoy the Premises for the Term hereof.

20. ENVIRONMENTAL MATTERS

20.1 Definitions.

20.1.1 For purposes of this Lease, the term "Environmental Laws" shall mean any and all federal, state, or local laws, statutes, rules, regulations, ordinances, or judicial or administrative decrees or orders relating to: (i) health, safety or environmental protection; (ii) the emissions, discharges, releases or threatened releases of pollutants, contaminants or toxic or hazardous materials into the environment (including, without limitation, ambient air, surface water, ground water or subsurface strata); or (iii) the use, storage, treatment, transportation, manufacture, refinement, handling, production or disposal of, or exposure to pollutants, contaminants or toxic or hazardous materials, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC 9601 et seq. ("CERCLA"), as amended and judicially and administratively interpreted through the date hereof, and all regulations promulgated thereunder as of such date.

20.1.2 For purposes of this Lease, the term "Hazardous Substance" shall mean: (i) any products, materials, solvents, elements, compounds, chemical mixtures, contaminants, pollutants, or other substances identified as toxic or hazardous under CERCLA or any other Environmental Law; and (ii) the following substances: PCBs, gasoline, kerosene or other petroleum products, toxic pesticides and herbicides, volatile solvents, materials containing asbestos or formaldehyde and radioactive materials.

20.2 Tenant's Obligations.

20.2.1 Tenant shall not cause or knowingly permit any Hazardous Substance to be placed, stored, treated, released, spilled, transported or disposed of on, under, at or from the Premises in violation of any Environmental Laws. Nor will Tenant knowingly permit the Premises to be used or operated in a manner

that may cause the Building, or any part thereof, to be contaminated by any Hazardous Substance in violation of any Environmental Laws.

20.2.2 Tenant shall contain at or remove from the Premises or perform any other remedial action regarding any Hazardous Substance placed, held, located, released, spilled, transported or disposed of on, under, at or from the Premises by Tenant, its employees, agents or contractors, at Tenant's sole cost and expense, if, and when such containment, removal or other remedial action is required under any Environmental Law, and shall perform such containment, removal or other remediation in compliance with all Environmental Laws.

20.2.3 Tenant shall provide Landlord with written notice (and a copy as may be applicable) within ten (10) business days after Tenant obtains actual knowledge of any of the following: (a) any governmental or regulatory actions instituted or threatened under any Environmental Law affecting the Tenant or the Premises, (b) all claims made or threatened by any third party against Tenant or the Premises relating to damage, contribution, cost recovery, compensation, loss or injury resulting from any Hazardous Materials, (c) the discovery of any occurrence or condition on any real property adjoining or in the vicinity of the Premises that could cause the Premises or Property to be classified in a manner which may support a claim under any Environmental Law, and (d) the discovery of any Hazardous Substance on, under, at or from the Premises not authorized or permitted under Environmental Laws.

20.2.4 In addition to Tenant's general indemnification obligations set forth in Section 21 below, Tenant shall defend all actions against Landlord and pay, protect, indemnify and save harmless Landlord from and against any and all liabilities, losses, damages, costs, expenses (including, without limitation, reasonable attorney fees and expenses), causes of action, suits, claims, demands or judgments of any nature arising from Tenant's failure to comply with this Section 20. The indemnity contained in this Section 20.2.4 shall survive the expiration or earlier termination of this Lease indefinitely with respect to the obligations and liabilities of Tenant under Section 20.2, actual or contingent, which have arisen on or prior to such expiration or earlier termination.

20.3 Landlord's Obligations.

20.3.1 In addition to Landlord's general indemnification obligations set forth in Section 21 below, Landlord shall, to the extent permitted by law, defend all actions against Tenant and pay, protect, indemnify and save harmless Tenant from and against any and all liabilities, losses, damages, costs, expenses (including, without limitation, reasonable attorney fees and expenses), causes of action, suits, claims, demands or judgments of any nature arising out of or relating to: (i) emissions, discharges, releases or threatened releases of pollutants, contaminants or Hazardous Substances into the environment (including, without limitation, ambient air, surface water, ground water or subsurface strata) or exposure to such Hazardous Substances on, at, under, or from the Premises, or any real estate contiguous thereto, which were caused by Landlord, its employees, agents or contractors; (ii) the use, storage, treatment, transportation, manufacture, refinement, handling, production or disposal of pollutants, contaminants or Hazardous Substances on, under, at or from the Premises, or any real estate contiguous thereto, by Landlord, its employees, agents or contractors; and (iii) any actual or alleged violation of any Environmental Law on, under, at or arising from the Premises, or any real estate contiguous thereto, by Landlord, its employees, agents or contractors. The indemnity contained

in this Section 20.3.1 shall survive the expiration or earlier termination of this Lease indefinitely with respect to the obligations and liabilities of Landlord under Section 20.3, actual or contingent, which have arisen on or prior to such expiration or earlier termination.

20.3.2 Landlord represents to Tenant that as of the Commencement Date Landlord has no knowledge that: (i) the Premises, the Building and the ground under them and the Property are contaminated by any Hazardous Substances; (ii) all or any portion of the Premises has, at any time, been used for the treatment, storage, or disposal of any Hazardous Substances; (iii) Hazardous Substances are (or have been) used, generated or disposed of on or about the Premises, except in compliance with all applicable Environmental Laws; and (iv) any part of the Premises or surrounding common areas are on any governmental list of contaminated properties, or of any investigation, administrative order or notice, consent order, or agreement for litigation pertaining to the Building or the Property.

21. WAIVER; INDEMNIFICATION

21.1 Waiver. EXCEPT AS OTHERWISE SET FORTH IN THIS LEASE, NEITHER PARTY OR ITS AGENTS OR EMPLOYEES, SHALL BE LIABLE TO THE OTHER PARTY OR ANY PERSON CLAIMING THROUGH THAT PARTY FOR ANY EXEMPLARY, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS) FOR ANY CAUSE WHATSOEVER, EXCEPT CLAIMS CAUSED BY OR RESULTING FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THAT PARTY, ITS AGENTS, CONTRACTORS OR EMPLOYEES.

21.2 Tenant's Indemnity. Except to the extent caused by the breach of this Lease by Landlord or the acts or omissions of Landlord, its officers, agents, employees, contractors, or any other person or entity for whom Landlord is legally responsible, Tenant shall defend, indemnify and hold Landlord and its officers, directors, shareholders, employees, agents and representatives harmless from and against any and all claims, demands, litigation, settlements, judgments, damages, liabilities, costs and expenses (including without limitation reasonable attorneys' fees) arising directly or indirectly out of: (i) any act or omission of Tenant, its officers, agents, employees, contractors, or any other person or entity for whom Tenant is legally responsible; or (ii) a breach of any representation, warranty or covenant of Tenant contained or incorporated in this Lease. Tenant's obligations under this Section 21.2 shall survive the expiration or earlier termination of this Lease for a period of eighteen months.

21.3 Landlord's Indemnity. Except to the extent caused by the breach of this Lease by Tenant or the acts or omissions of Tenant, its officers, agents, employees, contractors, or any other person or entity for whom Tenant is legally responsible, and to the extent permitted by law, Landlord shall defend, indemnify and hold Tenant, its officers, directors, shareholders, employees, agents and representatives harmless from and against any and all claims, demands, litigation, settlements, judgments, damages, liabilities, costs and expenses (including without limitation reasonable attorneys' fees) arising directly or indirectly out of: (i) any act or omission of Landlord, its officers, agents, employees, contractors or any other person or entity for whom Landlord is legally responsible; or (ii) a breach of any representation, warranty or covenant of Landlord contained or incorporated in this Lease. Landlord's obligations under this Section 21.3 shall survive the expiration or earlier termination of this Lease for a period of eighteen months.

21.4 Indemnification Procedure. The party seeking indemnification (the "Indemnified Party") shall promptly notify in writing the party from whom indemnification is being sought (the "Indemnifying Party") of the claim or suit for which indemnification is sought. The Indemnified Party shall not make any admission as to liability or agree to any settlement of or compromise any claim without the prior written consent of the Indemnifying Party. The Indemnifying Party shall be entitled to have the exclusive conduct of and/or settle all negotiations and litigation arising from any claim and the Indemnified Party shall, at the Indemnifying Party request and expense, give the Indemnifying Party all reasonable assistance in connection with those negotiations and litigation.

22. MISCELLANEOUS

22.1 Force Majeure. Notwithstanding anything to the contrary in this Lease, neither party shall be liable to the other party for nonperformance or delay in performance of any of its obligations under this Lease, (except Tenant's obligation to pay Base Rent and other amounts owed hereunder) due to causes beyond its reasonable control, including without limitation strikes, lockouts, labor troubles, acts of God, accidents, technical failure, governmental restrictions, insurrections, riots, enemy act, war, civil commotion, fire, explosion, flood, windstorm, earthquake, natural disaster, or other casualty ("Force Majeure"). Upon the occurrence of a Force Majeure condition, the affected party shall immediately notify the other party with as much detail as possible and shall promptly inform the other party of any further developments. Immediately after the Force Majeure event is removed or abates, the affected party shall perform such obligations with all due speed. Neither party shall be deemed in default under this Agreement if a delay or other breach is caused by a Force Majeure event. Notwithstanding the foregoing, a proportion of the Base Rent and other amounts owed hereunder, according to the extent that such Force Majeure event shall interfere with the full enjoyment and use of the Premises, shall be suspended and abated from the date of commencement of such Force Majeure event until the date that such Force Majeure event subsides.

22.2 Affiliates. For purposes of this Lease, the term "Affiliate" shall mean, with respect to a party hereto, any other person or entity directly or indirectly controlling, controlled by or under common control with that party.

22.3 Successors and Assigns. The respective rights and obligations provided in this Lease shall bind and shall inure to the benefit of the parties hereto, their legal representative, heirs, successors and permitted assigns. No rights however, shall inure to the benefit of any assignee of Tenant, unless such assignment shall have been made in accordance with Section 9 above.

22.4 Brokers. Each party represents and warrants to the other that no person or entity has a claim or will claim any commission, finders fee or other amounts by, through, under or as a result of any relationship with such party because of this transaction. Landlord and Tenant each agree to defend, indemnify and hold the other party harmless from and against any and all claims, losses or damages, including without limitation reasonable attorney's fees arising out of or relating to any breach of such party's representations and warranties contained in this Section 22.4.

22.5 Governing Law and Construction. This Lease shall be construed, governed and enforced in accordance with the laws of the state in which the Premises are located. Landlord and Tenant acknowledge and agree that they and their counsel have reviewed, or have been given a reasonable opportunity to review, this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments hereto.

22.6 Person; Gender; Number. As used in this Lease, the word "person" shall mean and include, where appropriate, an individual, corporation, partnership or other entity; the plural shall be substituted for the singular, and the singular for the plural, where appropriate; and words of any gender shall mean to include any other gender.

22.7 Severability. If any provisions of this Lease shall be held to be invalid, void or unenforceable, the remaining provisions hereof shall in no way be affected or impaired and such remaining provisions shall remain in full force and effect.

22.8 Waiver. The failure of any party to insist upon strict performance of any provision of this Agreement shall not be construed as a waiver of any subsequent default or breach of the same or similar nature. All rights and remedies reserved to either party shall be cumulative and shall not be in limitation of any other right or remedy which such party may have at law or in equity.

22.9 Notice. Any notice to be given hereunder shall be in writing and shall be sent by facsimile transmission, or by first class certified mail, postage prepaid, or by overnight courier service, charges prepaid, to the party notified, addressed to such party at the following address, or sent by facsimile to the following fax number, or such other address or fax number as such party may have substituted by written notice to the other parties. The sending of such notice with confirmation of receipt thereof (in the case of facsimile transmission) or receipt of such notice (in the case of delivery by mail or by overnight courier service) shall constitute the giving thereof:

If to Landlord:	Industrial Development Authority of Montgomery County, VA. 755 Roanoke Street, Suite 2H Christiansburg, VA 24073 Attn: Industrial Development Authority Secretary/Treasurer Fax No.: (540) 381-6888
With a copy to:	County Attorney County of Montgomery, VA 755 Roanoke Street, Suite 2F Christiansburg, Virginia 24073 Fax No.: (540) 382-6943
If to Tenant:	Luna Innovations Incorporated 10 South Jefferson Street, Suite 130 Roanoke, Virginia 24011 Facsimile: (540) 951-0760

With a copy to: C. Cooper Youell, IV
Gentry Locke Rakes & Moore
P.O. Box 40013
Roanoke, VA 24022-0013
Facsimile: (540) 983-9477

22.10 Entire Agreement. This Agreement sets forth the entire, final and complete understanding between the parties hereto relevant to the subject matter of this Agreement, and it supersedes and replaces all previous understandings or agreements, written, oral, or implied, relevant to the subject matter of this Agreement made or existing before the date of this Agreement. Except as expressly provided by this Agreement, no waiver or modification of any of the terms or conditions of this Agreement shall be effective unless in writing and signed by both parties.

22.11 Compliance with Law. The parties shall comply with, and agree that this Agreement is subject to, all applicable federal, state, and local laws, rules and regulations, and all amendments thereto, now enacted or hereafter promulgated in force during the Term, a Renewal Term or any extension of either.

22.12 Counterparts. This Lease may be executed in any number of identical counterparts and, as so executed, shall constitute one agreement, binding on all the parties hereto, notwithstanding that all the parties are not signatories to the original or the same counterpart.

22.13 Remedies Cumulative. It is agreed that, except as expressly set forth in this Lease, the rights and remedies herein provided in case of default or breach by either Landlord or Tenant are cumulative and shall not affect in any manner any other remedies that the non breaching party may have by reason of such default or breach. The exercise of any right or remedy herein provided shall be without prejudice to the right to exercise any other right or remedy provided herein, at law, or in equity.

22.14 Attorneys' Fees. If an action is brought by either party for breach of any covenant and/or to enforce or interpret any provision of this Lease, the prevailing party shall be entitled to recover its costs, expenses and reasonable attorney's fees, both at trial and on appeal, in addition to all other sums allowed by law.

22.15 Recordation of Memorandum of Lease. Landlord and Tenant mutually agree to execute a notarized memorandum (the "Memorandum") setting forth the material terms and disclosing the existence of this Lease within ten (10) days of a written request by either party with the cost of such recording being borne by the requesting party.

22.16 Time is of the Essence. Time is of the essence; and all due dates, time schedules, and conditions precedent to exercising a right shall be strictly adhered to without delay except where otherwise expressly provided.

22.17 Rear Drive Through Door and Parking Tenant shall have access to the rear drive through door in the Warehouse area of the Building, subject to such reasonable rules and regulations as Landlord may establish from time to time (such rules and regulations to be subject to Tenant's reasonable approval). Tenant shall be entitled to priority use of 75 parking spaces on the Property based upon the Tenant's proportionate share of the Premises.

22.18 Common Areas. Tenant shall have access to use the following areas in the Building, subject to such reasonable rules and regulations as Landlord may establish from time to time:

(a) Rear drive through door in the Warehouse area of the Building as set forth in Section 22.17.

(b) Doors and hallways required for emergency egress.

22.19 Air and Wastewater Discharge. Tenant shall not be permitted to discharge wastewater or air through the Building's existing wastewater or air handling systems; provided Landlord shall provide Tenant with a separate wastewater handling system. It is acknowledge by Tenant that it shall be solely responsible for obtaining any necessary permits in connection with discharge of wastewater from the Premises. Nothing herein shall prohibit Tenant from discharging ordinary sanitary sewage through the Building's sanitary sewage system.

In Witness Whereof, Landlord and Tenant have executed this Lease on the 21st day of March, 2006.

THE INDUSTRIAL DEVELOPMENT AUTHORITY OF MONTGOMERY COUNTY, VIRGINIA

By: /s/ Michael B. Miller
Name: Michael B. Miller
Title: Chairman

LUNA INNOVATIONS INCORPORATED

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

COMMONWEALTH OF VIRGINIA, at large,
COUNTY OF MONTGOMERY, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Michael B. Miller, whose name as Chairman of the Industrial Development Authority of Montgomery County is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 21st day of March, 2006.
My Commission expires:

/s/ Brenda Rigney
Notary Public

COMMONWEALTH OF VIRGINIA, at large,
CITY OF ROANOKE, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Scott Graeff, whose name as CFO, of Luna Innovations Incorporated is signed to the foregoing Lease, has acknowledged the same before me in my Jurisdiction aforesaid.

Given under my hand this 21st day of March, 2006.
My commission expires: 9-30-06

/s/ Leigh S. Holland
Notary Public

Exhibit A

Description of the Premises

Exhibit B

Description of the Property

All that certain tract or parcel of Land, with improvements thereon and appurtenances thereon to located and situated in the Mount Tabor Magisterial District of Montgomery County, Virginia, in the Blacksburg Industrial Park and being all of Lot Number Eight (8) containing 15.025 acres, Phase IV, Industrial Park Expansion, as shown on a plat of survey entitled “Industrial Park Expansion Phase IV”, prepared by Anderson and Associates, Inc., dated 19 Dec 95 and revised 19 Feb 96, which plat is of record in the Clerk’s Office of the Circuit Court of Montgomery County, Virginia, in Plat Book 16, at page 507.

Exhibit C

Separation improvements

25

Exhibit D

Tenant’s Up-Fits

FIRST AMENDMENT TO INDUSTRIAL LEASE AGREEMENT

THIS FIRST AMENDMENT TO INDUSTRIAL LEASE AGREEMENT (the "Amendment") is made and effective as of this 11 th day of May, 2006, by and between The Industrial Development Authority of Montgomery County, Virginia ("Landlord"), a public body corporate, having a principal place of business at 755 Roanoke Street, Suite 2 H, Christiansburg, Virginia 24073, and Luna Innovations Incorporated, ("Tenant"), a Virginia Corporation having a principal place of business at 10 South Jefferson Street, Suite 130, Roanoke, Virginia 24011.

WHEREAS, Landlord and Tenant entered into that certain Industrial Lease Agreement dated as of the 21st day of March, 2006 (the "Lease"), whereby the Landlord leased to Tenant that certain space 31,300 square feet located in the 109,000 sq. ft. Technology Manufacturing Building (the "Building") situated in the Blacksburg Industrial Park, 3150 State Street, Blacksburg, VA 24060, such space being more particularly described in the Lease (the "Premises");

WHEREAS, Landlord and Tenant desire to amend the Lease pursuant to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the rents, covenants and agreements herein set forth, and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. The recitals set forth above are incorporated herein by reference and all capitalized terms not otherwise defined herein shall have the meanings as set forth in the Lease.

2. The first sentence of Section 1.4 of the Lease is deleted in its entirety and replaced with the following:

The Landlord shall provide the Tenant with an Up-fit improvement allowance of an amount up to Seven Hundred Nineteen Thousand Five Hundred Dollars ($719,500) (the "Up-fit Allowance").

3. Section 3.1.1 of the Lease is hereby deleted in its entirety and replaced with the following:

"3.1.1 Payment. Beginning on the Commencement Date and for each month thereafter until September 30, 2007, Tenant shall pay to Landlord base rent for the Premises ("Base Rent") in advance, without demand or set-off, in the amount of Nineteen Thousand Five Hundred Sixty Two and 50/100 Dollars ($19,562.50), based on an annual rent of $7.50 per sq. ft., on or before the first day of each successive calendar month during the Term in lawful money of the United States of America, without prior notice or demand, at such place or places as may be designated in writing from time to time by Landlord. Beginning on October 1, 2007 for each of the next 59 calendar months thereafter, the Tenant shall pay to Landlord Base Rent for the Premises in advance, without demand or set-off, in the amount of Forty Thousand Four Hundred Twenty Nine and 16/100 Dollars ($40,429.16), based on an annual rent of $15.50 per sq. ft., on or before the first day of each successive calendar month during the Term in lawful money of the United States of America, without prior notice or demand, at such place or places as may be designated in writing from time to time by Landlord. In addition to the Base Rent for the Premises, Tenant shall pay to Landlord a Utilities Fee and a Common Area

Maintenance Fee for the Premises as indicated in Sections 4 and 8.1.1. The Tenant's proportionate share of the real estate taxes on the Premises have been included in the Base Rent, and the payment of the real estate taxes for the Property and the Building, of which the Premises are a part, shall be the sole responsibility of Landlord."

4. Section 3.1.4 of the Lease is hereby deleted in its entirety and replaced with the following:

"3.1.4 Letter of Credit. In addition to the required deposit, the Tenant shall cause to be put in place within five (5) business days following written notice from Landlord that construction of the improvements shown on Exhibit C and Exhibit D is ready to commence and shall remain continuously in place until the end of the Term, unless otherwise provided herein or agreed by the Landlord, a letter of credit issued by a Bank in the area that is acceptable to the Landlord in the amount of Seven Hundred Nineteen Thousand Five Hundred ($719,500), against which the Landlord may draw upon the occurrence of an Event of Default, as defined in Section 13.1, by Tenant under this Lease (the "Letter of Credit"). Landlord agrees that the Letter of Credit may be issued and renewed on an annual basis; provided that in the event Tenant fails to provide Landlord with a renewal Letter of Credit within thirty (30) days prior to the termination of any then existing Letter of Credit, an Event of Default as defined in Section 13.1 shall be deemed to have occurred. The Letter of Credit shall be provided in a satisfactory form to the Landlord and be governed by the "Uniform Customs and Practices for Commercial Documentary Credits" promulgated by the XIII Congress of the International Chamber of Commerce (International Chamber of Commerce Brochure No. 500, 1993 revision) and the provisions of the Uniform Commercial Code-Letters of Credit—Title 8.5 of the Code of Virginia, 1950, as amended. The Landlord agrees that so long as the Tenant is in good standing with the Lease, the amount of the Letter of Credit shall automatically be reduced at each anniversary of the Commencement Date by the amount of One Hundred Nineteen Thousand Nine Hundred Sixteen and 67/100 Dollars ($119,916.67), provided the Letter of Credit shall automatically terminate at the end of the Term."

5. This Amendment may be executed in any number of identical counterparts and, as so executed, shall constitute one agreement, binding on all the parties hereto, notwithstanding that all the parties are not signatories to the original or the same counterpart.

6. Except as specifically amended herein, the Lease shall remain in full force and effect.

[Remainder of Page Intentionally Left Blank – Signature Page Follows]

In Witness Whereof, Landlord and Tenant have executed this Amendment as of the 11th day of May, 2006.

THE INDUSTRIAL DEVELOPMENT AUTHORITY OF MONTGOMERY COUNTY, VIRGINIA

By: /s/ MICHAEL B. MILLER
Name: Michael B. Miller
Title: Chairman

LUNA INNOVATIONS INCORPORATED

By: /s/ SCOTT A. GRAEFF
Name: Scott A. Graeff
Title: CFO

COMMONWEALTH OF VIRGINIA, at large,
COUNTY OF MONTGOMERY, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Michael B. Miller, whose name as Chairman of the Industrial Development Authority of Montgomery County is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 12th day of May, 2006.
My Commission expires: 02-28-07

/s/ Brenda Rigney
Notary Public

COMMONWEALTH OF VIRGINIA, at large,

CITY OF ROANOKE, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Scott A. Graeff, whose name as CFO, of Luna Innovations Incorporated is signed to the foregoing Lease, has acknowledged the same before me in my Jurisdiction aforesaid.

Given under my hand this 14th day of May, 2006.
My commission expires: 9-30-06

/s/ Leigh S. Holland
Notary Public

SECOND AMENDMENT TO INDUSTRIAL LEASE AGREEMENT

THIS SECOND AMENDMENT TO INDUSTRIAL LEASE AGREEMENT (the "Amendment") is made and effective this 15th of July, 2009, by and between The Industrial Development Authority of Montgomery County, Virginia ("Landlord"), a public body corporate, having a principal place of business at 755 Roanoke Street, Suite 2 H Christiansburg, Virginia 24073, and Luna Innovations Incorporated ("Tenant"), a Virginia corporation having a principal place of business at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016.

1. Introduction. Landlord and Tenant previously entered into that certain Industrial Lease Agreement dated as of the 21st day of March, 2006, as amended by the First Amendment dated effective as of 11th day of May, 2006 (as amended, the "Lease"). Any capitalized terms used but not defined herein shall have the meanings given to them in the Lease. Section 3.1.4 of the Lease provides for a Letter of Credit against which Landlord may draw upon an Event of Default. Landlord and Tenant now wish to amend the Lease to replace the Letter of Credit with funds deposited in an escrow account held by Landlord to serve the same purpose. Now, therefore, in consideration of the rents, covenants and agreements set forth herein and in the Lease, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to the following terms.

2. Amendment. Section 3.1.4 of the Lease is hereby deleted in its entirety and replaced with the following:

3.1.4 Escrow Account. Effectively immediately, Tenant shall deliver $359,748.99 to Landlord to be deposited by Landlord in an interest-bearing account to be held in escrow for the purposes and subject to the terms of this Lease (the "Escrow Account"), against which Landlord may draw upon the occurrence of an Event of Default, as defined by Section 13.1, by Tenant under this Lease. So long as Tenant is in good standing under the Lease, Landlord shall release from the Escrow Account and pay over to Tenant the amount of $119,916.67 on each of June 16, 2010, and June 16, 2011, respectively, and the balance therein on June 16, 2012 (after which time no Escrow Account shall be further required).

Any other references in the Lease to the Letter of Credit shall hereby be deemed to refer to the Escrow Account.

3. Miscellaneous. This Amendment may be executed in any number of identical counterparts and, as so executed, shall constitute one agreement, binding on all the parties hereto, notwithstanding that all the parties are not signatories to the original or the same counterpart. Except as specifically amended herein, the Lease shall remain in full force and effect.

[Remainder of Page Intentionally Left Blank – Signature Page Follows]

In Witness Whereof, Landlord and Tenant have executed this Amendment as of the 15th day of July, 2009.

THE INDUSTRIAL DEVELOPMENT AUTHORITY OF MONTGOMERY COUNTY, VIRGINIA

By: /s/ Michael B. Miller
Name: Michael B. Miller
Title: Chairman

LUNA INNOVATIONS INCORPORATED

By: /s/ Scott A. Graeff
Name: Scott A. Graeff
Title: Chief Operating Officer

COMMONWEALTH OF VIRGINIA, at large,
COUNTY OF MONTGOMERY, to-wit:

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Michael B. Miller whose name as Chairman of the Industrial Development Authority of Montgomery County is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 21 day of July, 2009.
My commission expires: August 31, 2012

/s/ Lori Ann Law
Notary Public

COMMONWEALTH OF VIRGINIA, at large,
CITY OF ROANOKE, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Scott A. Graeff, whose name as Chief Operating Officer and Treasurer of Luna Innovations Incorporated is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 30th day of July, 2009.
My commission expires: April 30, 2012

/s/ Kimberly Bush
Notary Public

THIRD AMENDMENT TO INDUSTRIAL LEASE AGREEMENT

THIS THIRD AMENDMENT TO INDUSTRIAL LEASE AGREEMENT (the "Amendment") is made and effective this March 23rd, 2010, by and between The Economic Development Authority of Montgomery County, Virginia ("Landlord"), formerly known as The Industrial Development Authority of Montgomery County a public body corporate, having a principal place of business at 755 Roanoke Street, Suite 2 H Christiansburg, Virginia 24073, and Luna Innovations Incorporated ("Tenant"), a Virginia corporation having a principal place of business at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016.

1. Introduction. Landlord and Tenant previously entered into that certain Industrial Lease Agreement dated as of the 21st day of March, 2006, as amended by the First Amendment dated effective as of May 11, 2006, and as amended by the Second Amendment (the "Second Amendment") dated effective as of July 15, 2009 (as amended, the "Lease"). Any capitalized terms used but not defined herein shall have the meanings given to them in the Lease. Section 3.1.4 of the original Lease provided for a Letter of Credit against which Landlord could draw upon an Event of Default; the Second Amendment amended the Lease to replace the Letter of Credit with funds deposited in a cash escrow account held by Landlord to serve the same purpose. By this Amendment, the parties wish to amend Section 3.1.4 of the Lease to replace the cash escrow with a Letter of Credit against which Landlord may draw upon an event of default, and to release the funds currently held in escrow. Now, therefore, in consideration of the rents, covenants and agreements set forth herein and in the Lease, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to the following terms.

2. Amendment. Section 3.1.4 of the Lease is hereby deleted in its entirety and replaced with the following:

3.1.4 Letter of Credit. Tenant shall deliver a letter of credit issued by a Bank reasonably acceptable to Landlord in the amount of $239,832.32 against which Landlord may draw upon the occurrence of an Event of Default, as defined by Section 13.1, by Tenant under this Lease (the "Letter of Credit"). This Letter of Credit shall be maintained throughout the Term, subject to the following provisions. Landlord agrees that the Letter of Credit may be issued and renewed on annual basis; provided that in the event Tenant fails to provide Landlord with a renewal Letter of Credit within thirty (30) days prior to the termination of any then-existing Letter of Credit, an Event of Default as defined in Section 13.1 shall be deemed to have occurred. The Letter of Credit shall be provided in satisfactory form to Landlord and be governed by the "Uniform Customs and Practices for Commercial Documentary Credits" promulgated by the XIII Congress of the International Chamber of Commerce (International Chamber of Commerce Brochure No. 500, 1993 revision) and the provisions of the Uniform Commercial Code – Letters of Credit – Title 8.5 of the Code of Virginia, 1950, as amended. So long as Tenant is in good standing under

the Lease, the amount of the Letter of Credit shall automatically be reduced by $119,916.67 on June 16, 2011, and on June 16, 2012, no Letter of Credit shall be further required.

Any other references in the original Lease to the Letter of Credit shall hereby be deemed to continue to refer to the Letter of Credit, notwithstanding the Second Amendment.

3. Release of Funds from Escrow. Upon receipt by Landlord of the Letter of Credit re-established by Section 2 above, the $359,748.00 in funds held in the escrow deposit account (plus accrued interest, if any) established by the Second Amendment shall immediately be released and payable to Tenant.

4. Miscellaneous.

This Amendment may be executed in any number of identical counterparts and, as so executed, shall constitute one agreement, binding on all the parties hereto, notwithstanding that all the parties are not signatories to the original or the same counterpart.

Except as specifically amended herein, the Lease shall remain in full force and effect.

[Remainder of Page Intentionally Left Blank – Signature Page Follows]

In Witness Whereof, Landlord and Tenant have executed this Amendment as of March 23rd, 2010.

THE ECONOMIC DEVELOPMENT AUTHORITY OF MONTGOMERY COUNTY, VIRGINIA

By: /s/ Michael B. Miller
Name: Michael B. Miller
Title: Chairman

LUNA INNOVATIONS INCORPORATED

By: /s/ Scott A. Graeff
Name: Scott A. Graeff
Title: COO & Treasurer

COMMONWEALTH OF VIRGINIA, at large,
COUNTY OF MONTGOMERY, to-wit:

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Michael B. Miller whose name as Chairman of the Industrial Development Authority of Montgomery County is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 23 day of March, 2010.
My commission expires: 02-28-11

/s/ Brenda Rigney
Notary Public

COMMONWEALTH OF VIRGINIA, at large,
CITY OF ROANOKE, to-wit;

I, the undersigned, a notary public in and for the jurisdiction aforesaid, do hereby certify that Scott A. Graeff, whose name as Chief Operating Officer and Treasurer of Luna Innovations Incorporated is signed to the foregoing Lease, has acknowledged the same before me in my jurisdiction aforesaid.

Given under my hand this 23rd day of March, 2010.
My commission expires: 3-31-13

/s/ Janice Rettinghaus
Notary Public

Exhibit 10.15

LEASE

RIVERSIDE CENTER

ROANOKE, VIRGINIA

THIS LEASE is made this **30th** day of **December 2005**, by **CARILION MEDICAL CENTER** (hereinafter referred to as "Landlord") and **LUNA INNOVATIONS INCORPORATED** (hereinafter referred to as "Tenant").

WITNESSETH

In consideration of the mutual agreements hereinafter set forth, the parties hereto mutually agree as follows:

1. **Premises**. Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, for the term and upon the conditions hereinafter provided, that certain space in **Suites 300 & 400**, located on the **3rd and 4th** floors of the office building to be constructed by Landlord at Phase 1 of Building #1 - Riverside Center, Roanoke, Virginia, 24014, (hereinafter referred to as the "Building"), which space shall consist of the entire 4th floor of the Building and the portion of the 3rd floor identified by Tenant in writing to Landlord on or before June 1, 2006, provided that the total leased space shall consist of approximately **20,000** net rentable square feet (such space being hereinafter referred to as the "Premises"). The parties agree that a floor plan showing the Premises shall be attached hereto as Exhibit A once the space has been identified by Tenant.

1A. **Tenant's Option and Right of First Refusal**. If at any time hereafter, Landlord receives from a ready, willing and able prospective tenant an acceptable bona fide offer, or makes a bona fide offer to such a prospective tenant, to lease all or a portion of the space on the third floor of the Building not leased to Tenant, Landlord shall give Tenant written notice thereof, specifying term, rent of the proposed lease, accompanied by Landlord's affidavit that such offer to lease is in good faith. Tenant shall thereupon have the prior option to lease the space at the rent rate covered by the offer, which option Tenant may exercise by giving Landlord written notice within fifteen (15) days after Tenant's receipt of Landlord's notice of the offer. Should Tenant fail to exercise the right of first refusal within the time limits set forth above or elect not to exercise said right, Landlord may lease the space to such third party and Tenant's right of first refusal for space shall terminate. Notwithstanding the foregoing, Tenant shall have the option, at any time prior to receiving notice from Landlord that Landlord has made or received a bona fide offer to lease all or a portion of the third floor of the Building not leased to Tenant, to lease all or a portion of such additional space. In the event Tenant notifies Landlord in writing of its election to lease additional space on the third floor, the additional space shall be leased by Landlord to Tenant pursuant to the terms and conditions set forth herein and the parties agree to execute an amendment to this Lease reflecting the lease of the additional space.

2. **Term and Renewal**. The term of this Lease shall be for five years and commence on the later of: (i) the **1st** day of **September 2006** or (ii) the day the Landlord delivers to Tenant of a

certificate of occupancy issued by the appropriate governmental authorities (provided the Building and Tenant's Improvements are substantially complete), permitting Tenant to take possession of the Premises. Landlord shall provide at least thirty (30) days prior notice to the Tenant of the anticipated Commencement Date and Landlord shall give Tenant access to the Premises during such thirty (30) day period. In the event the Landlord has not substantially completed the Building, including Tenant's Improvements, and delivered a certificate of occupancy to Tenant by January 1, 2007, Tenant may terminate this Lease upon written notice to Landlord.

Landlord agrees that in the event Tenant notifies Landlord in writing at least twelve (12) months prior to the end of the initial five year term that Tenant would like to renew this Lease for an additional five years, Landlord shall negotiate with Tenant in good faith for a five year extension of this Lease.

3. **Rent**. Tenant shall pay as base rent for the Premises at the rate of Twenty Four Dollars ($24.00) per square foot for the first year of the term, payable in advance, in equal monthly installments. The first monthly installment is to be made by Tenant within two business days following the Commencement Date, and the second and all subsequent monthly payments to be made on the first day of each and every calendar month during the term hereof, beginning with the second full calendar month after the Commencement Date. If the Commencement Date is a date other than the first day of a month, the rent from the Commencement Date until the first day of the following month shall be prorated at the rate of one-thirtieth (1/30th) or one-thirty first (1/31st), as applicable, of the base monthly rental for each day and that amount plus rent for the first full calendar month shall be paid by Tenant to Landlord within two business days following the Commencement Date. Tenant shall pay rent to Landlord, or to such other party or at such other address as Landlord may designate from time to time by written notice to Tenant, without demand and without deduction, set-off or counterclaim, except as expressly set forth herein. If Landlord shall at any time or times accept said rent after it shall become due and payable, such acceptance shall not excuse delay upon subsequent occasions, or constitute, or be construed as, a waiver of any or all of Landlord's rights hereunder. As reflected in the table set forth below, rent for the third, fourth and fifth years of the term shall increase by two percent (2%) over the rent paid during the preceding lease year (numbers based on 20,000 net rentable square feet).

Year One	$40,000.00 per month	$480,000.00 annually
Year Two	$40,000.00 per month	$480,000.00 annually
Year Three	$40,800.00 per month	$489,600.00 annually
Year Four	$41,616.00 per month	$499,392.00 annually
Year Five	$42,448.32 per month	$509,379.84 annually

3A. **Rent Adjustment**. Notwithstanding the provisions of Article 3, and after taking into account the various terms of each lease, Landlord agrees that the rent paid by Tenant shall never exceed the rent paid to Landlord by any other tenant in the Building. In the event any space in the Building is leased to one or more third parties for less than Twenty Four Dollars ($24.00) per square foot, Landlord shall give immediate notice to Tenant. Tenant and Landlord shall jointly choose a MIA real estate appraiser. The two leases and all relevant information including the cost of the tenant improvements shall be submitted to the appraiser for his review. Without sharing the details of the information submitted with Tenant, the appraiser shall then be requested to evaluate

the relative financial value of the two landlord/tenant arrangement and then report back to Landlord and Tenant whether the new tenant is receiving a better financial arrangement on a square foot basis. If the appraiser determines that the new tenant is receiving a better financial arrangement he shall then inform the Landlord and Tenant what adjustment would need to be made in Tenant's rent to make the two financial arrangements equivalent. That adjustment would then be implemented and the rent for the subsequent years of Tenant's Term shall also be adjusted accordingly. Tenant acknowledges and agrees that the terms and conditions set forth in this Article 3A shall not be triggered by, or apply to, any leased space containing less than 1,000 square feet, or wherein the tenant is Carilion Health System, its subsidiaries or the Carilion Biomedical Institute, and that this Article 3A only applies to the Building and not any other buildings that may be constructed by Landlord in Riverside Center.

4. **Use of Premises**. Tenant will use and occupy the Premises following the Commencement Date solely for the conduct of Tenant's business and in accordance with the uses permitted under applicable zoning regulations. Tenant will not use or occupy the Premises for any unlawful purpose, and will comply with all present and future laws, ordinances, regulations, and orders of the United States of America, State of Virginia, and any other public authority having jurisdiction over the Premises. It is expressly understood that if any present or future law, ordinance, regulation or order requires an occupancy permit for the Premises, Tenant will obtain such permit at Tenant's own expense. Tenant will have, together with other tenants in the Building, access to and use of all common areas and facilities of the Building.

5. **Assignment and Subletting**. Tenant will not assign, transfer or encumber this Lease or the Premises without obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed, nor shall any assignment or transfer of this Lease be effectuated by operation of law or otherwise without prior written consent of the Landlord, which consent shall not be unreasonably withheld or delayed. If Tenant merges with a third party or if Tenant sells substantially all its assets Tenant may assign and/or transfer this Lease after obtaining the written consent of the Landlord, which consent shall not be unreasonably withheld or delayed. Tenant may sublet or rent the Premises or any portion thereof only with the prior written consent of the Landlord, which consent shall not be unreasonably withheld or delayed. In the event that Tenant defaults hereunder, Tenant hereby assigns to Landlord the rent due from any assignee or subtenant of Tenant and hereby authorizes each such subtenant to pay said rent directly to Landlord.

6. **Building and Improvements**. Landlord, at its sole cost and expense, shall cause the Building, of which the Premises are a part, to be constructed in accordance with the plans and specifications, including finishes, resubmitted to the Building Department of the City of Roanoke on December 28, 2005, which plans and specifications are incorporated herein by reference (the "Plans and Specifications"). Landlord warrants to Tenant that the Building shall be constructed in a good and workmanlike manner, substantially free of defects in workmanship and substantially in accordance with the Plans and Specifications; it being acknowledged by Tenant that Landlord may substitute materials of like-kind and quality without obtaining Tenant's prior written consent. Landlord shall promptly repair and replace any defects or deficiencies noted by Tenant to Landlord which arises as a result of the construction of the Building and not as a result of Tenant's use of the Premises.

Prior to the Commencement Date, Landlord shall complete construction of all requested Tenant improvements according to Tenant's plans and specifications as approved by Landlord, which approval shall be unreasonably withheld or delayed ("Tenant's Improvements"). Landlord agrees that it shall pay an amount up to **$25.00 per sq. ft.** for the construction of Tenant's Improvements. Landlord agrees to contract directly with the party constructing the Building to complete Tenant's Improvements, and Tenant shall be named as a third party beneficiary to such contract. Landlord shall inform Tenant of any cost of Tenant's Improvements that shall exceed the square foot allowance and Landlord will not begin the construction of Tenant's Improvements without Tenant's written approval. Landlord shall not make any modifications to Tenant's Improvements that would result in an additional cost in excess of the square foot allowance without the prior written consent of Tenant. In the event the cost of Tenant's Improvements exceed the square foot allowance paid by Landlord, Tenant shall reimburse Landlord the additional costs following Tenant's receipt of written notice from Landlord evidencing that the additional costs have been paid. Tenant shall be free to make, with Landlord's consent, provided such consent shall not be unreasonably withheld or delayed, additional alterations, redecorations, or improvements in and to the Premises provided all of such alterations, redecorations, additions or improvements conform to all applicable Building Codes of the City of Roanoke. If any mechanic's lien is filed against the Premises, or the real property of which the Premises are a part, for work claimed to have been done directly for, or materials claimed to have furnished directly to, Tenant, such mechanic's lien shall be discharged by Tenant within twenty (20) days thereafter, at Tenant's sole cost and expense, by the payment thereof or by filing any bond permitted by law. If Tenant shall fail to discharge any such mechanic's lien, Landlord may, at its option, discharge the same and treat the cost thereof as additional rent payable with the monthly installment of rent next becoming due; it being hereby expressly covenanted and agreed that such discharge by Landlord shall not be deemed to waive, or release, the default of Tenant in not discharging the same. It is understood and agreed that in the event Landlord shall give its written consent to Tenant's making any alterations, decorations, or improvements, such written consent shall not be deemed to be an agreement or consent by Landlord to subject Landlord's interest in the Premises, the Building or the real property upon which the Building is situated to any mechanic's liens which may be filed in respect of any such alterations, decorations, additions, or improvements made by or on behalf of Tenant. All alterations, decorations, additions or improvements, in or to the Premises or the Building made by either party shall remain upon and be surrendered with the Premises as a part thereof at the end of the term hereof without disturbance, molestation or injury; provided, however, that if Tenant is not in default in the performance of any of its obligations under this Lease, Tenant shall have the right to remove, prior to the expiration or termination of the term of this Lease, all movable furniture, furnishings, or equipment installed in the Premises at the expense of Tenant (except carpeting which Tenant has installed, which shall become property of Landlord), and if such property of Tenant is not removed by Tenant prior to the expiration or termination of this Lease the same shall become the property of Landlord and shall be surrendered with the Premises as a part thereof.

7. **Maintenance and Repair**. Tenant shall suffer no waste or injury to the Premises or the fixtures and equipment therein, and shall, at the expiration or other termination of the term of this Lease, surrender up the Premises in the same order and condition in which they are on the Commencement Date, ordinary wear and tear and damage by the elements, fire or other casualties excepted. Landlord, at its sole cost, shall diligently and as soon as practicable perform all necessary maintenance and make all repairs, service, maintenance and/or replacement necessary (including, but

not limited to, all plumbing, piping, heating and air conditioning systems, electrical and lighting facilities and equipment, wiring, fixtures, elevators, windows, door glass, plate glass, showcases, skylights and entrances) to keep the Premises in good condition and in proper working order. Landlord shall also provide and install all original and replacement fluorescent tubes and light bulbs within the Premises necessary to provide adequate lighting. Landlord shall promptly cause the removal, at no expense to Tenant, of all snow and ice from the sidewalks and parking areas serving the Leased Premises and shall maintain, at its sole cost, the landscaping, sidewalks and parking areas in good repair and condition.

8. **Signs; Furnishings**. No sign, advertisement or notice shall be inscribed, painted, affixed or displayed on any part of the inside of the Building except on the directories, the doors of offices and corridor walls, and then only in such place, number, size, color and style as is approved by Landlord, which approval shall not be unreasonably withheld or delayed, and at Tenant's cost and expense, and if such sign, advertisement or notice is nevertheless exhibited by Tenant without Landlord's consent, Landlord shall have the right to remove the same and Tenant shall be liable for any and all expenses incurred by Landlord by said removal. Tenant shall be entitled, at Tenant's expense, to construct signage on the exterior of the Building based on a prorated share of the allowable space for signage on the side of Building. Said proration shall be calculated based on the percentage of square footage of the Premises over the total net rentable square footage with in the Building. The signs shall comply with all local rules, regulations and ordinances promulgated by the local governing body where the Building is located. Landlord shall have the right to prescribe the weight and position of safes and other heavy equipment or fixtures, which shall, if considered necessary by the Landlord, stand on plank strips to distribute the weight. Any and all damage or injury to the Premises or the Building caused by moving the property of Tenant into, in or out of the Premises, or due to the same being on the Premises shall be repaired by, and at the sole cost of, Tenant. No deliveries of any matter of any description will be received into the Building or carried in the elevators except as approved by Landlord, which approval shall not be unreasonably withheld or delayed, and all deliveries shall be made only through entrances of the Building designated for this purpose. All moving of furniture, equipment and other material shall be coordinated with, and under the supervision of, Landlord who shall, however, not be responsible for any damage to or charges for moving same.

9. **Access to Premises**. Tenant shall permit Landlord, or its representatives to enter the Premises during Tenant's normal business hours provided Tenant receives at least twenty four (24) hours prior written notice (except in the case on an emergency when no such notice is necessary), without charge therefore to Landlord and without diminution of the rent payable by Tenant, to examine, inspect and protect the same, and to make such alterations and/or repairs as in the judgment of Landlord may be deemed reasonably necessary. Upon receipt of written prior notice, Tenant shall also permit Landlord or its representatives such access to Premises to exhibit the same to prospective Tenants during the last one hundred twenty (120) days of the term of this Lease.

10. **Insurance Rating**. Tenant will not conduct or permit to be conducted any activity, or place any equipment in or about the Premises, which will, in any way, increase the rate of fire insurance or other insurance on the Building, and if any increase in the rate of fire insurance or other insurance is stated by any insurance company or by the applicable Insurance Rating Bureau to be due to activity or equipment in or about the Premises, such statement shall be conclusive evidence

that the increase in such rate is due solely to such activity or equipment and, as a result thereof, Tenant shall be liable for such increase and shall reimburse Landlord therefore.

11. **Tenant's Equipment**. Tenant may not install or operate in the Premises any electrically operated equipment or other machinery, other than radios, televisions, clocks, copying machines, paper shredders, computers, fax machines, printers or other equipment and machinery used in Tenant's ordinary business without first obtaining the prior consent of Landlord, which consent shall not be reasonably withheld or delayed, provided that such consent may be conditioned upon the payment by Tenant of additional rent in compensation for such excess consumption of utilities and for the cost of additional wiring as may be occasioned by the operation of said equipment or machinery. Tenant shall not install any other equipment of any kind or nature whatsoever which will or may necessitate any changes, replacements or additions to, or in the use of, the water system, heating system, plumbing system, air-conditioning system, or electrical system of the Premises or the Building without first obtaining the prior written consent of Landlord, which consent shall not be unreasonably withheld or delayed. Business machines and mechanical equipment belonging to Tenant which cause noise or vibration that may be transmitted to the structure of the Building or to any space therein to such a degree as to be reasonably objectionable to Landlord or to any tenant in the Building shall be installed and maintained by Tenant, at Tenant's expense, on vibration eliminators or other devices sufficient to eliminate such noise and vibration.

12. **Indemnity and Liability and Casualty Insurance**. Tenant shall indemnify and hold harmless Landlord, Carilion Medical Center and its respective parents, subsidiaries, affiliates, related corporations, agents, officers, directors, and employees, from and against any and all claims, liabilities, losses and causes of action of whatever kind or nature which are suffered by or asserted against Landlord arising out of Tenant's use of the Premises, provided Tenant shall not be responsible for damages and injury caused by the negligence or wrongful act of Landlord, its employees, agents or representatives; and Tenant further agrees to defend all such claims at its own cost and expense without reimbursement from Landlord. Tenant further covenants and agrees to indemnify Landlord resulting from any action or failure to act by any and all of Tenant's employees on the Premises.

Tenant does hereby covenant and agree to obtain and keep in full force and effect insurance as set forth below and to furnish Landlord with certificates of insurance evidencing such coverage, which insurance shall name Carilion Medical Center as additional named insured and shall contain a forty-five (45) day cancellation or material change in coverage clause. To the extent reasonably available, such policies shall contain a waiver of subrogation in favor of Carilion Medical Center. Tenant agrees that the insurance coverages set out below shall be primary coverage as between Landlord and Tenant. Except as set forth herein, such insurance coverages do not limit the liability of Tenant to Landlord for any damages.

12A. **Comprehensive General Liability**. Tenant shall obtain commercial general liability insurance with minimum limits of $1,000,000 Each Occurrence, $2,000,000 General Aggregate, $2,000,000 Products & Completed Operations Aggregate, $1,000,000 Personal & Advertising Injury, $1,000,000 Fire Damage (any one fire) and $10,000 Medical Expense (any one person).

12B. **Additional Insured Endorsement** CG2010 11/85 or equivalent in favor of Carilion Medical Center and all affiliates (copy of endorsement(s) must accompany standard ACORD certificate of insurance).

It is understood and agreed that the furnishing by Tenant of such policies of insurance and the acceptance of same by Landlord is not intended to and shall not, limit, affect, or modify the obligations or responsibilities otherwise assumed or owed by Tenant.

Tenant agrees to take out and maintain at all times during the term of this Lease a policy of all risk property insurance including, but not limited to, improvements and betterments coverage, on its improvements, alterations, and other personal property placed at the Premises, whether or not placed there by Tenant.

Tenant will not engage in any activity or business which would cause Landlord's all risk property insurance to be canceled or which would result in higher premiums. Should the nature or conduct of Tenant's business in the Premises result in increased all risk property premiums for the Premises and/or the adjoining and surrounding improvements owned by Landlord, Tenant will pay Landlord during the term thereof an amount equal to such increase so long as it shall continue in effect, following Tenant's receipt of written evidence that the increase arises directly and solely from Tenant's business in the Premises.

Landlord, at its sole cost and expense, shall obtain at all times during the term of this Lease hazard insurance, in an amount equal to the replacement cost of the Building, against loss or damage by fire or other casualty. Landlord hereby indemnifies Tenant and its respective parents, subsidiaries, affiliates, related corporations, agents, officers, directors, and employees (collectively, "Tenant Affiliates") and holds Tenant and Tenant's Affiliates harmless from and against any claims, liabilities, losses and causes of action of whatever kind or nature which are suffered by or asserted against Tenant and/or Tenant's Affiliates by any person and which claims, liabilities, losses and causes of action arise out of, or in connection with or are based upon any wrongful acts, omissions, or failures of Landlord, its employees, servants or invitees under this Lease, unless due to Tenant's negligence, or wrongful acts or omissions.

13. **Services and Utilities**. It is agreed that Landlord will furnish heat and air conditioning, during the seasons of the year when heat and air conditioning are required, between the hours of 8:00 a.m. and 8:00 p.m., Monday through Saturday, government holidays excepted. It is agreed that Landlord will provide reasonably adequate electricity, water, exterior window cleaning service and Monday through Friday only (except government holidays), janitorial service after 6:00 p.m. Landlord will also provide elevator service between the hours of 8:00 a.m. and 8:00 p.m., Monday through Saturday (except government holidays), and at least one (1) elevator with code access on a twenty-four hour basis, provided, however, that Landlord shall have the right to remove elevators from service as the same shall be required for moving freight, or for servicing or maintaining the elevators and/or the Building, provided that so far as is reasonably practical, at least one elevator shall be available at all times. Landlord shall maintain the public restrooms in the Building and shall furnish, without charge therefore, all soap, paper towels, and toilet tissue necessary for the efficient use of such rooms. It is understood and agreed that Landlord shall not be liable for failure to furnish, or for delay or suspension in furnishing, any of the services (required to

be performed by Landlord) caused by breakdown, maintenance, repairs, strikes, scarcity of labor or materials, act of God or from any other cause. For purposes of this Lease, a "government holiday" shall be determined by reference to Public Law, as the same may be amended from time to time.

14. **Insolvency or Bankruptcy of Tenant**. In the event Tenant makes an assignment for the benefit of creditors, or a receiver of Tenant's assets is appointed; or Tenant files a voluntary petition in any bankruptcy or insolvency proceeding, or an involuntary petition in any bankruptcy or insolvency proceeding is filed against Tenant and the same is not discharged within sixty (60) days, or Tenant is adjudicated as bankrupt, Landlord shall have the option of terminating this Lease by sending written notice to Tenant of such termination and, upon such written notice being given by Landlord to Tenant, the term of this Lease shall, at the option of Landlord, end and Landlord shall be entitled to immediate possession of the Premises and to recover damages from Tenant in accordance with the provisions of Article 17 hereof.

15. **Limitation of Liability of Landlord**. Landlord shall not be liable to Tenant, its employees, agents, business invitees, licensees, customers, clients, family members, guests or trespassers for any damage, compensation or claim arising from the necessity of repairing any portion of the Building, the interruption in the use of the Premises, accident or damage resulting from the use or operation (by Landlord, Tenant, or any other person or persons whatsoever) of elevators, or heating, cooling, electrical or plumbing equipment or apparatus, or the termination of this Lease by reason of the destruction of the Premises, or from any fire, robbery, theft, and/or any other casualty, or from any leakage in any part or portion of the Premises, or the Building, or from water, rain or snow that may leak into, or flow from, any part of the Premises or the Building. Any goods, property or personal effects, stored or placed by Tenant in or about the Premises or Building, shall be at the risk of Tenant, and Landlord shall not in any manner be held responsible therefore.

16. **Damage to the Premises**. If the Premises shall be partially damaged by fire or other cause without the fault or neglect of Tenant, its agents, employees or invitees, Landlord shall diligently and as soon as practicable after such damage occurs (taking into account the time necessary to effectuate a satisfactory settlement with any insurance company) repair such damage at the expense of Landlord, provided, however, that if the Building is damaged by fire or other cause to such extent that the damage cannot be fully repaired within ninety (90) days from the date of such damage, Landlord upon written notice to the Tenant, in which event the rent shall be apportioned and paid to date of such damage. During the period that Tenant is deprived of the use of the damaged portion of the Premises, Tenant shall be required to pay rental covering only that part of the Premises that Tenant is able to occupy and the rent for such space shall be that portion of the total rent which the amount of square foot area remaining that can be occupied by Tenant bears to the total square foot area of the Premises. All injury or damage to the Premises or the Building caused by Tenant or its agents, employees and invitees, shall be repaired by Landlord, and any cost so incurred by Landlord not covered by insurance shall be paid by Tenant in which event such cost shall become additional rent payable with the installment of rent next becoming due under the terms of this Lease. Notwithstanding the foregoing, in the event the Premises are damaged following the second anniversary of the Commencement Date and the repair of the same shall take longer than ninety (90) days, Tenant shall have the right to terminate this Lease upon written notice to Landlord provided Tenant shall remain responsible for the payment of rent through the date of the damage.

17. **Default of Tenant and Landlord**. If Tenant shall fail to pay any monthly installment of rent as aforesaid and/or as otherwise required By Article 23 hereof (although no legal or formal demand has been made therefore), or shall violate or fail to perform any of the other conditions, covenants or agreements on its part contained in this or in any other lease of space in the Building, and such failure to pay rent or such violation or failure shall continue for a period of fifteen (15) days after Tenant's receipt of written notice from Landlord, then and in any of said events Tenant shall be deemed in default (provided in the event of a non-monetary breach, Tenant shall not be deemed in default if it has begun to cure the same within fifteen (15) days following receipt of such notice and diligently proceeds to cure the same) and this Lease shall, at the option of Landlord, cease and terminate upon at least thirty (30) days prior written notice of such election to Tenant by Landlord, and if such failure to pay rent or such violation or failure shall continue to the date set forth in such notice of termination, then this Lease shall cease and terminate without further notice to quit or of Landlord's intention to re-enter, the same being hereby waived, and Landlord may proceed to recover possession under and by virtue of the provisions of the laws of Virginia, or by such other proceedings, including re-entry and possession, as may be applicable. If Landlord elects to terminate this Lease everything herein contained on the part of Landlord to be done and performed shall cease without prejudice, however, to the right of Landlord to recover from Tenant all rental accrued up to the time of termination or recovery of possession by Landlord, whichever is later. Should this Lease be terminated before the expiration of the term of this Lease by reason of Tenant's default as herein provided, or if Tenant shall abandon or vacate the Premises before the expiration or termination of the term of this Lease, the Premises may be relet by Landlord for such rent and upon such terms as are not unreasonable under the circumstances and, if the full rental hereinabove provided shall not be realized by Landlord, Tenant shall be liable for all damages sustained by Landlord, including, without limitation, deficiency in rent, reasonable attorneys' fees, brokerage and leasing fees and expenses of placing the Premises in first class rentable condition. Any damage or loss of rental sustained by Landlord may be recovered by Landlord, at Landlord's option, at the time of the relettings, or in separate actions, from time to time, as said damage shall have been made more easily ascertainable by successive relettings, or, at Landlord's option, may be deferred until the expiration of the term of this Lease in which event the cause of action shall not be deemed to have accrued until the date of expiration of said term. The provisions contained in this paragraph shall be in addition to and shall not prevent the enforcement of any claim Landlord may have against Tenant for anticipatory breach of the unexpired term of this Lease. In the event that Tenant continues to occupy the Premises after the expiration of the term of this Lease, with the express or implied consent of Landlord, such tenancy shall be from month to month and shall not be renewal of the term of this Lease or a tenancy from year to year. All rights and remedies of Landlord under this Lease shall be cumulative and shall not be exclusive of any other rights and remedies provided to Landlord under applicable law.

If Landlord breaches any of its covenants and obligations contained in this Lease and the breach shall continue for a period of fifteen (15) days after written notice of such violation is received by Landlord from Tenant, Landlord shall be deemed to be in default (provided Landlord shall not be deemed in default if it has begun to cure the same within fifteen (15) days following receipt of notice from Tenant and diligently proceeds to cure the same). In the event of a default by Landlord related to its maintenance and repair obligations hereunder, Tenant shall have the right to cure such default on behalf of the Landlord and deduct the cost of the same from the monthly rent owed by Tenant hereunder until Tenant is reimbursed in full for the cost thereof. In the event of any

other default by Landlord under this Lease, Tenant shall have the right to seek any remedy available under applicable law.

18. **Waiver**. If under the provisions hereof Landlord shall institute proceedings and a compromise or settlement thereof shall be made, the same shall not constitute a waiver of any covenant herein contained nor of any of Landlord's rights hereunder. No waiver by Landlord of any breach of any covenant, condition or agreement herein contained shall operate as a waiver of such covenant, condition or agreement itself, or of any subsequent breach thereof. No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installments of rent herein stipulated shall be deemed to be other that on account of the earliest stipulated rent or shall any endorsement or statement on any check or letter accompanying a check for payment of rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such rent or to pursue any other remedy provided in this Lease. No re-entry by Landlord, and no acceptance by Landlord of keys from Tenant, shall be considered an acceptance of a surrender of the Lease.

19. **Subordination**. This Lease is subject and subordinate to the lien of all and any mortgages (which term "mortgages" shall include both construction and permanent financing and shall include deeds of trust and similar security instruments) which may now or hereafter encumber or otherwise affect the real estate (including the Building) of which the Premises form a part, or Landlord's leasehold interest therein, and to all and any renewals, extensions, modifications, recastings or refinancings thereof. Notwithstanding the foregoing Landlord shall obtain from any holder of a mortgage, deed of trust or other security instrument a non-disturbance agreement from such third parties acknowledging and agreeing that Tenant's possession of the Premises will not be disturbed so long as Tenant performs its obligations hereunder. In confirmation of such subordination, Tenant shall, at Landlord's request, promptly execute any requisite or appropriate certificate or other document and if Tenant fails to execute the same within fifteen (15) days following receipt of request from Landlord, Tenant agrees that Landlord shall be authorized to execute the certificate or other document as Tenant's attorney-in-fact. Tenant agrees that in the event that any proceedings are brought for the foreclosure of any such mortgage, Tenant shall attorn to the purchaser at such foreclosure sale and recognize such purchaser as the Landlord under this Lease, and Tenant waives the provisions of any statute or rule of law, now or hereinafter in effect, which may give or purport to give Tenant any right to terminate or otherwise adversely affect this Lease and the obligations of Tenant hereunder in the event that any such foreclosure proceeding is prosecuted or completed; provided, however, that such attornment and recognition shall be conditioned upon Tenant's receiving from such purchaser, reasonable assurances that Tenant may remain in quiet and peaceable possession of the Premises for the unexpired term at the rents herein provided and that purchaser shall otherwise keep and perform all of the covenants and conditions herein contained on the part of Landlord to be kept and performed.

20. **Condemnation**. If the whole or a substantial part of the Premises shall be taken or condemned by any governmental authority for any public or quasi-public use or purpose (including sale under threat of such a taking), then the term of this Lease shall cease and terminate as of the date when title vests in such governmental authority, and the annual rental shall be abated on the date when such title vests in such governmental authority. If less than a substantial part of the Premises is taken or condemned by any governmental authority for any public or quasi-public use or

purpose, the rent shall be equitably adjusted on the date when title vests in such governmental authority and the Lease shall otherwise continue in full force and effect. Tenant shall have no claim against Landlord (or otherwise) for any portion of the amount that may be awarded as damages as a result of any governmental taking or condemnation (or sale under threat of such taking or condemnation) or for the value of any unexpired term of the Lease. For purposes of this Article 20, a substantial part of the Premises shall be considered to have been taken if more than fifty percent (50%) of the Premises are unusable by Tenant and, if the Premises are on more than one floor of the Building, then this Article shall apply as if separate leases were made in respect of the Premises on each such floor.

21. **Rules and Regulations**. Tenant, its agents and employees shall abide by and observe the rules and regulations attached hereto as Exhibit B. Tenant, its agent and employees, shall abide by and observe such other reasonable rules and regulations as may be promulgated from time to time by Landlord, with copy sent to Tenant, for the operation and maintenance of the Building, provided that the same are in conformity with common practice and usage in similar buildings and are not inconsistent with the provisions of this Lease. Nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce such rules and regulations, or the terms, conditions or covenants contained in any other Lease, as against any other Tenant, and Landlord shall not be liable to Tenant for violation of the same by other Tenant, its employees, agents, business invitees, licensees, customers, clients, family members or guests.

22. **Covenants of Landlord**. Landlord covenants that it has the right to make this Lease for the term aforesaid, and that if Tenant shall pay the rental and perform all of the covenants, terms and conditions of this Lease to be performed by Tenant, Tenant shall, during the term hereby created, freely, peaceably and quietly occupy and enjoy the full possession of the Premises without molestation or hindrance by Landlord or any party claiming through or under Landlord.

23. **Increases in Real Estate Taxes**. Beginning on January 1, 2009, and for each year thereafter, Tenant shall be responsible for paying, for the Term year, its prorata share of the increase in real estate taxes paid by Landlord over the “Base Year Amount”, as defined below, within thirty (30) days following Tenant’s receipt of evidence of the increase and confirmation that such amount has been paid by Landlord. Tenant’s prorata share for purposes of this Article 23 shall be a fraction, the numerator of which is the net rentable square footage of the Premises and the denominator of which shall be the total net rentable square footage of all the buildings situated on the land which the Premises are located. The “Base Year Amount” shall be defined as the real estate taxes levied upon the land and Building for the first full calendar year following the Commencement Date.

24. **No Partnership**. Nothing contained in this Lease shall be deemed or construed to create a partnership or joint venture of or between Landlord and Tenant, or to create any other relationship between the parties hereto other than that of Landlord and Tenant.

25. **No Representations by Landlord**. Neither Landlord nor any agent or employee of Landlord has made any representations or promises with respect to the Premises or the Building except as herein expressly set forth, and no rights, privileges, easements or licenses are acquired by Tenant except as herein expressly set forth. The Tenant, by taking possession of the Premises, shall

accept the same “as is,” and such taking of possession shall be conclusive evidence that the Premises and the Building are in good and satisfactory condition at the time of such taking of possession.

26. **Brokers**. Landlord recognizes Edwin C. Hall Associates as the broker negotiating this Lease and shall pay said broker a leasing commission therefore pursuant to a separate agreement between said broker and Landlord. Landlord and Tenant each represent and warrant one to another that except as immediately hereinabove set forth neither of them has employed any broker in carrying on the negotiations relating to this Lease. Landlord shall indemnify and hold Tenant harmless, and Tenant shall indemnify and hold Landlord harmless, from and against any claim or claims for brokerage or other commission arising from or out of any breach of the foregoing representation and warrant by the respective indemnitors.

27. **Notices**. All notices or other communications hereunder shall be in writing and shall be deemed duly given when received if delivered in person or by certified or registered mail, return receipt requested, first-class postage prepaid, (i) if to Landlord addressed at **c/o Hall Associates Inc. 213 S. Jefferson St., Suite 1007, Roanoke, VA 24011** and if to Tenant addressed at **Luna Innovations, Attn: Scott Graeff, Riverside Center, Suite 300, Roanoke, VA 24014**, unless notice of a change of address is given pursuant to the provisions of this Article.

28. **Estoppel Certificates**. Tenant agrees, at any time and from time to time, upon not less than five (5) days prior written notice by Landlord, to execute, acknowledge and deliver to Landlord a statement in writing (i) certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the Lease is in full force and effect as modified and stating the modifications), (ii) stating the dates to which the rent and other charges hereunder have been paid by Tenant, (iii) stating whether or not to the best knowledge of Tenant, Landlord is in default in the performance of any covenant, agreement or condition contained in this Lease, and, if so, specifying each such default of which Tenant may have knowledge, and (iv) stating the address to which notices to Tenant should be sent pursuant to Article 27 hereof. Any such statement delivered pursuant hereto may be relied upon by any owner of the Building, any prospective purchaser of the Building, any mortgagee or prospective mortgagee of the Building or of Landlord’s interest, or any prospective assignee of any such mortgage.

29. **Holding Over**. In the event that Tenant shall not immediately surrender the Premises on the date of expiration of the term hereof, Tenant shall, by virtue of the provisions hereof, become a Tenant by the month at the monthly rental in effect during the last month of the term of this Lease, which said monthly tenancy shall commence with the first day next after the expiration of the term of this Lease. Tenant as a monthly tenant shall be subject to all of the conditions and covenants of this Lease, including the additional rent provisions of Article 23. Tenant shall give to Landlord at least sixty (60) days’ prior written notice of any intention to quit the Premises, and Tenant shall be entitled to thirty (30) days’ written notice to quit the Premises, except in the event of nonpayment of rent in advance or of the breach of any other covenant by the Tenant, in which event Tenant shall not be entitled to any notice to quit, the usual notice to quit being hereby expressly waived. Notwithstanding the foregoing provisions of this Article 29, in the event that Tenant shall hold over after the expiration of the term hereby created, and if Landlord shall desire to regain possession of the Premises promptly at the expiration of the term of this Lease, then at any time prior to Landlord’s acceptance of rent from Tenant as a monthly tenant hereunder, Landlord, at its option, may forthwith

re-enter and take possession of the Premises without process, or by any legal process in force in Virginia.

30. **Right of Landlord to Cure Tenant's Default**. If Tenant defaults in the making of any payment or in the doing of any act herein required to be made or done by Tenant, then Landlord may, but shall not be required to, make such payment or do such act, and the amount of the expense thereof, if made or done by Landlord, with interest thereon at the annual rate of one percent (1%) above the New York City prime rate of interest in effect at and accruing from the first day of the first calendar month following the date such payment was made by Landlord, shall be paid by Tenant to Landlord and shall constitute additional rent hereunder due and payable with the next monthly installment of rent; but the making of such payment or the doing of such act by Landlord shall not operate to cure such default or to estop Landlord from the pursuit of any remedy to which Landlord would otherwise be entitled. If Tenant fails to pay any installment of rent on or before the tenth (10th) day of the calendar month when such installment becomes due and payable, Tenant shall pay to Landlord a late charge of **five percent (5%)** of the amount of such installment. Such late charge shall constitute additional rent hereunder due and payable with the next monthly installment rent.

31. **Lien on Personal Property**. Landlord shall have a lien upon all the personal property of Tenant moved into the Premises, as and for security for the rent and other Tenant obligations heretofore provided. In order to perfect and enforce said lien, Landlord may at any time after default in the payment of rent or default of other obligations, seize and take possession of any and all personal property belonging to Tenant which may be found in and upon the Premises. Should Tenant fail to redeem the property so seized, by payment of whatever sum may be due Landlord under and by virtue of the provisions of this Lease, then and in that event, Landlord shall have the right, after ten (10) days' written notice to Tenant of its intention to do so, to sell such property so seized at public or private sale and upon such terms and conditions as to Landlord may appear advantageous, and after the payment of all property charges incident to such sale, apply the proceeds thereof to the payment of any balance due on account of rent or other obligations as aforesaid. In the event there shall then remain in the hands of Landlord any balance realized from the sale of said property, as aforesaid, the same may be retained by Landlord and applied against accruing rents or paid over to or for the account of Tenant.

32. **Benefit and Burden**. The provisions of this Lease shall be binding upon, and shall inure to the benefit of, the parties hereto and, subject to the provisions of Article 5, each of their respective representatives, successors and assigns. Landlord may freely and fully assign its interest hereunder.

33. **Gender and Number**. Feminine or neuter pronouns shall be substituted for those of the masculine form, and the plural shall be substituted for the singular number, in any place or places herein which the context may require such substitution.

34. **Entire Agreement**. This Lease, together with the Exhibits attached hereto, contains and embodies the entire agreement or the parties hereto, and no representations, inducements or agreements, oral or otherwise, between the parties not contained, in this Lease and exhibits, shall be of any force or effect. This Lease may not be modified, changed or terminated in whole or in part in any manner other than by an agreement in writing duly signed by both parties hereto.

35. **Invalidity of Particular Provisions**. If any provision of this Lease or the application thereof to any person or circumstances shall to any extent be invalid or unenforceable, the remainder of this Lease, or the application of such provisions to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

36. **Miscellaneous Additional Provisions**.

36A. Notwithstanding anything herein to the contrary, and so long as the Tenant is current in the payment of the Rent, the parties agree that any dispute arising out of or related to this Lease shall be resolved exclusively by arbitration in Roanoke, Virginia, provided however that neither Landlord nor Tenant shall commence an arbitration proceeding unless and until such party shall first give a written notice (a "Dispute Notice") to the other party setting forth the nature of the dispute. The parties shall first attempt in good faith to resolve the dispute without resorting to arbitration. If the dispute has not been resolved by the parties within thirty (30) days after delivery of a Dispute Notice, then either party may proceed with the filing of a demand for arbitration. The arbitration shall be initiated and administered according to the Commercial Arbitration Rules of the American Arbitration Association ("AAA") in effect on the date of the Dispute Notice, and the parties agree that a single arbitrator, mutually selected by the parties, will preside over the proceeding. The arbitration will be initiated by the certified mailing of a Demand for Arbitration by one party to the other. If the parties cannot agree upon an arbitrator within thirty (30) days after a Demand for Arbitration has been made, the parties shall seek appointment of an arbitrator by the Circuit Court for the City of Roanoke. The arbitrator shall base the award on applicable law and judicial precedent and, unless both parties agree otherwise, shall include in such award the findings of fact and conclusions of law upon which the award is based. The ruling of the arbitrator shall be final and binding on the parties, and any judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The losing party shall pay the costs of the arbitration, the legal fees and all other reasonable costs incurred by the winning party.

36B. This Lease shall be construed in accordance with the laws of the Commonwealth of Virginia.

36C. To the extent any terms and conditions set forth in the Rules and Regulations attached hereto as Exhibit C conflict with the provisions set forth in any Article of this Lease, the provisions contained in the Articles shall control.

36D. In consideration of the payment of rent, Tenant shall also be entitled to select and have the exclusive use of its prorata share of the parking spaces under the Building and such spaces shall be marked as reserved.

36E. Tenant agrees that it shall not disclose the terms and conditions of this Lease to any third party, provided Tenant may disclose the same to its accountants, attorneys and other third parties engaged by Tenant.

36F. This Lease may be executed in counterparts and facsimile signatures shall be deemed originals for purposes of this Lease.

Landlord and Tenant have each executed this Lease under seal on the day and year hereinabove written.

LANDLORD: **CARILION MEDICAL CENTER**

By /s/ Edward G. Murphy

Edward G. Murphy Pres/CEO

TENANT: **LUNA INNOVATIONS INCORPORATED**

By /s/ Scott A. Graeff

Scott A. Graeff CFO

EXHIBIT A

[Attach Floor Plans]

EXHIBIT B
RULES AND REGULATIONS
RIVERSIDE CENTER
ROANOKE, VIRGINIA

The following rules and regulations have been formulated for the safety and well-being of all the Tenants of the Building. Strict adherence to these rules and regulations is necessary to guarantee that each and every tenant will enjoy a safe and unannoyed occupancy in the Building. Any repeated or continuing violation of these rules and regulations by Tenant after notice from Landlord shall be sufficient cause for termination of this Lease at the option of Landlord.

The Landlord may, upon request by any Tenant, waive the compliance by such Tenant of any of the foregoing rules and regulations, provided that (i) no waiver shall be effective unless signed by Landlord or Landlord's authorized agent, (ii) any such waiver shall not relieve such Tenant from the obligation to comply with such rule or regulation in the future unless expressly consented to by Landlord, and (iii) no waiver granted to any Tenant shall relieve any other Tenant from the obligation of complying with the foregoing rules and regulations unless such other Tenant has received a similar waiver in writing from Landlord.

1. The sidewalks, entrances, passages, courts, elevators, vestibules, stairways, corridors or halls or other parts of the Building not occupied by any Tenant shall not be obstructed or encumbered by any Tenant or used for any purpose other than ingress and egress to and from the Premises and if the Premises are situated on the ground floor of the Building the Tenant thereof shall, at said Tenant's own expense, keep the sidewalks of said Premises clean and free from ice and snow. Landlord shall have the right to control and operate the public portions of the Building, and the facilities furnished for the common use of the Tenants, in such manner as Landlord deems best for the benefit of the Tenants generally. No Tenant shall permit the visit to the Premises of persons in such numbers or under such conditions as to interfere with the use and enjoyment by other Tenants of the entrances, corridors, elevators and other public portions or facilities of the Building. No smoking in building.

2. No awnings or other projections shall be attached to the outside walls of the Building without the prior written consent of the Landlord.

3. No sign, advertisement, notice or other lettering shall be exhibited, inscribed, painted or affixed by any Tenant on any part of the outside or inside of the Premises or building without the prior consent of the Landlord. In the event of the violation of the foregoing by any Tenant, Landlord may remove same without any liability, and may charge the expense incurred by such removal to the Tenant or Tenants violating this rule. Interior signs on doors and directory tablet shall be inscribed, painted or affixed for each Tenant by the Landlord at the expense of such Tenant, and shall be of a size, color and style acceptable to the Landlord.

4. No show cases or other articles shall be put in front of or affixed to any part of the exterior of the Building, nor placed in the halls, corridors or vestibules without the prior written consent of the Landlord.

5. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein. All damages resulting from any misuse of the fixtures shall be borne by the Tenant who, or whose servants, employees, agents, visitors or licensees, shall have caused the same.

6. There shall be no defacing any part of the Premises or the Building. No boring, cutting or stringing of wires shall be permitted. Tenant shall not construct, maintain, use or operate within the Premises or elsewhere within or on the outside of the Building, any electrical device, wiring or apparatus in connection with a loud speaker system or other sound system.

7. No vehicles or animals, birds or pets of any kind shall be brought into or kept in or about the premises, and no cooking of food shall be done or permitted by any Tenant on said premises. No Tenant shall cause or permit any unusual or objectionable odors to be produced upon or permeate from the Premises.

8. No Tenant shall make, or permit to be made, any unseemingly or disturbing noises or disturb or interfere with occupants of this or neighboring buildings or premises of those having business with them whether by the use of any musical instrument, radio, talking machine, unmusical noise, whistling, singing, or in any other way. No Tenant shall throw anything out of the doors or windows or down the corridors or stairs.

9. Any inflammable, combustible or explosive fluid, chemical or substance kept or brought in to the building must be stored and monitored and meet all conditions and standards that are applicable.

10. Each Tenant, shall, upon the termination of this tenancy, restore to Landlord all keys of stores, offices, storage, and toilet rooms either furnished to, or otherwise procured by, such Tenant, and in the event of the loss of any keys, so furnished, such Tenant shall pay to the Landlord the cost thereof.

11. No additional locks or bolts of any kind shall be placed upon any of the doors, or windows by any Tenant, nor shall any changes be made in existing locks or the mechanism thereof. The doors leading to the corridors or main halls shall be kept closed during business hours except as they may be used for ingress or egress. Each Tenant, shall, upon the termination of this tenancy, restore to Landlord all keys of stores, offices, storage, and toilet rooms either furnished to, or otherwise procured by, such Tenant, and in the event of the loss of any keys, so furnished, such Tenant shall pay to the Landlord the cost thereof.

12. All removals, or the carrying in or out of any matter of any description must take place during the hours which the Landlord or its Agent may determine from time to time. The Landlord reserves the right to inspect all freight to be brought into the Building and to exclude from

the Building all freight which violates any of these Rules and Regulations or the Lease of which these Rules and Regulations are a part.

13. Any person employed by any Tenant to do janitorial work within the Premises must obtain Landlord's consent and such person shall, while in the Building and outside of said Premises, comply with all instructions issued by Building Management.

14. Landlord shall have the right to prohibit any advertising by any Tenant which, in Landlord's opinion, tends to impair the reputation of the Building or its desirability as a building for offices, and upon written notice from Landlord, Tenant shall refrain from or discontinue such advertising.

15. Landlord reserves the right to exclude from the Building at all times any person who is not known or does not properly identify himself to the Building Management. Each Tenant shall be responsible for all persons for whom he authorizes entry into or exit from the Building, and shall be liable to the Landlord for all acts of such persons.

16. The premises shall not be used for lodging or sleeping or for any immoral or illegal purpose.

17. No Tenant shall occupy or permit any portion of the Premises to be used or occupied as an office for the possession, storage, manufacture, or sale of narcotics, nitroglycerin, illegal drugs, fertilizer, tobacco in any form, or a barber or manicure shop, or as an employment bureau, unless said Tenant's Lease expressly grants permission to do so. No Tenant shall engage or pay any employees on the Premises, except those actually working for such Tenant on said premises, nor advertise for laborers giving an address at said premises.

18. Each Tenant, before closing and leaving the Premises at any time, shall see that all suite entry doors are closed and all lights turned off.

19. The requirements of Tenants will be attended to only upon application at the office of the Building. Employees shall not perform any work or do anything outside of the regular duties, unless under special instruction from the management of the Building.

20. Canvassing or soliciting in the Building is prohibited and each Tenant shall cooperate to prevent the same.

21. No water cooler, plumbing or electrical fixtures shall be installed by any Tenant, unless expressly authorized by Landlord.

22. There shall not be used in any space, or in the public halls of the Building, either by any Tenant or others, in the delivery or receipt of merchandise, any hand trucks, except those equipped with rubber tires and side guards.

23. Access plates to underfloor conduits shall be left exposed. Where carpet is installed, carpet shall be cut around access plates.

24. Mats, trash or other objects shall not be placed in the public corridors.

25. Landlord does not maintain suite finishes which are nonstandard; such as kitchens, bathrooms, wallpaper, special lights, etc. However, should the need for repairs arise, the Landlord will arrange for the work to be done at Tenant’s expense.

AMENDED LEASE RIVERSIDE CENTER

This is an amendment to a certain Lease (the "Lease") entered into between **CARILION MEDICAL CENTER**, a Virginia nonprofit corporation (the "Landlord") and **LUNA INNOVATOINS INCORPORATED**, a Virginia corporation (the "Tenant") dated the 30th day of December, 2005.

WHEREAS, Landlord and Tenant desire to amend said Lease.

NOW, THEREFORE, for and in consideration of the mutual covenants contained herein and those terms and conditions set out in the Lease, the parties hereby agree to amend the numbered Articles in said lease with the following replacement Articles of the same number, amend and replace Exhibit A attached to the Lease with that attached hereto, and to add to the Lease the other numbered Articles set forth herein and Exhibit C and Exhibit D attached hereto.

1. **Premises**. Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, for the term and upon the conditions hereinafter provided, that certain space located on the **4th** floors of the office building to be constructed by Landlord of Building #1 – Riverside Center, Roanoke, Virginia, 24014, (hereinafter referred to as the "Building"), which space shall consist of the entire 4th floor of the Building with approximately **24,057** net rentable square feet (such space being hereinafter referred to as (the "Premises"). The Building, including the Premises, is being constructed in two phases: upon completion of Phase 1 of the Building the 4th floor will contain approximately 13,740 net rentable square feet and upon completion of Phase 2 of the Building the 4th floor will contain an additional 10,317 net rentable square feet. The parties agree that a floor plan showing the Premises is attached hereto as Exhibit A.

2. **Term and Renewal**. Initially this Lease shall be for 13,740 sq. ft. of the Premises with a rental rate of $24.00 per square foot and Tenant's obligation to pay rent shall commence on the later of: (i) the **1st** day of **September 2006** or (ii) the day the Landlord delivers to Tenant a certificate of occupancy issued by the appropriate governmental authorities (provided Phase 1 of the Building and Tenant's Improvements for such space are substantially complete) permitting Tenant to take possession of the first 13,740 net rentable square feet of the Premises as reflected on Exhibit A (the "Commencement Date") Landlord shall provide at least thirty (30) days prior notice to Tenant of the anticipated Commencement Date for Phase 1 and Landlord shall give Tenant access to the Premises being part of Phase I during such thirty (30) day period.

The "term" of this Lease shall commence on the later of: (i) the 1st day of January, 2007, or (ii) the day the Landlord delivers to Tenant of a certificate of occupancy issued by the appropriate governmental authorities (provided Phase 2 of the Building and Tenant's Improvements for such space are substantially complete) permitting Tenant to take possession of the remaining 10,317 net rentable square feet of the Premises as reflected on Exhibit A and shall terminate seven years thereafter, unless sooner terminated as provided herein. In the event the a certificate of occupancy for Phase 2 of the Building and Tenant's Improvements for such space are not substantially complete by April 1, 2007, Tenant may terminate the Lease. Beginning on the first day of the term, Tenant shall pay an annual rent at the rate of $24.00 per square foot on the entire square footage in the Premises, subject to the increases described in Article 5 hereinbelow.

Landlord agrees that in the event Tenant notifies Landlord in writing at least twelve (12) months prior to the end of the initial seven year term that Tenant would like to renew this Lease for an additional five years, Landlord shall negotiate with Tenant in good faith for a five year extension of this Lease.

2A. **Tenant's Right to Terminate the Lease**. In addition to the other provisions set forth herein, Tenant shall have the option to terminate this Lease after the 5th year of the Term if it provides Landlord with notice of the exercise of such option and at the same time pays to Landlord a termination fee of $275,362 (as reflected on Exhibit C attached hereto) plus interest from January 1, 2007 based on the increase by the percentage that the Consumer Price Index increases between the beginning of the first month of that Year and the end of the last month of the that Year. For every year thereafter an additional increase shall be calculated in a similar fashion. The Consumer Price Index refers to the Consumer Price Index entitled "All Urban Consumers – (1967=100) – All Items," as promulgated by the Bureau of Labor Statistics of the United States Department of Labor. In the event that this price index or a successor or substitute index is not available, a similar governmental or other nonpartisan agency index shall be chosen by the Tenant to cover the increased cost of build out. To be effective said notice of termination must be accompanied with the payment of said termination fee and must be given during the month of July, 2011.

5. **Rent**. The first monthly installment of rent in accordance with the terms of Article 2 shall be made by Tenant within two business days following the Commencement Date, and the second and all subsequent monthly payments to be made on the first day of each and every calendar month until the end of the term, unless sooner terminated as provided herein, beginning with the second full calendar month after the Commencement Date. If the Commencement Date is a date other than the first day of a month, the rent from the Commencement Date until the first day of the following month shall be prorated at the rate of one-thirtieth (1/30th) or one-thirty first (1/31st), as applicable, of the base monthly rental for each day and that amount plus rent for the first full calendar month. Tenant shall pay rent to Landlord, or to such other party or at such other address as Landlord may designate from time to time by written notice to Tenant, without demand and without deduction, set-off or counterclaim, except as expressly set forth herein. If Landlord shall at any time or times accept said rent after it shall become due and payable, such acceptance shall not excuse delay upon subsequent occasions, or constitute, or be construed as, a waiver of any or all of Landlord's rights hereunder. As reflected in the table set forth below, rent for the third, fourth, fifth, sixth and seventh years of the term shall increase by two percent (2%) over the rent paid during the preceding lease year.

Rent Schedule

Pro-rated for 2006 – (13,740 sq. ft.)	$ 27,480.00 per month
Year One Jan. 1, 2007 – Dec. 31, 2007 – (24,057sq. ft.)	$ 48,114.00 per month
	$ 577,368.00 annually
Year Two	
Jan. 1, 2008 – Dec. 31, 2008	$ 48,114.00 per month
	$ 577,368.00 annually

Year Three	
Jan. 1, 2009 – Dec. 31, 2009	$ 49,076.28 per month
	$ 588,915.36 annually
Year Four	
Jan. 1, 2010 – Dec. 31, 2010	$ 50,057.81 per month
	$ 600,693.72 annually
Year Five	
Jan. 1, 2011 – Dec. 31, 2011	$ 51,058.97 per month
	$ 612,707.64 annually
Year Six	
Jan. 1, 2012 – Dec. 31, 2012	$ 52,080.14 per month
	$ 624,961.78 annually
Year Seven	
Jan. 1, 2013 – Dec. 31, 2013	$ 53,121.75 per month
	$ 637,461.01 annually

** The dates are to be adjusted if the term does not begin on January 1, 2007.

6. **Building and Improvements**. Landlord, at its sole cost and expense, shall cause the Building, of which the Premises are a part, to be constructed in accordance with the plans and specifications, including finishes, resubmitted to the Building Department of the City of Roanoke on December 28, 2005, which plans and specifications are incorporated herein by reference (the "Plans and Specifications"). Landlord warrants to Tenant that the Building shall be constructed in a good and workmanlike manner, substantially free of defects in workmanship and substantially in accordance with the Plans and Specifications; it being acknowledged by Tenant that Landlord may substitute materials of like-kind and quality without obtaining Tenant's prior written consent. Landlord shall promptly repair and replace any defects or deficiencies noted by Tenant to Landlord which arises as a result of the construction of the Building and not as a result of Tenant's use of the Premises.

Prior to the Commencement Date Landlord shall complete construction of all requested Tenant improvements in Phase 1 according to Tenant's plans and specifications attached hereto as Exhibit D, and prior to the beginning of the term Landlord shall complete construction of all request Tenant Improvements in the Premises (all the requested Tenant improvements are referred to herein as the "Tenant's Improvements"). Landlord agrees that it shall pay for all of Tenant's Improvements as shown on the plans and specifications attached hereto as Exhibit D, provided Tenant agrees to pay the Landlord, within five (5) business days following the Commencement Date, $79,247 for a portion of the Tenant's Improvements.

Landlord agrees to contract directly with the party constructing the Building to complete Tenant's Improvements, and Tenant shall be named as a third party beneficiary to such contract. Tenant shall be free to make, with Landlord's consent, provided such consent shall not be

unreasonably withheld or delayed, additional alterations, redecorations, or improvements in and to the Premises provided all of such alterations, redecorations, additions or improvements conform to all applicable Building Codes of the City of Roanoke. In the event Tenant requests alterations, redecorations or additional improvements not reflected on the plans and specification attached hereto as Exhibit D, Tenant agrees that it shall be responsible for the cost of the same if the alterations, redecoration or improvements cause the total amount to be incurred by Landlord for the construction of Tenant's Improvements to increase. Tenant shall reimburse Landlord for any additional costs paid by Landlord arising from Tenant's requested alterations, redecorations or improvements not shown on the plans and specification attached hereto as Exhibit D within thirty (30) days following Tenant's receipt of written notice from Landlord that the additional costs have been paid. If any mechanic's lien is filed against the Premises, or the real property of which the Premises are a part, for work claimed to have been done directly for, or materials claimed to have furnished directly to, Tenant, such mechanic's lien shall be discharged by Tenant within twenty (20) days thereafter, at Tenant's sole cost and expense, by the payment thereof or by filing any bond permitted by law. If Tenant shall fail to discharge any such mechanic's lien, Landlord may, at its option, discharge the same and treat the cost thereof as additional rent payable with the monthly installment of rent next becoming due; it being hereby expressly covenanted and agreed that such discharge by Landlord shall not be deemed to waive, or release, the default of Tenant in not discharging the same. It is understood and agreed that in the event Landlord shall give its written consent to Tenant's making any alterations, decorations, or improvements, such written consent shall not be deemed to be an agreement or consent by Landlord to subject Landlord's interest in the Premises, the Building or the real property upon which the Building is situated to any mechanic's liens which may be filed in respect of any such alterations, decorations, additions, or improvements made by or on behalf of Tenant. All alterations, decorations, additions or improvements, in or to the Premises or the Building made by either party shall remain upon and be surrendered with the Premises as a part thereof at the end of the term hereof without disturbance, molestation or injury; provided, however, that if Tenant is not in default in the performance of any of its obligations under this Lease, Tenant shall have the right to remove, prior to the expiration or termination of the term of this Lease, all movable furniture, furnishings, or equipment installed in the Premises at the expense of Tenant (except carpeting which Tenant has installed, which shall become property of Landlord), and if such property of Tenant is not removed by Tenant prior to the expiration or termination of this Lease the same shall become the property of Landlord and shall be surrendered with the Premises as a part thereof.

"Exhibit C" in subparagraph C in Article 36 is changed to "Exhibit B".

Except as modified herein, all other terms and provisions of the Lease remain unchanged and are hereby ratified and affirmed.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

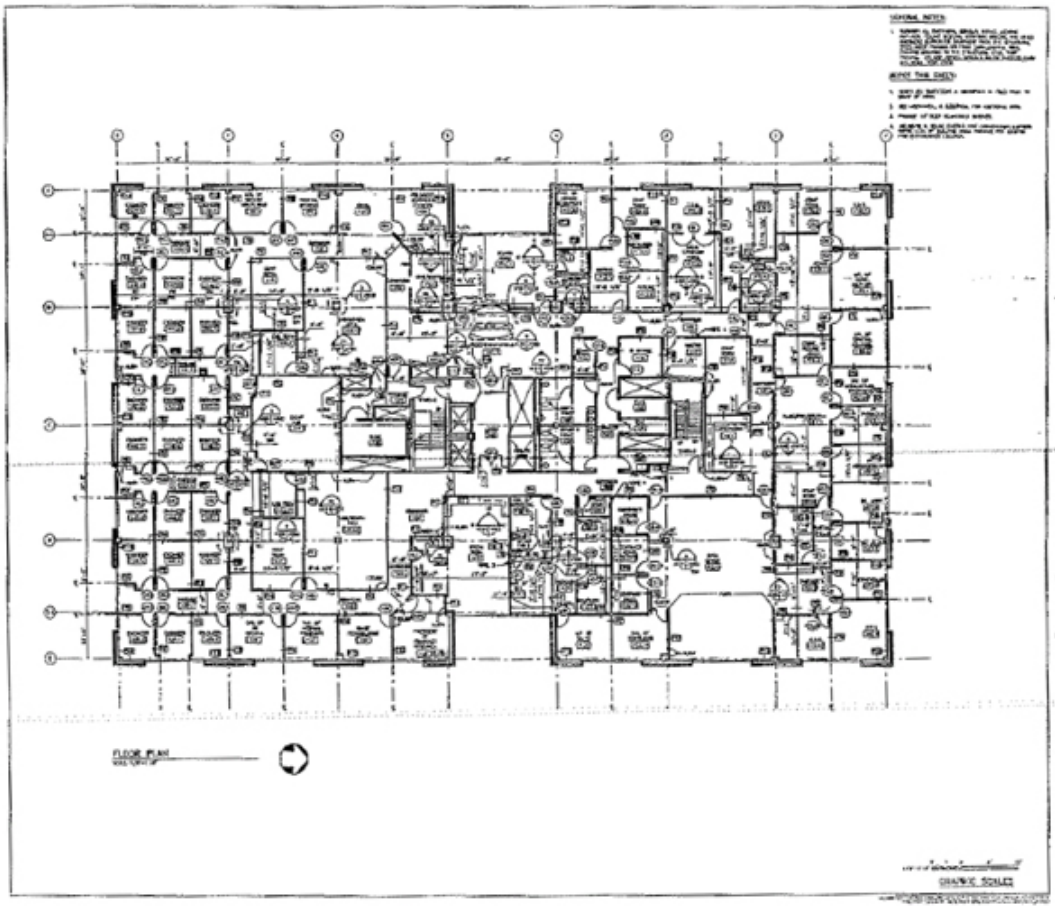
WITNESS the following signatures and seals as of the 20 day of July, 2006.

LANDLORD: **CARILION MEDICAL CENTER**

By: /s/ Curtis E. Mills SVP
Curtis E. Mills, Jr.
Senior Vice President

TENANT: **LUNA INNOVATIONS INCORPORATED**

By: /s/ Scott A. Graeff
Title: CFO



HSMM

LUNA

CARILION
Health System

LUNA INNOVATIONS/
RIVERSIDE CENTER

FLOOR PLAN

A101

EXHIBIT C

LUNA Inovations Tenant Upfit
Riverside Corporate Centre
Office Building #1

Scope of Work Changes	COSTS TO BE PAID BY LUNA AT OCCUPANY	
1. Rough Carpentry	$ 6,114.06	
2. Board Room Trim	$ 5,304.00	
3. Finish Carpentry	$ 4,613.72	
4. Reception Area	$ 18,494.32	
5. Caulking	SEE ADDITIONAL	
6. Security Hardware	$ 19,884.80	
7. Metal Studs & Drywall	$ 15,722.72	
8. Acoustical Wall Panels	$ 820.56	
9. Delete Toilet Accessories	($689.52)	
10. Decorative Lighting	$ 20,800.00	
11. Alt. Light Fix Type F	($990.00)	
12. Alt. Light Fix Type X	($1,103.00)	
13. Motorized Sun Shades	$ 9,615.00	
14. Allowance for S.C.I.F. Room	$ 20,057.00	
Sub Total	$ 118,643.66	
Skanska Fee	$ 4,449.14	3.75%
Total Construction Scope Changes	$ 123,092.80	
HSMM Design Fee	$ 6,154.64	5.00%
Project Total Scope Changes	**$ 129,247.44**	
Deduct-Luna Takes All of 4th Fl 1/1/07	-$50,000.00	
Net Due Carilion @ 9/1/07	**$ 79,247.44**	

ADDITIONAL COSTS ABOVE THE UPFIT ALLOWANCE	COSTS TO LUNA IF ONLY A FIVE YR LEASE	
1. Fire Extinguishers & Cabt.	$ 4,350.32	
2. Electrical	$ 15,811.12	
3. Caulking	$ 3,120.00	
Sub Total	$ 23,281.44	
Skanska Fee	$ 873.05	3.75%
Total Construction Scope Changes	$ 24,154.49	
HSMM Design Fee	$ 1,207.72	5.00%
Total Addl. Upfit Costs	**$ 25,362.22**	
Previous Overage of Upfit Costs	$ 250,000.00	
Total Due-Lease Terminated at Five Yrs.	**$ 275,362.22**	

Exhibit D

[Attached Plans and Specifications for Tenant’s Improvements]

SECOND AMENDMENT TO LUNA INNOVATIONS
LEASE OF RIVERSIDE CENTER

This is the Second Amendment to a certain Lease (the "Lease") entered into between **CARILION SERVICES, INC.**, a Virginia nonprofit corporation (the "Landlord") and **LUNA INNOVATIONS INCORPORATED**, a Virginia corporation (the "Tenant") dated the 30th day of December, 2005.

WHEREAS, Landlord and Tenant desire to amend the Lease as provided herein below.

NOW, THEREFORE, for and in consideration of the mutual covenants contained herein and those terms and conditions set out in the Lease, the parties hereby agree to delete Section 1A. Tenant's Option and Right of First Refusal in the Lease and to replace it with the following:

1A. **Tenant's Option and Right of First Refusal**. If at any time hereafter, Landlord receives from a ready, willing and able prospective tenant an acceptable bona fide offer, or makes a bona fide offer to such a prospective tenant, to lease all or a portion of the space on the second floor of the Building not leased to Tenant, Landlord shall give Tenant written notice thereof, specifying term, rent of the proposed lease, accompanied by Landlord's affidavit that such offer to lease is in good faith. Tenant shall thereupon have the prior option to lease the space at the rent rate covered by the offer, which option Tenant may exercise by giving Landlord written notice within fifteen (15) days after Tenant's receipt of Landlord's notice of the offer. Should Tenant fail to exercise the right of first refusal within the time limits set forth above or elect not to exercise said right, Landlord may lease the space to such third party and Tenant's right of first refusal for space shall terminate. Notwithstanding the foregoing, Tenant shall have the option, at any time prior to receiving notice from Landlord that Landlord has made or received a bona fide offer to lease all or a portion of the second floor of the Building not leased to Tenant, to lease all or a portion of such additional space. In the event Tenant notifies Landlord in writing of its election to lease additional space on the second floor, the additional space shall be leased by Landlord to

Tenant pursuant to the terms and conditions set forth herein and the parties agree to execute an amendment to this Lease reflecting the lease of the additional space.

Except as modified herein and by the first amendment, all other terms and provisions of the Lease remain unchanged and are hereby ratified and affirmed.

WITNESS the following signatures and seals as of the 5th day of October, 2007.

Date: October 5, 2007

LANDLORD;

CARILION MEDICAL CENTER

By: /s/ Curtis E. Mills, Jr.

Curtis E. Mills, Jr.
Senior Vice President

Date: 10/5, 2007

TENANT:

LUNA INNOVATIONS INCORPORATED

By: /s/ Scott A. Graeff

Scott A. Graeff
Chief Commercialization Officer

CONFIDENTIAL - SUBJECT TO PROTECTIVE ORDER

CC 08226

THIRD AMENDMENT
TO
LEASE

RIVERSIDE CENTER

This is an amendment having an effective date of April 1, 2010 to a certain lease entered into between **CARILION MEDICAL CENTER**, a Virginia nonprofit corporation (the "Landlord") and **LUNA INNOVATIONS INCORPORATED**, a Delaware corporation (the "Tenant") dated the 30th day of December, 2005, as amended by the Amended Lease Riverside Center dated July 20th, 2006 with an effective date of September 1, 2006 (the "First Amendment"), and the Second Amendment to Luna Innovations Lease of Riverside Center dated on or about October 5, 2007 (as thus amended, the "Lease")

WHEREAS, Landlord and Tenant desire to amend the Lease and find that the below amendments are mutually beneficial for the effective continuation of the Lease,

NOW, THEREFORE, for and in consideration of the mutual covenants contained herein and those terms and conditions set out in the Lease, the parties hereby agree to delete Article 2.A of the First Amendment and declare it null and void from this time forth, to amend the numbered Articles in the Lease with the following replacement articles of the same number.

2 **Term and Renewal**. The Term of this Lease shall extend until and end on December 31, 2015.

5 **Rent**. Monthly payments are to be made on the first day of each and every calendar month until the end of the Term. Tenant shall pay rent to Landlord, or to such other party or at such other address as Landlord may designate from time-to-time by written notice to Tenant, without demand and without deduction, set-off or counterclaim, except as expressly set forth herein. If Landlord shall at any time or times accept said rent after it shall become due and payable, such acceptance shall not excuse delay upon subsequent occasions, or constitute, or be construed as, a wavier of any or all of Landlord's rights hereunder. As reflected in the table set forth below, rent for the third, fourth, fifth, sixth, seventh, eight and ninth years of the Term shall increase by two percent (2%) over the rent paid during the preceding lease year.

Rent Schedule

Pro-rated for 2006 – (13,740 sq. ft.)	$ 27,480.00 per month
Year One	$ 48,114.00 per month
Jan. 1, 2007 – Dec. 31, 2007 – (24,057 sq. ft.)	$ 577,368.00 annually
Year Two	$ 48,114.00 per month
Jan. 1, 2008 – Dec. 31, 2008	$ 577,368.00 annually
Year Three	$ 49,076.28 per month
Jan. 1, 2009 – Dec. 31, 2009	$ 588,915.36 annually
Year Four	$ 50,057.81 per month
Jan. 1, 2010 – Dec. 31, 2010	$ 600,693.72 annually
Year Five	$ 51,058.97 per month
Jan. 1, 2011 – Dec. 31, 2011	$ 612,707.64 annually
Year Six	$ 52,080.14 per month
Jan. 1, 2012 – Dec. 31, 2012	$ 624,961.78 annually

Year Seven	$ 53,121.75 per month
Jan. 1, 2013 – Dec. 31, 2013	$ 637,461.01 annually
Year Eight	$ 54,184.19 per month
Jan. 1, 2014 – Dec. 31, 2014	$ 650,210.28 annually
Year Nine	$ 55,267.87 per month
Jan. 1, 2015 – Dec. 31, 2015	$ 663,214.44 annually

Except as expressly amended above, the Lease shall remain in full force and effect

EXECUTED as of the date first herein specified.

Landlord: **CARILION MEDICAL CENTER**

Date: April 12, 2010

By: /s/ Briggs W. Andrews

Briggs W. Andrews
Secretary

Date: April 13, 2010

Tenant: **LUNA INNOVATIONS INCORPORATED**

By: /s/ Kent A. Murphy

Title: CEO

Exhibit 31.1

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

I, Kent A. Murphy, 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)) 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 controls over financial reporting.

Date: May 17, 2010

/S/ KENT A. MURPHY

Kent A. Murphy, Ph.D.
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION OF CHIEF 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)) 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 controls over financial reporting

Date: May 17, 2010

/s/ DALE E. MESSICK

Dale E. Messick
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF CHIEF 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 period ending March 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Kent A. Murphy, 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.

/S/ KENT A. MURPHY

Kent A. Murphy, Ph.D.
President and Chief Executive Officer

May 17, 2010

Exhibit 32.2

CERTIFICATION OF CHIEF 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 period ending March 31, 2010 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.

/S/ DALE E. MESSICK

Dale E. Messick
Chief Financial Officer

May 17, 2010