PROSPECTUS SUPPLEMENT NO. 5
(to Prospectus dated January 29, 2016)

Filed Pursuant to Rule 424(b)(3)
Registration No. 333-209009

MRI Interventions, Inc.

29,356,679 Shares of Common Stock

This prospectus supplement relates to the prospectus dated January 29, 2016, as supplemented by prospectus supplement no. 1 dated March 22, 2016, prospectus supplement no. 2 dated March 25, 2016, prospectus supplement no. 3 dated April 4, 2016, and prospectus supplement no. 4 dated April 25, 2016, which permits the resale of up to 16,309,270 outstanding shares of our common stock, and 13,047,409 shares of our common stock issuable upon the exercise of outstanding warrants, by the selling securityholders identified in the prospectus, as amended and supplemented from time to time. We will pay the expenses of registering the shares, but we are not selling any shares of common stock in this offering and therefore will not receive any proceeds from this offering. We will, however, receive the exercise price of the warrants, if and when the warrants are exercised for cash by the securityholders.

This prospectus supplement is being filed to update, amend and supplement the information previously included in the prospectus with the information contained in our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 6, 2016 (the "Form 10-Q"). Accordingly, we have attached the Form 10-Q to this prospectus supplement. You should read this prospectus supplement together with the prospectus, which is to be delivered with this prospectus supplement.

Our common stock is traded in the over-the-counter market and is quoted on the OTCQB Marketplace and the OTC Bulletin Board under the symbol MRIC. On May 4, 2016, the last reported sale price of our common stock was $0.40 per share.

We are an "emerging growth company" under the federal securities laws and will be subject to reduced public company reporting requirements. Investing in our common stock involves risk. See "Risk Factors" beginning on page 6 of the prospectus, as amended and supplemented by the "Risk Factors" beginning on page 21 of our Annual Report on Form 10-K for the year ended December 31, 2015, which is included in prospectus supplement no. 2, to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus or this prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is May 6, 2016.

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

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2016

or

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

For the transition period from_____to _____

Commission file number: 000-54575

MRI Interventions, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**58-2394628**
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification Number)
5 Musick Irvine, California	**92618**
(Address of Principal Executive Offices)	(Zip Code)

(949) 900-6833
(Registrant's Telephone Number, Including Area Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 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 smaller reporting company)	Smaller Reporting Company ☒

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

☐ Yes ☒ No

As of April 14, 2016, there were 95,889,044 shares of common stock outstanding.

MRI INTERVENTIONS, INC.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains "forward-looking statements" as defined under the United States federal securities laws. The forward-looking statements are contained principally in the section of this Quarterly Report entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations." These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- our ability to obtain additional financing;
- estimates regarding the sufficiency of our cash resources;
- future revenues from sales of ClearPoint system products; and
- our ability to market, commercialize and achieve broader market acceptance for our ClearPoint system products.

In some cases, you can identify forward-looking statements by terms such as "anticipates," "believes," "could," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," and similar expressions intended to identify forward-looking statements, although not all forward-looking statements contain these words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report, we caution you that these statements are based on a combination of facts and factors currently known by us and our projections of the future, about which we cannot be certain. You should refer to the section titled "Risk Factors" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, which we filed with the SEC on March 25, 2016, for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by the forward-looking statements contained in this Quarterly Report. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. We do not undertake to update any of the forward-looking statements after the date of this Quarterly Report, except to the extent required by applicable securities laws.

PART I – FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

MRI INTERVENTIONS, INC.
Condensed Consolidated Balance Sheets
(Unaudited)

	March 31, 2016	December 31, 2015
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 3,582,227	$ 5,408,523
Accounts receivable	1,497,537	1,218,043
Inventory, net	1,570,078	1,807,895
Prepaid expenses and other current assets	115,364	97,249
Total current assets	6,765,206	8,531,710
Property and equipment, net	459,259	440,606
Software license inventory	989,600	937,100
Other assets	77,446	27,306
Total assets	$ 8,291,511	$ 9,936,722
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 818,047	$ 697,807
Accrued compensation	455,915	557,784
Other accrued liabilities	1,305,943	1,398,707
Derivative liabilities	498,168	658,286
Deferred product and service revenues	151,706	116,009
Senior secured note payable, net of unamortized discount of $64,835 at December 31, 2015	-	4,224,609
Total current liabilities	3,229,779	7,653,202
Accrued interest	577,125	542,500
Senior secured note payable	4,289,444	-
2014 junior secured notes payable, net of unamortized discount and deferred issuance costs of $434,408 and $467,611 at March 31, 2016 and December 31, 2015, respectively	3,290,592	3,257,389
2010 junior secured notes payable, net of unamortized discount of $2,535,230 and $2,481,510 at March 31, 2016 and December 31, 2015, respectively	518,490	464,770
Total liabilities	11,905,430	11,917,861
Commitments and contingencies		
Stockholders' deficit:		
Common stock, $0.01 par value; 200,000,000 shares authorized; 91,916,634 shares issued and outstanding at March 31, 2016; and 91,381,488 issued and outstanding at December 31, 2015	919,165	913,814
Additional paid-in capital	83,237,314	82,831,627
Accumulated deficit	(87,770,398)	(85,726,580)
Total stockholders' deficit	(3,613,919)	(1,981,139)
Total liabilities and stockholders' deficit	$ 8,291,511	$ 9,936,722

See accompanying notes.

MRI INTERVENTIONS, INC.
Condensed Consolidated Statements of Operations
(Unaudited)

	For The Three Months Ended March 31,	
	2016	**2015**
Revenues:		
Product revenues	$ 1,366,153	$ 976,871
Other service revenues	27,981	33,532
Total revenues	1,394,134	1,010,403
Cost of product revenues	696,546	385,609
Research and development costs	657,192	527,512
Selling, general, and administrative expenses	1,974,249	2,288,660
Restructuring charges	-	753,400
Operating loss	(1,933,853)	(2,944,778)
Other income (expense):		
Gain (loss) on change in fair value of derivative liabilities	160,118	(782,802)
Other income, net	75,142	82,688
Interest income	4,333	7,451
Interest expense	(349,558)	(307,813)
Net loss	$ (2,043,818)	$ (3,945,254)
Net loss per share attributable to common stockholders:		
Basic and diluted	$ (0.02)	$ (0.05)
Weighted average shares outstanding:		
Basic and diluted	91,645,881	74,842,841

See accompanying notes.

MRI INTERVENTIONS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

	For The Three Months Ended March 31,	
	2016	**2015**
Cash flows from operating activities:		
Net loss	$ (2,043,818)	$ (3,945,254)
Adjustments to reconcile net loss to net cash flows from operating activities:		
Depreciation and amortization	41,022	86,680
Share-based compensation	260,149	377,892
Expenses paid through the issuance of common stock	192,166	37,583
(Gain) loss on change in fair value of derivative liabilities	(160,118)	782,802
Amortization of debt issuance costs and original issue discounts	151,759	110,015
Increase (decrease) in cash resulting from changes in:		
Accounts receivable	(279,494)	(136,769)
Inventory	217,873	(109,994)
Prepaid expenses and other current assets	(18,114)	(6,909)
Other assets	(58,473)	(4,000)
Accounts payable and accrued expenses	52,790	13,782
Deferred revenue	35,697	(4,870)
Net cash flows from operating activities	(1,608,561)	(2,799,042)
Cash flows from investing activities:		
Purchases of property and equipment	(77,649)	(6,635)
Net cash flows from investing activities	(77,649)	(6,635)
Cash flows from financing activities:		
Payment of 2015 private placement financing costs	(140,086)	-
Net cash flows from financing activities	(140,086)	-
Net change in cash and cash equivalents	(1,826,296)	(2,805,677)
Cash and cash equivalents, beginning of period	5,408,523	9,244,006
Cash and cash equivalents, end of period	$ 3,582,227	$ 6,438,329
SUPPLEMENTAL CASH FLOW INFORMATION		
Cash paid for:		
Income taxes	$ -	$ -
Interest	$ 223,500	$ 223,500

See accompanying notes.

MRI INTERVENTIONS, INC.
Condensed Consolidated Statements of Cash Flows (continued)
(Unaudited)

NON-CASH INVESTING AND FINANCING TRANSACTIONS:

- During the three months ended March 31, 2016 and 2015, the Company recorded net transfers of ClearPoint reusable components having an aggregate net book value of $24,223 and $4,366, respectively, from loaned systems, which are included in property and equipment in the accompanying condensed consolidated balance sheets, to inventory.

1. Description of the Business and Liquidity

MRI Interventions, Inc. (the "Company") is a medical device company focused on the development and commercialization of technology that enables physicians to see inside the brain and heart using direct, intra-procedural magnetic resonance imaging ("MRI") guidance while performing minimally invasive surgical procedures. The Company was incorporated in the state of Delaware in March 1998. The Company's principal executive office and principal operations are located in Irvine, California. The Company established MRI Interventions (Canada) Inc., a wholly-owned subsidiary incorporated in Canada, in August 2013. This subsidiary was established primarily for the purpose of performing software development, and its activities are reflected in these condensed consolidated financial statements.

The Company's ClearPoint system, an integrated system comprised of reusable and disposable products, is designed to allow minimally invasive procedures in the brain to be performed in an MRI suite. The Company received 510(k) clearance from the U.S. Food and Drug Administration ("FDA") in 2010 to market the ClearPoint system in the United States for general neurological interventional procedures. The Company's ClearTrace system is a product candidate under development that is designed to allow catheter-based minimally invasive procedures in the heart to be performed in an MRI suite. Although still a product candidate, the Company has suspended its efforts to commercialize the ClearTrace system.

Liquidity and Management's Plans

The cumulative net loss from the Company's inception through March 31, 2016 was $87.8 million. Net cash used in operations was $1.6 million and $8.6 million for the three months ended March 31, 2016 and the year ended December 31, 2015, respectively. Since inception, the Company has financed its operations principally from the sale of equity securities, the issuance of notes payable and license arrangements. Recent financing activities consist of: (i) a December 2015 private placement of equity, which resulted in net proceeds of $4.7 million; (ii) a December 2014 private placement of equity, which resulted in net proceeds of $9.4 million; and (iii) a March 2014 private placement of debt and warrants, which resulted in net proceeds of $3.5 million.

In addition, as more fully discussed in Note 7, on March 22, 2016 the Company entered into a securities purchase agreement (the "2016 Purchase Agreement") with Brainlab AG ("Brainlab") that provided, among other items, for the restructuring of a senior secured note payable to Brainlab, which was originally issued to Brainlab on April 5, 2011, and subsequently amended and restated on March 6, 2013 (the "Brainlab Note"). The restructuring of the Brainlab Note was consummated on April 4, 2016 and resulted in a reduction of the principal amount outstanding under the Brainlab Note, which is reflected in a new, amended and restated note payable to Brainlab that matures on December 31, 2018.

The Company's plans for the next twelve months reflect management's anticipation of increases in revenues from sales of the ClearPoint system and related disposable products as a result of greater utilization at existing installed sites and the installation of the ClearPoint system at new sites. Management also anticipates maintaining recurring operating expenses at historical levels, with expected decreases in general and administrative expenses resulting primarily from the operational restructuring, discussed in Note 4, being offset by increases in selling and marketing expenses associated with the anticipated growth in revenues. However, there is no assurance that the Company will be able to achieve its anticipated results, and even in the event such results are achieved, the Company expects to continue to consume cash in its operations over at least the next twelve months.

As a result of the foregoing, the Company believes it will be necessary to seek additional financing from the sale of equity or debt securities, which would result in dilution to the Company's current stockholders, the establishment of a credit facility, or the entry into an agreement with a strategic partner of some other form of collaborative relationship. There is no assurance, however, that the Company will be able to obtain such additional financing on commercially reasonable terms, if at all, and there is no assurance that any additional financing that the Company does obtain will be sufficient to meet its needs. If the Company is not able to obtain the additional financing on a timely basis, the Company may be unable to achieve its anticipated results, and the Company may not be able to meet its other obligations as they become due. As such, there is substantial doubt as to the Company's ability to continue as a going concern.

The accompanying condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

2. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation and Use of Estimates

In the opinion of management, the accompanying unaudited condensed consolidated financial statements have been prepared on a basis consistent with the Company's December 31, 2015 audited consolidated financial statements, and include all adjustments, consisting of only normal recurring adjustments, necessary to fairly state the information set forth therein. These condensed consolidated financial statements have been prepared in accordance with United States ("U.S.") Securities and Exchange Commission ("SEC") rules for interim financial information, and, therefore, omit certain information and footnote disclosures necessary to present such statements in accordance with generally accepted accounting principles in the U.S. ("GAAP"). The preparation of these condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and the related disclosures at the date of the financial statements and during the reporting period. Actual results could materially differ from these estimates. These condensed financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2015, which was filed with the SEC on March 25, 2016. The accompanying unaudited condensed consolidated balance sheet as of December 31, 2015 has been derived from the audited consolidated financial statements at that date, but does not include all information and footnotes required by GAAP for a complete set of financial statements. The results of operations for the three months ended March 31, 2016 may not be indicative of the results to be expected for the entire year or any future periods.

Derivative Liabilities for Warrants to Purchase Common Stock

Derivative liabilities for warrants to purchase common stock represent the fair value of warrants issued in connection with certain private placements of shares of the Company's common stock (see Note 6). The fair values of these warrants are presented as liabilities based on certain net cash settlement and exercise price reset, or "down round," provisions. These derivative liabilities are calculated utilizing the Monte Carlo simulation valuation method. Changes in the fair values of these warrants are recognized as other income or expense in the related statements of operations.

Fair Value Measurements

The Company measures and records certain financial assets and liabilities at fair value on a recurring basis. GAAP provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority, referred to as Level 1, to quoted prices in active markets for identical assets and liabilities. The next priority, referred to as Level 2, is given to quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in markets that are not active; that is, markets in which there are few transactions for the asset or liability. The lowest priority, referred to as Level 3, is given to unobservable inputs. The table below reflects the level of the inputs used in the Company's fair value calculation for instruments carried at fair value at (see Note 6):

	Quoted Prices in Active Markets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value
March 31, 2016				
Derivative liabilities - warrants	$ -	$ -	$ 498,168	$ 498,168
December 31, 2015				
Derivative liabilities - warrants	$ -	$ -	$ 658,286	$ 658,286

Carrying amounts of the Company's cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to their short maturities.

The table below reflects the carrying values and the estimated fair values, based on Level 3 inputs, of the Company's outstanding notes payable, including the related accrued interest, at March 31, 2016:

	Carrying Values	Estimated Fair Values
Senior secured note payable, including accrued interest	$ 5,026,966	$ 5,026,966
2014 junior secured notes payable, including accrued interest	3,298,967	3,733,375
2010 junior secured notes payable, including accrued interest	1,087,240	2,476,630

Inventory

Inventory is carried at the lower of cost (first-in, first-out method) or net realizable value. Items in inventory relate predominantly to the Company's ClearPoint system. Software license inventory that is not expected to be utilized within the next twelve months is classified as a non-current asset. The Company periodically reviews its inventory for obsolete items and provides a reserve upon identification of potential obsolete items.

Revenue Recognition

The Company's revenues are comprised of: (1) product revenues resulting from the sale of ClearPoint system reusable products and disposable products; and (2) other service revenues. The Company recognizes revenue when persuasive evidence of an arrangement exists, the selling price or fee is fixed or determinable, collection is reasonably assured, and, for product revenues, risk of loss has transferred to the customer. For all sales, the Company requires either a purchase agreement or a purchase order as evidence of an arrangement. The Company analyzes revenue recognition on a case-by-case basis. The Company determines if the deliverables under the arrangement represent separate units of accounting as defined by GAAP. Application of GAAP regarding multiple-element arrangements requires the Company to make subjective judgments about the values of the individual elements and whether delivered elements are separable from the other aspects of the contractual relationship.

(1) *Product Revenues*

Sales of ClearPoint system reusable products: The predominance of ClearPoint system reusable product sales (consisting primarily of integrated computer hardware and software) are preceded by customer evaluation periods, generally with 90-day terms. During these evaluation periods, installation of, and training of customer personnel on, the systems have been completed and the systems have been in operation. Accordingly, reusable product sales following such evaluation periods are recognized on the basis of an executed purchase agreement or purchase order that provide for risk of loss to pass to the customer. Sales of reusable products not having been preceded by an evaluation period are recognized on an individual agreement basis as described in the preceding paragraph above.

Sales of ClearPoint system disposable products: Revenues from the sale of disposable products, including ClearPoint system disposable products, are recognized at the time risk of loss passes to the customer, which is generally at the shipping point or upon delivery to the customer's location, depending on the agreed upon terms with the customer.

(2) *Other Service Revenues*

Other service revenues are comprised of installation fees, training fees, shipping fees and service fees charged in connection with ClearPoint system installations and ClearPoint system service agreements. Typically, the Company bills upfront for service agreements, which have terms ranging from one to three years. These amounts are recognized as revenue ratably over the term of the related service agreement

Net Loss Per Share

The Company computes net loss per share using the weighted-average number of common shares outstanding during the period. Basic and diluted net loss per share are the same because the conversion, exercise or issuance of all potential common stock equivalents, which are comprised of the Company's common stock options and warrants described in Note 6, would be anti-dilutive.

Concentration Risks and Other Risks and Uncertainties

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. The Company holds its cash and cash equivalents on deposit with financial institutions in the U.S. insured by the Federal Deposit Insurance Corporation. At March 31, 2016, the Company had approximately $11,000 in bank balances that were in excess of the insured limits.

At March 31, 2016, two customers each represented 11% of the Company's accounts receivable balance. At December 31, 2015, three customers represented 14%, 14% and 12% of the Company's accounts receivable balance. No other customer represented more than 9% of total accounts receivable at each of March 31, 2016 and December 31, 2015.

For the three months ended March 31, 2016, sales to one customer represented 11% of product revenues. For the three months ended March 31, 2015, sales to two customers represented 17% and 14% of product revenues. No other single customer represented more than 9% and 7% of product revenues for the three months ended March 31, 2016 and 2015, respectively. The Company performs credit evaluations of its customers' financial condition, and generally does not require collateral from its customers. The Company will provide an allowance for doubtful accounts when collections become doubtful. The allowance for doubtful accounts at each of March 31, 2016 and December 31, 2015 was $28,000.

Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2014-15, "Disclosure of Uncertainties About an Entity's Ability to Continue as a Going Concern," which provides guidance on determining when and how to disclose going-concern uncertainties in financial statements. The new standard requires management to perform interim and annual assessments of an entity's ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity's ability to continue as a going concern. ASU 2014-15 applies to all entities and is effective for annual periods ending after December 15, 2016, and interim periods thereafter, with early adoption permitted. The Company is currently evaluating the impact of this update on future disclosures concerning its liquidity position.

In July 2015, the FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory," which requires an entity to measure inventory at the lower of cost or net realizable value, as opposed to the current requirement to measure inventory at the lower of cost or market, where market could be replacement cost, net realizable value, or net realizable value less an approximately normal profit margin. ASU 2015-11 is effective for fiscal years beginning after December 15, 2016 and interim periods within fiscal years beginning after December 15, 2017. ASU 2015-11 is to be applied prospectively with earlier application permitted as of the beginning of an interim or annual reporting period. The Company believes that adoption of ASU 2015-11 will not have a material effect on its consolidated financial statements.

In August 2015, the FASB issued ASU 2015-14 as an amendment to ASU 2014-09, "Revenue from Contracts with Customers," which created a new Topic, Accounting Standards Codification ("ASC") Topic 606. The standard is principle-based and provides a five-step model to determine when and how revenue is recognized. The core principle is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This standard is effective for the Company beginning in 2018. Earlier application is permitted only as of 2017. Based on a preliminary evaluation, the Company believes that adoption of ASC Topic 606 will not have a material effect on its consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, "Balance Sheet Classification of Deferred Taxes," which simplifies the presentation of deferred income taxes by requiring that deferred income tax liabilities and assets be classified as noncurrent in a classified balance sheet. Until implementation of this standard, deferred income tax liabilities and assets are required to be classified as current or noncurrent based on the classification of the related asset or liability for financial reporting purposes. Deferred tax liabilities and assets that are not related to an asset or liability for financial reporting are classified according to the expected reversal date of the temporary difference. This standard is effective for the Company beginning in 2017. Adoption will have no effect on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, "Leases," which created a new Topic, ASC Topic 842 and established the core principle that a lessee should recognize the assets, representing rights-of-use, and liabilities to make lease payments, that arise from leases. For leases with a term of 12 months or less, a lessee is permitted to make an election under which such assets and liabilities would not be recognized, and lease expense would be recognized generally on a straight-line basis over the lease term. This standard is effective for the Company beginning in 2019, and early application is permitted. Based on a preliminary evaluation, the Company believes that adoption of ASC Topic 842 will not have a material effect on its consolidated financial statements.

Adoption of New Accounting Standard

In April 2015, the FASB issued ASU 2015-03, "Simplifying the Presentation of Debt Issuance Costs," which requires debt issuance costs related to a recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. ASU 2015-03 required retrospective adoption and became effective with respect to the Company's financial statements on January 1, 2016. Prior to the effective date, such issuance costs were classified as assets and included as other assets in the Company's balance sheet. Under the provisions of ASU 2015-03, such issuance costs are presented as a direct deduction from the carrying amount of the related debt (see Note 5) in the accompanying March 31, 2016 condensed consolidated balance sheet, and such issuance costs, amounting to $166,080, have been reclassified in the December 31, 2015 condensed consolidated balance sheet to conform to the 2016 presentation.

3. Inventory

Inventory consists of the following as of:

	March 31, 2016	December 31, 2015
Raw materials and work in process	$ 820,907	$ 853,034
Software licenses	109,800	179,400
Finished goods	639,372	775,461
Inventory included in current assets	1,570,078	1,807,895
Software licenses – non-current	989,600	937,100
	$ 2,559,678	$ 2,744,995

4. Restructuring Charges

In March 2015, the Company announced its plan to consolidate all major business functions into its Irvine, California headquarters and close its Memphis, Tennessee office. The Company completed this consolidation and closure in May 2015. The Company did not retain any of its Memphis-based employees. A total of seven employees were impacted by the consolidation, including three executives of the Company. In connection with this consolidation and closure, the Company recorded restructuring charges of approximately $753,000 during the three months ended March 31, 2015 that related primarily to costs associated with severance and other compensation for the impacted employees.

5. Notes Payable

Senior Secured Note Payable

The principal indebtedness outstanding under the Brainlab Note at both March 31, 2016 and December 31, 2015 was $4,289,444. The original discount associated with the Brainlab Note represented the difference between the fair value and the principal amount of the note at the time the note was modified in March 2013. The discount was completely amortized as of March 31, 2016 and amounted to $64,835 at December 31, 2015. The discount was amortized to interest expense using the effective interest method over the term of the Brainlab Note. The Brainlab Note was to mature in April 2016, with principal and accrued interest, which had accrued at a rate of 5.5% and amounted to approximately $738,000 at March 31, 2016, payable in a single installment upon maturity. As discussed in Note 7, on March 22, 2016, the Company entered into the 2016 Purchase Agreement with Brainlab that would provide, among other items, for a reduction of the principal amount outstanding under the Brainlab Note. The restructuring of the Brainlab Note was consummated on April 4, 2016, and was reflected by a new, amended and restated note payable to Brainlab that matures on December 31, 2018. The Brainlab Note is collateralized by a senior security interest in the assets of the Company.

2014 Junior Secured Notes Payable

In March 2014, the Company entered into securities purchase agreements for the private placement of: (i) second-priority secured non-convertible promissory notes (the "2014 Secured Notes"); and (ii) warrants to purchase 0.3 shares of the Company's common stock for each dollar in principal amount of the 2014 Secured Notes sold by the Company. Pursuant to those securities purchase agreements, the Company sold 2014 Secured Notes in a total aggregate principal amount of $3,725,000, together with warrants to purchase up to 1,117,500 shares of common stock, for aggregate gross proceeds of $3,725,000, before placement agent commissions and other expenses.

The 2014 Secured Notes have a five-year term and bear interest at a rate of 12% per year, payable semi-annually, in arrears. The 2014 Secured Notes are not convertible into shares of the Company's common stock. Following the third anniversary of the issuance date, the 2014 Secured Notes may be prepaid, without penalty or premium, provided that all principal and unpaid accrued interest under all 2014 Secured Notes is prepaid at the same time. Prior to the third anniversary of the issuance date, the Company may prepay all, but not less than all, of the principal and unpaid accrued interest under the 2014 Secured Notes at any time, subject to the Company's payment of the additional prepayment premium stated in the notes. The 2014 Secured Notes are collateralized by a security interest in the Company's property and assets, which security interest is junior and subordinate to the security interest that collateralizes the Brainlab Note.

The warrants issued to the investors are exercisable, in full or in part, at any time prior to the fifth anniversary of the issuance date, at an exercise price of $1.75 per share, subject to adjustment from time-to-time for stock splits or combinations, stock dividends, stock distributions, recapitalizations and other similar transactions. Assumptions used in calculating the fair value of the warrants using the Black-Scholes valuation model were:

Dividend yield	0%
Expected volatility	47.5% - 47.7%
Risk free interest rates	1.73% - 1.76%
Expected life (in years)	5.0

Under GAAP, the Company allocated the $3,725,000 in proceeds proportionately between the 2014 Secured Notes and the warrants issued to investors based on their relative fair values, with $413,057 being allocated to the fair value of the warrants, recorded as equity. The 2014 Secured Notes were recorded at the principal amount, less a discount equal to $413,057. The unamortized discount at March 31, 2016 and December 31, 2015 was $280,919 and $301,531, respectively. This discount is being amortized to interest expense over the five-year term of the 2014 Secured Notes using the effective interest method. The carrying amount of the 2014 Secured Notes in the accompanying condensed consolidated balance sheets is also presented net of issuance costs, as discussed further below.

Non-employee directors of the Company purchased a total of $1,100,000 of the 2014 Secured Notes, either directly or through a trust. The Company's placement agents earned cash commissions of $145,500 as well as warrants to purchase 72,750 shares of the Company's common stock. The placement agent warrants have the same terms and conditions as the investor warrants.

The placement agent cash commissions, the $30,210 fair value of the placement agent warrants, and other offering expenses, aggregating $76,186, were recorded as deferred financing costs and are presented as reductions of the carrying amount of the 2014 Secured Notes in the accompanying condensed consolidated balance sheets. These deferred financing costs, having an unamortized balance of $153,489 and $166,080 at March 31, 2016 and December 31, 2015, are being amortized to interest expense over the term of the 2014 Secured Notes using the effective interest method.

2010 Junior Secured Notes Payable

In November 2010, the Company issued units consisting of a junior secured note (the "2010 Secured Notes") and one share of the Company's common stock. An aggregate of 10,714,286 units were issued, and the Company received proceeds of $3,000,000 representing the aggregate principal amount of the 2010 Secured Notes. The 2010 Secured Notes mature in November 2020, accrue interest at the rate of 3.5% per year, and are collateralized by a security interest in the assets of the Company, which security interest is junior and subordinate to the security interests that collateralize the Brainlab Note and the 2014 Secured Notes. All outstanding principal and interest on the 2010 Secured Notes will be due and payable in a single payment upon maturity.

Under GAAP, the Company allocated the $3,000,000 in proceeds from the sale of the units between the 2010 Secured Notes and the shares of common stock based on their relative fair values, with the fair value of the notes being estimated based on an assumed market interest rate for notes of similar terms and risk, and the fair value of the Company's common stock being estimated by management using a market approach, with input from a third-party valuation specialist. The allocation of such relative fair values resulted in $2,775,300 being allocated to the value of the shares of common stock, which was recorded as equity. The 2010 Secured Notes were recorded at the principal amount of $3,000,000, less a discount equal to $2,775,300. The unamortized discount at March 31, 2016 and December 31, 2015 was $2,481,510 and $2,535,230, respectively. This discount is being amortized to interest expense over the 10-year term of the notes using the effective interest method.

Four then-serving officers of the Company purchased an aggregate of 882,726 units in the offering for $247,164. In addition, three non-employee directors of the Company also purchased an aggregate of 567,203 units in the offering for $158,816.

Scheduled Notes Payable Maturities

Scheduled principal payments, before giving effect to the terms of the New Brainlab Note discussed in Note 7, with respect to notes payable are summarized as follows:

Years ending December 31,	
2016	$ 4,289,444
2017	-
2018	-
2019	3,725,000
2020	3,000,000
Total scheduled principal payments	11,014,444
Less unamortized discounts at March 31, 2016	(2,762,429)
	$ 8,252,016

6. Stockholders' Equity

Issuance of Common Stock in Lieu of Cash Payments

Under the terms of the Amended and Restated Non-Employee Director Compensation Plan, each non-employee member of the Company's Board of Directors may elect to receive all or part of his or her director fees in shares of the Company's common stock. Director fees, whether paid in cash or in shares of common stock, are payable quarterly on the last day of each fiscal quarter. The number of shares of common stock issued to directors is determined by dividing the product of: (i) the fees otherwise payable to each director in cash, times (ii) the percentage of fees the director elected to receive in shares of common stock, by (iii) the volume weighted average price per share of common stock over the last five trading days of the quarter. During the three months ended March 31, 2016 and 2015, 112,975 shares and 37,583 shares, respectively, were issued to directors as payment for director fees in lieu of cash.

Common Stock Warrants Requiring Liability Accounting

Warrants issued in 2012 and 2013 financing transactions contain either or both of net-cash settlement and down round provisions. Under GAAP, such provisions require that these warrants be accounted for as derivatives, thus requiring that they be adjusted to estimated fair value at each balance sheet date and shown as liabilities in the accompanying consolidated balance sheets. The fair value of such warrants was calculated using the Monte Carlo simulation valuation method.

Assumptions used in calculating the fair value of the warrants at March 31, 2016 are as follows:

	March 31, 2016
Dividend yield	0%
Expected volatility	54.50% - 59.50%
Risk free interest rates	0.63% - 0.70%
Expected remaining term (in years)	1.25 – 1.82

In addition to the assumptions above, the Company also estimates the likelihood of whether it will participate in a future round of equity financing and, if so, the estimated timing and pricing of its offering of common stock.

The fair values and the changes in fair values of the warrants accounted for as derivative liabilities for the three months ended March 31, 2016 are as follows:

Balance, December 31, 2015	$ 658,286
Gain on change in fair value for the three months ended March 31, 2016	(160,118)
Balance, March 31, 2016	$ (498,168)

Stock Incentive Plans

The Company has various share-based compensation plans and share-based compensatory contracts (collectively, the "Plans") under which it has granted share-based awards, such as stock grants, and incentive and non-qualified stock options, to employees, directors, consultants and advisors. Awards may be subject to a vesting schedule as set forth in individual award agreements. Certain of the Plans also have provided for cash-based performance bonus awards.

In June 2013, the Company's stockholders approved the 2013 Incentive Compensation Plan. Upon its approval, the Company ceased making awards under other previous Plans, although then-outstanding awards made under such other previous Plans remain outstanding in conformity with their original terms. At the 2015 Annual Meeting, the Company's stockholders approved the adoption of the MRI Interventions, Inc. Amended and Restated 2013 Incentive Compensation Plan (the "Amended 2013 Plan"). The material change effected in the Amended 2013 Plan was to increase the number of shares of the Company's common stock available for awards thereunder by 5,000,000 shares, resulting in a total of 6,250,000 shares of the Company's common stock being reserved for issuance under the Amended 2013 Plan. Of this amount, stock grants of 727,353 shares have been awarded and option grants of 3,104,667 shares were outstanding as of March 31, 2016. Accordingly, 2,417,980 shares remained available for grants under the Amended 2013 Plan as of that date.

Activity under all of the Company's equity compensation plans during the three months ended March 31, 2016 is summarized below:

	Shares	Weighted - Average Exercise Price
Outstanding at December 31, 2015	11,931,309	$ 1.22
Granted	300,000	0.31
Forfeited	(90,000)	1.08
Outstanding at March 31, 2016	12,141,309	$ 1.20

The estimated grant date fair values of options granted during the three months ended March 31, 2016 were calculated using the Black-Scholes valuation model, based on the following assumptions:

Dividend yield	0%
Expected volatility	49.86%
Risk free interest rates	1.38%
Expected lives (in years)	6.0

The Company records share-based compensation expense on a straight-line basis over the related vesting period. For the three months ended March 31, 2016 and 2015, share-based compensation expense related to options was:

Three Months Ended March 31,	
2016	2015
$ 260,149	$ 367,309

As of March 31, 2016, there was unrecognized compensation expense of $1,575,511 related to outstanding stock options, which is expected to be recognized over a weighted average period of 1.83 years.

Warrants

Warrants have generally been issued for terms of up to five years. Common stock warrant activity for the three months ended March 31, 2016 was as follows:

	Shares	Weighted - Average Exercise Price
Outstanding at December 31, 2015	33,816,102	$ 0.66
Issued	-	-
Terminated	-	-
Outstanding at March 31, 2016	33,816,102	$ 0.66

7. Subsequent Events

2016 Securities Purchase Agreement

On April 4, 2016 (the "Closing Date"), the Company consummated the transactions contemplated by the 2016 Purchase Agreement. Under the 2016 Purchase Agreement, the Company: (i) paid to Brainlab all accrued and unpaid interest on the Brainlab Note, in the amount of approximately $740,000; (ii) amended and restated the Brainlab Note on the terms described below; (iii) entered into a patent and technology license agreement with Brainlab for software relating to the Company's SmartFrame device, in consideration for the cancellation of $1.0 million of the principal amount of the Brainlab Note; (iv) issued to Brainlab, in consideration for the cancellation of approximately $1.3 million of the principal amount of the Brainlab Note, 3,972,410 units, consisting of: (a) one share of the Company's common stock; (b) warrants to purchase 0.40 shares of common stock (the "2016 Series A Warrants"); and (c) warrants to purchase 0.30 shares of common stock (the "2016 Series B Warrants") (collectively, the "Units"); and (v) entered into a Registration Rights Agreement (the "2016 Registration Rights Agreement"), pursuant to which the Company agreed to file a registration statement with the SEC covering the resale of the shares of common stock issued to Brainlab under the 2016 Purchase Agreement, as well as the shares of common stock that are issuable upon exercise of the 2016 Series A Warrants and 2016 Series B Warrants (together, the "2016 Warrants").

The 2016 Purchase Agreement contains covenants, representations and warranties by the Company and Brainlab (including indemnification from the Company in the event of breaches of its representations and warranties), which the Company believes are customary for transactions of this type.

2016 Registration Rights Agreement

The Company is required to file the 2016 Registration Statement within 60 calendar days following the Closing Date (the "Filing Deadline"). The Company is required to use its best efforts to have the 2016 Registration Statement declared effective as soon as practicable. Pursuant to the 2016 Registration Rights Agreement, if: (i) the 2016 Registration Statement is not filed with the SEC on or prior to the Filing Deadline; (ii) the 2016 Registration Statement is not declared effective by the SEC on or prior to the 75th day after the Closing Date (or the 120th day after the Closing Date if the SEC determines to review the 2016 Registration Statement); or (iii) the Company fails to continuously maintain the effectiveness of the 2016 Registration Statement (with certain permitted exceptions), the Company will incur certain liquidated damages in a range of 2%-10%, depending on the duration of such failure, of the approximately $1.3 million principal reduction of the Brainlab Note as described above. The 2016 Registration Rights Agreement also contains mutual indemnifications by the Company and Brainlab, which the Company believes are customary for transactions of this type. The 2016 Registration Statement was filed with the SEC on April 29, 2016.

2016 Warrants

The 2016 Series A Warrants and 2016 Series B Warrants are exercisable, in full or in part, at any time prior to the fifth anniversary of their issuance, at an exercise price of $0.4058 per share and $0.5275 per share, respectively. The 2016 Warrants provide for certain adjustments that may be made to the exercise price and the number of shares issuable upon exercise due to future corporate events or otherwise. In the case of certain fundamental transactions affecting the Company, the holder of such 2016 Warrants, upon exercise of such warrants after such fundamental transaction, will have the right to receive, in lieu of shares of the Company's common stock, the same amount and kind of securities, cash or property that such holder would have been entitled to receive upon the occurrence of the fundamental transaction, had the 2016 Warrants been exercised immediately prior to such fundamental transaction. The 2016 Warrants contain a "cashless exercise" feature that allows the holders to exercise the warrants without a cash payment to the Company upon the terms set forth in the respective 2016 Warrant agreements.

Amended and Restated Promissory Note

On the Closing Date and pursuant to the 2016 Purchase Agreement, the Company issued Brainlab an unregistered, amended and restated secured note (the "New Brainlab Note"), which has the same terms and conditions as the Brainlab Note, except that: (i) the principal amount of the New Brainlab Note is $2 million; (ii) interest will be paid quarterly in arrears; and (iii) the maturity date of the New Brainlab Note is December 31, 2018.

Non-Exclusive License Agreement

On the Closing Date and pursuant to the 2016 Purchase Agreement, the Company and Brainlab entered into a patent and technology license (the "2016 License Agreement"), for software relating to our SmartFrame device, for use in neurosurgery. The 2016 License Agreement does not affect the Company's ability to continue to independently develop, market and sell its own software for the SmartFrame device.

Based on the foregoing, the Brainlab Note was classified as a non-current liability in the accompanying March 31, 2016 condensed consolidated balance sheet.

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 the unaudited condensed financial statements and the notes thereto appearing in Part I, Item 1 of this Quarterly Report. Historical results and trends that might appear in this Quarterly Report should not be interpreted as being indicative of future operations.

Overview

We are a medical device company that develops and commercializes innovative platforms for performing minimally invasive surgical procedures in the brain and heart under direct, intra-procedural MRI guidance. We have two product platforms. Our ClearPoint system, which is in commercial use, is used to perform minimally invasive surgical procedures in the brain. We anticipate that our ClearTrace system, which is a product candidate still in development, will be used to perform minimally invasive surgical procedures in the heart. In 2015, we suspended development of the ClearTrace system so that we could focus our resources on the ClearPoint system. Both systems utilize intra-procedural MRI to guide the procedures and are designed to work in a hospital's existing MRI suite. We believe that our two product platforms, subject to appropriate regulatory clearance and approval, will deliver better patient outcomes, enhance revenue potential for both physicians and hospitals, and reduce costs to the healthcare system.

In 2010, we received regulatory clearance from the FDA to market our ClearPoint system in the U.S. for general neurological procedures. In 2011, we also obtained CE marking approval for our ClearPoint system, which enables us to sell our ClearPoint system in the European Union. Substantially all of our product revenues for the three months ended March 31, 2016 and 2015 relate to sales of our ClearPoint system products. We do not have regulatory clearance or approval to sell our ClearTrace system for commercial use. We have financed our operations and internal growth primarily through the sale of equity securities, the issuance of convertible and other secured notes, and license arrangements. We have incurred significant losses since our inception in 1998 as we have devoted substantial efforts to research and development. As of March 31, 2016, we had an accumulated deficit of $87.8 million. We expect to continue to incur operating losses as we commercialize our ClearPoint system products and expand our business.

Factors Which May Influence Future Results of Operations

The following is a description of factors that may influence our future results of operations, and that we believe are important to an understanding of our business and results of operations.

Revenues

In June 2010, we received 510(k) clearance from the FDA to market our ClearPoint system in the U.S. for general neurological procedures. Future revenues from sales of our ClearPoint system products are difficult to predict and may not be sufficient to offset our continuing research and development expenses and our increasing selling, general and administrative expenses. We cannot sell our ClearTrace system for commercial use until we receive regulatory clearance or approval.

Generating recurring revenues from the sale of disposable products is an important part of our business model for our ClearPoint system. We anticipate that, over time, recurring revenues will constitute an increasing percentage of our total revenues as we leverage installations of our ClearPoint system to generate recurring sales of our ClearPoint disposable products. Our product revenues were approximately $1.4 million for the three months ended March 31, 2016, and were almost entirely related to our ClearPoint system.

Our revenue recognition policies are more fully described in Note 2 to the condensed consolidated financial statements appearing in Part I, Item 1 of this Quarterly Report.

Cost of Product Revenues

Cost of product revenues includes the direct costs associated with the assembly and purchase of components for disposable products and ClearPoint system reusable products which we have sold, and for which we have recognized the revenue in accordance with our revenue recognition policy. Cost of product revenues also includes the allocation of manufacturing overhead costs and depreciation of loaned systems installed under our ClearPoint Placement Program, as well as provisions for obsolete, impaired, or excess inventory. Cost of product revenues also includes similar applicable costs associated with the sale of any ClearTrace system components for non-commercial use.

Research and Development Costs

Our research and development costs consist primarily of costs associated with the conceptualization, design, testing, and prototyping of our ClearPoint system products and our ClearTrace system components (prior to the suspension of such development). Such costs include salaries, travel, and benefits for research and development personnel, including related share-based compensation; materials and laboratory supplies in research and development activities; consultant costs; sponsored research and product development with third parties; and licensing costs related to technology not yet commercialized. We anticipate that, over time, our research and development costs may increase as we: (i) continue to develop enhancements to our ClearPoint system; (ii) resume our ClearTrace system product development efforts; and (iii) expand our research to apply our technologies to additional product applications. From our inception through March 31, 2016, we have incurred approximately $46 million in research and development costs.

Product development timelines, likelihood of success, and total costs can vary widely by product candidate. There are also risks inherent in the regulatory clearance and approval process. At this time, we are unable to estimate with any certainty the costs that we will incur in the continuing development of our ClearTrace system for commercialization.

Selling, General and Administrative Expenses

Our selling, general and administrative expenses consist primarily of salaries, incentive-based compensation, travel and benefits, including related share-based compensation; marketing costs; professional fees, including fees for attorneys and outside accountants; occupancy costs; insurance; medical device excise taxes; and other general and administrative expenses, which include, but are not limited to, corporate licenses, director fees, hiring costs, taxes, postage, office supplies and meeting costs. Our selling, general and administrative expenses are expected to increase due to costs associated with the commercialization of our ClearPoint system and the increased headcount necessary to support growth in operations.

Critical Accounting Policies

There have been no significant changes in our critical accounting policies during the three months ended March 31, 2016 as compared to the critical accounting policies described in our Annual Report on Form 10-K for the year ended December 31, 2015, which we filed with the SEC on March 25, 2016.

Results of Operations

Three Months Ended March 31, 2016 Compared to the Three Months Ended March 31, 2015

	Three Months Ended March 31,		
	2016	2015	Percentage Change
Product and other service revenues	$ 1,394,134	$ 1,010,403	38%
Cost of product revenues	696,546	385,609	81%
Research and development costs	657,192	527,512	25%
Selling, general and administrative expenses	1,974,249	2,288,660	(14)%
Restructuring charges	-	753,400	NM
Other income (expense):			
Gain (loss) on change in fair value of derivative liabilities	160,118	(782,802)	120%
Other income, net	75,142	82,688	(9)%
Interest expense, net	(345,225)	(300,362)	15%
Net loss	$ (2,043,818)	$ (3,945,254)	(48)%

NM= not meaningful

Product and Other Service Revenues. Product and other service revenues were $1.4 million for the three months ended March 31, 2016, and $1.0 million for the same period in 2015, an increase of $384,000, or 38%.

ClearPoint disposable product sales for the three months ended March 31, 2016 were $1.1 million, compared with $840,000 for the same period in 2015, representing an increase of $264,000, or 31%. This increase was due primarily to a greater number of procedures performed using our ClearPoint system within a larger installed base for ClearPoint in the three months ended March 31, 2016, relative to the same period in 2015.

ClearPoint reusable product sales for the three months ended March 31, 2016 were $262,000, compared with $137,000 of such sales for the same period in 2015, representing an increase of $125,000, or 92%. Sales of our reusable products, which consist primarily of computer hardware and software bearing sales prices that are appreciably higher than those for disposable products, may vary, sometimes significantly, from quarter to quarter.

Cost of Product Revenues. Cost of product revenues was $697,000 for the three months ended March 31, 2016, representing gross margin on product revenues of 49%, compared to $386,000 for the same period in 2015, representing gross margin of 61%. The decrease in gross margin was due primarily to: (a) an $88,000 increase in the three months ended March 31, 2016, relative to the same period in 2015, in the allocation of indirect labor to production activities, commensurate with the Company's transition from a focus on research and development to commercial activities; and (b) unfavorable product mix related to reusable product sales.

Research and Development Costs. Research and development costs were $657,000 for the three months ended March 31, 2016, compared to $528,000 for the same period in 2015, an increase of $129,000, or 25%. The increase was due primarily to increases in 2016, relative to 2015, in (a) software development costs of $64,000 incurred in connection with the Company's development of the next generation of the ClearPoint operating system; (b) compensation and recruiting costs of $58,000 related to the hiring of a manager of regulatory and quality to replace a part-time consultant that retired in 2015; (c) project research cost of $36,000 undertaken in connection with government grants; and (d) licensing fees of $28,000. These increases were partially offset by: (i) an increase of $37,000 in 2016, relative to 2015, in the allocation of research and development personnel costs to manufacturing in connection with the Company's transition from a focus on research and development to commercial activities; and (ii) a $23,000 reduction in travel costs in 2016, as compared to 2015.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were $2.0 million for the three months ended March 31, 2016 as compared with $2.3 million for the same period in 2015, a decrease of $314,000, or 14%. This decrease was attributable primarily to decreases in: (a) compensation costs, both cash and stock-based, of $347,000; and (b) professional fees of $56,000. Also contributing to the decrease was the allocation of costs, in the three months ended March 31, 2016, to manufacturing in connection with the Company's transition from a focus on research and development to commercial activities. These fluctuations were partially offset by an $84,000 increase in other general and administrative costs such as public company and investor relations expenses.

Other Income (Expense). During the three months ended March 31, 2016, we recorded a gain of $160,000, and during the three months ended March 31, 2015, we recorded a loss of $783,000, in each case resulting from changes in the fair value of our derivative liabilities associated with certain warrants issued in the 2012 and 2013 private placement transactions.

Net other income was relatively insignificant, amounting to $75,000 and $83,000 for the three months ended March 31, 2016 and 2015, respectively.

Net interest expense for the three months ended March 31, 2016 was $345,000, compared with $300,000 for the same period in 2015. The increase is due primarily to an increase in the amortization of debt discount and deferred financing costs associated with prior year financing transactions.

Liquidity and Capital Resources

The cumulative net loss from our inception through March 31, 2016 was $87.8 million. Net cash used in operating activities was $1.6 million and $2.8 million for the three months ended March 31, 2016 and 2015, respectively. Since inception, we have financed our operations principally from the sale of equity securities, the issuance of notes payable and license arrangements. Recent such financing activities consist of: (i) a December 2015 private placement of equity, which resulted in net proceeds of $4.7 million; (ii) a December 2014 private placement of equity, which resulted in net proceeds of $9.3 million; and (iii) a March 2014 private placement of debt and warrants, which resulted in net proceeds of $3.5 million. In addition, in March 2014, we completed a transaction with Boston Scientific that resulted in the cancellation of $4.3 million in related party convertible notes payable held by Boston Scientific, which were scheduled to mature in 2014.

Our plans for the next twelve months reflect management's anticipation of increases in revenues from sales of the ClearPoint system and related disposable products as a result of greater utilization at existing installed sites and the installation of the ClearPoint system at new sites. Management also anticipates maintaining recurring operating expenses at historical levels, with expected decreases in general and administrative expenses, resulting primarily from the operational restructuring discussed in Note 4 to the condensed consolidated financial statements included elsewhere in this Quarterly Report being offset by increases in selling and marketing expenses associated with the anticipated growth in revenues. However, there is no assurance that we will be able to achieve our anticipated results, and even in the event such results are achieved, we expect to continue to consume cash in our operations over at least the next twelve months.

As a result of the foregoing, we believe it will be necessary to seek additional financing from the sale of equity or debt securities, which would result in dilution to our current stockholders, the establishment of a credit facility, or the entry into an agreement with a strategic partner or some other form of collaborative relationship. There is no assurance, however, that we will be able to obtain such additional financing on commercially reasonable terms, if at all, and there is no assurance that any additional financing that we do obtain will be sufficient to meet our needs. If we are not able to obtain the additional financing on a timely basis, we may be unable to achieve our anticipated results, and we may not be able to meet our other obligations as they become due. As such, there is substantial doubt as to our ability to continue as a going concern.

Cash Flows

Cash activity for the three months ended March 31, 2016 and 2015 is summarized as follows:

	Three Months Ended March 31,	
	2016	**2015**
Cash used in operating activities	$ (1,608,561)	$ (2,799,042)
Cash used in investing activities	(77,649)	(6,635)
Cash used in financing activities	(140,086)	-
Net decrease in cash and cash equivalents	$ (1,826,296)	$ (2,805,677)

Net Cash Flows from Operating Activities. We used $1.6 million and $2.8 million of cash for operating activities during the three months ended March 31, 2016 and 2015, respectively.

During the three months ended March 31, 2016, uses of cash in operating activities primarily consisted of: (i) our $2.0 million net loss; and (ii) increases in accounts receivable of $279,000, prepaid expenses and other current assets of $18,000, and other assets of $58,000. These uses were partially offset by: (a) a decrease in inventory of $218,000; (b) increases in accounts payable and accrued expenses of $53,000, and in deferred revenue of $36,000; and (c) non-cash expenses included in our loss from operations aggregating $645,000 and consisting of depreciation and amortization, share-based compensation, expenses paid through the issuance of common stock, and amortization of debt issuance costs and original issue discounts, partially offset by a $160,000 decrease in the fair value of our derivative liabilities.

During the three months ended March 31, 2015, uses of cash in operating activities primarily consisted of: (i) our $3.9 million net loss; (ii) increases in accounts receivable of $137,000, inventory of $110,000, prepaid expenses and other current assets of $7,000, and other assets of $4,000; and (iii) a decrease in deferred revenue of $5,000. These uses were partially offset by: (a) an increase in accounts payable and accrued expenses of $14,000; and (b) non-cash expenses included in our loss from operations aggregating $1.4 million and consisting of depreciation and amortization, share-based compensation, expenses paid through the issuance of common stock, an increase in the fair value of our derivative liabilities, and amortization of debt issuance costs and original issue discounts.

Net Cash Flows from Investing Activities. Net cash flows used in investing activities for the three months ended March 31, 2016 and 2015 were $78,000 and $7,000, respectively, and consisted of equipment acquisitions in both periods.

Net Cash Flows from Financing Activities. Net cash used in financing activities for the three months ended March 31, 2016 of $140,000 consisted of costs paid in connection with our December 2015 private placement of equity. There were no financing activities affecting cash during the three months ended March 31, 2015.

Operating Capital and Capital Expenditure Requirements

To date, we have not achieved profitability. We could continue to incur net losses as we continue our efforts to expand the commercialization of our ClearPoint system products, develop our ClearTrace system, and pursue additional applications for our technology platforms. Our cash balances are typically held in a variety of interest bearing instruments, including interest bearing demand accounts and certificates of deposit. Cash in excess of immediate requirements is invested primarily with a view to liquidity and capital preservation.

Because of the numerous risks and uncertainties associated with the development and commercialization of medical devices, we are unable to estimate the exact amounts of capital outlays and operating expenditures necessary to successfully commercialize our ClearPoint system products and complete the development of our ClearTrace system. Our future capital requirements will depend on many factors, including, but not limited to, the following:

- the timing of broader market acceptance and adoption of our ClearPoint system products;
- the scope, rate of progress and cost of our ongoing product development activities relating to our ClearPoint system;
- the cost and timing of expanding our sales, clinical support, marketing and distribution capabilities, and other corporate infrastructure;
- the cost and timing of establishing inventories at levels sufficient to support our sales;
- the effect of competing technological and market developments;
- the terms and timing of any future collaborative, licensing or other arrangements that we may establish;
- the scope, rate of progress and cost of our research and development activities relating to our ClearTrace system (prior to the suspension of such development;
- the cost and timing of any clinical trials;
- the cost and timing of regulatory filings, clearances and approvals; and
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Off Balance Sheet Arrangements

We are not a party to any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

Interest Rate Risk

Our exposure to market risk is limited primarily to interest income sensitivity, which is affected by changes in the general level of U.S. interest rates, because all of our investments are in short-term bank deposits and institutional money market funds. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive without significantly increasing risk. Due to the nature of our short-term investments, we believe that we are not subject to any material market risk exposure.

Foreign Currency Risk

To date, we have recorded no product sales in currencies other than U.S. dollars. We have only limited business transactions in foreign currencies. We do not currently engage in hedging or similar transactions to reduce our foreign currency risks, which at present, are not material. We believe we have no material exposure to risk from changes in foreign currency exchange rates at this time. We will continue to monitor and evaluate our internal processes relating to foreign currency exchange, including the potential use of hedging strategies.

ITEM 4. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

We have established disclosure controls and procedures, as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, or the Exchange Act. Our disclosure controls and procedures are designed to ensure that material information relating to us is made known to our principal executive officer and principal financial officer by others within our organization. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of March 31, 2016 to ensure that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the 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 us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of March 31, 2016.

Changes in Internal Control Over Financial Reporting

During the quarter ended March 31, 2016, there were no changes in our internal control over financial reporting that materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

None.

ITEM 1A. RISK FACTORS.

Our business, future financial condition and results of operations are subject to a number of factors, risks and uncertainties, which are disclosed in Item 1A, "Risk Factors," in Part I of our Annual Report on Form 10-K for the year ended December 31, 2015, which we filed with the SEC on March 25, 2016. Additional information regarding some of those risks and uncertainties is contained in the notes to the condensed consolidated financial statements appearing in Part I, Item 1 of this Quarterly Report, and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing in Part I, Item 2 of this Quarterly Report. The risks and uncertainties disclosed in our Annual Report on Form 10-K, our quarterly reports on Form 10-Q and other reports filed with the SEC are not necessarily all of the risks and uncertainties that may affect our business, financial condition and results of operations in the future.

There have been no material changes to the risk factors as disclosed in our Annual Report on Form 10-K for our year ended December 31, 2015.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

None.

ITEM 4. MINE SAFETY DISCLOSURES.

None.

ITEM 5. OTHER INFORMATION.

None.

ITEM 6. EXHIBITS.

The exhibits listed in the accompanying Exhibit Index are filed, furnished or incorporated by reference as part of this Quarterly Report.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 6, 2016

MRI INTERVENTIONS, INC.

By: /s/ Francis P. Grillo
Francis P. Grillo
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Harold A. Hurwitz
Harold A. Hurwitz
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

EXHIBIT INDEX

Exhibit Number	Exhibit Description
4.1	Form of Series A Warrant (Incorporated by reference to Exhibit 4.1 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
4.2	Form of Series B Warrant (Incorporated by reference to Exhibit 4.2 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
4.3	Form of Amended and Restated 5.5% Promissory Note, Due December 31, 2018, issued to Brainlab AG by MRI Interventions, Inc. (Incorporated by reference to Exhibit 4.3 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
10.1	Securities Purchase Agreement, dated March 22, 2016, by and between MRI Interventions, Inc. and Brainlab AG (Incorporated by reference to Exhibit 10.1 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
10.2	Form of Registration Rights Agreement by and between MRI Interventions, Inc. and Brainlab AG (Incorporated by reference to Exhibit 10.2 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
10.3	Form of Patent and Technology License Agreement by and between MRI Interventions, Inc. and Brainlab AG (Incorporated by reference to Exhibit 10.3 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 000-54575) filed with the Securities and Exchange Commission on March 22, 2016)
31.1*	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) Under the Securities Exchange Act of 1934
31.2*	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) Under the Securities Exchange Act of 1934
32+	Certification of Chief Executive Officer and Chief Financial Officer Pursuant to Rule 13a-14(b) under the Securities Exchange Act of 1934 and Section 1350 of Chapter 60 of Title 18 of the United States Code
101.INS*	XBRL Instance
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Extension Calculation
101.DEF*	XBRL Taxonomy Extension Definition
101.LAB*	XBRL Taxonomy Extension Labels
101.PRE*	XBRL Taxonomy Extension Presentation

* Filed herewith.

\+ This certification is being furnished solely to accompany this Quarterly Report pursuant to 18 U.S.C. Section 1350, and it is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.