

MRI Interventions, Inc.

13,807,533 Shares of Common Stock

This prospectus supplement relates to the prospectus dated July 7, 2017, which permits the resale of up to 6,693,333 outstanding shares of our common stock and 7,114,200 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 of our common stock, 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 (the "SEC") on August 11, 2017 (the "10-Q"). Accordingly, we have attached the 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 August 10, 2017, the last reported sale price of our common stock was \$1.90 per share.

We are an "emerging growth company" under the federal securities laws and are subject to reduced public company reporting requirements. Investing in our common stock involves risk. See "Risk Factors" beginning on page 12 of the prospectus to read about factors you should consider before buying shares of our common stock.

Neither the SEC 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 August 11, 2017.

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

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FORM 10-Q					
(Mark	k One)				
\boxtimes	QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT OF 1934			
	For the quarterly period ended June 30, 2017				
	Or	•			
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15	(d) OF THE SECURITIES EXCHANGE ACT OF 1934			
	For the transition period fromto				
	Commission file nu	mber: 001-34822			
	MRI Interve (Exact Name of Registrant a				
	Delaware (State or Other Jurisdiction of Incorporation or Organization)	58-2394628 (IRS Employer Identification Number)			
	5 Musick Irvine, California (Address of Principal Executive Offices)	92618 (Zip Code)			
	(949) 90 (Registrant's Telephone Nun				
		reports required to be filed by Section 13 or 15(d) of the Securities reer period that the registrant was required to file such reports), and			
		⊠ 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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.					
	Non-accelerated filer □	Accelerated filer □ Smaller Reporting Company ⊠ Emerging Growth Company ⊠			
comp	If an emerging growth company, indicate by check mark if the olying with any new or revised financial accounting standards provi	e registrant has elected not to use the extended transition period for ided pursuant to Section 13(a) of the Exchange Act. \boxtimes			
	Indicate by check mark whether the registrant is a shell compare	ny (as defined in Rule 12b-2 of the Exchange Act).			
		☐ Yes ⊠ No			

As of August 11, 2017, there were 10,339,210 shares of common stock outstanding.

MRI INTERVENTIONS, INC.

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Trademarks, Trade Names and Service Marks

ClearPoint[®], ClearTrace[®], MRI Interventions[®] and SmartFrame[®] are trademarks of MRI Interventions, Inc. Any other trademarks, trade names or service marks referred to in this Quarterly Report on Form 10-Q (this "Quarterly Report") are the property of their respective owners. As used in this Quarterly Report, Brainlab refers to Brainlab AG and its affiliates.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report 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:

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

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, 2016, which we filed with the SEC on March 9, 2017, 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)

		June 30, 2017	D	ecember 31, 2016
ASSETS				_
Current Assets:				
Cash and cash equivalents	\$	12,740,583	\$	3,315,774
Accounts receivable		750,761		865,943
Inventory, net		1,891,692		1,768,382
Prepaid expenses and other current assets		270,481	_	134,996
Total current assets		15,653,517		6,085,095
Property and equipment, net		298,062		328,249
Software license inventory		889,400		976,900
Other assets		10,640		10,641
Total assets	\$	16,851,619	\$	7,400,885
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)				
Current liabilities:				
Accounts payable	\$	1,022,787	\$	1,546,926
Accrued compensation	-	680,036	-	666,060
Other accrued liabilities		619,827		450,424
Derivative liabilities		182,253		131,173
Deferred product and service revenues		425,901		223,117
Total current liabilities		2,930,804		3,017,700
Accrued interest		700,000		647,500
Senior secured note payable		2,000,000		2,000,000
2014 junior secured notes payable, net of unamortized discount and deferred issuance costs of \$140,602				
and \$180,774 at June 30, 2017 and December 31, 2016, respectively		1,834,398		1,794,226
2010 junior secured notes payable, net of unamortized discount of \$2,141,401 and \$2,302,472 at				
June 30, 2017 and December 31, 2016, respectively		858,599		697,528
Total liabilities		8,323,801		8,156,954
Commitments and contingencies				
Stockholders' equity (deficit):				
Preferred stock, \$0.01 par value; 25,000,000 shares authorized at June 30, 2017 and December 31,				
2016; none issued and outstanding at June 30, 2017 and December 31, 2016		-		-
Common stock, \$0.01 par value; 200,000,000 shares authorized; 10,339,210 shares issued and				
outstanding at June 30, 2017; and 3,622,032 issued and outstanding at December 31, 2016		103,391		36,220
Additional paid-in capital		105,953,342		93,076,475
Accumulated deficit		(97,528,915)		(93,868,764)
Total stockholders' equity (deficit)		8,527,818		(756,069)
Total liabilities and stockholders' equity (deficit)	\$	16,851,619	\$	7,400,885

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

		Months Ended e 30,
	2017	2016
Revenues:		
Product revenues	\$ 1,892,638	\$ 1,066,551
Other revenues	83,367	37,330
Total revenues	1,976,005	1,103,881
Cost of product revenues	798,498	520,987
Research and development costs	1,084,202	749,942
Selling, general, and administrative expenses	1,915,601	1,888,056
Operating loss	(1,822,296)	(2,055,104)
Other income (expense):		
Gain on change in fair value of derivative liabilities	31,307	263,927
Gain from debt restructuring	-	121,224
Other income (expense), net	(715)	139,239
Interest expense, net	(212,709)	(251,250)
Net loss	\$ (2,004,413)	\$ (1,781,964)
Net loss per share attributable to common stockholders:		
Basic and diluted	\$ (0.32)	\$ (0.90)
Weighted average shares outstanding:		
Basic and diluted	6,315,759	1,971,071

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

	1	For The Six Months Ended June 30,		
		2017 201		
Revenues:				
Product revenues	\$	3,814,853	\$	2,432,705
Other revenues		168,224		65,311
Total revenues		3,983,077		2,498,016
Cost of product revenues		1,550,962		1,217,533
Research and development costs		1,641,901		1,407,134
Selling, general, and administrative expenses		3,966,130		3,862,305
Operating loss		(3,175,916)		(3,988,956)
Other income (expense):				
Gain (loss) from change in fair value of derivative liabilities		(61,739)		424,045
Gain from debt restructuring		-		121,224
Other income, net		3,412		214,380
Interest expense, net		(425,908)		(596,475)
Net loss	\$	(3,660,151)	\$	(3,825,782)
Net loss per share attributable to common stockholders:				
Basic and diluted	\$	(0.74)	\$	(1.66)
Weighted average shares outstanding:				
Basic and diluted		4,976,337		2,309,537

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

For The Six Months Ended June 30, 2017 2016 Cash flows from operating activities: Net loss (3,660,151) \$ (3,825,782)Adjustments to reconcile net loss to net cash flows from operating activities: 65,824 Depreciation and amortization 88,678 Share-based compensation 429,026 498,881 Expenses paid through the issuance of common stock 502,032 230,397 (Gain) loss from change in fair value of derivative liabilities 61,739 (424,045)Amortization of debt issuance costs and original issue discounts 201,243 234,943 Loss from retirement of fixed assets 1,689 Gain from debt restructuring (121,224)Increase (decrease) in cash resulting from changes in: Accounts receivable 448,320 115,182 Inventory, net (68,312)51,483 Prepaid expenses and other current assets (161,552)(135,485)Other assets (227,570)Accounts payable and accrued expenses (279,435)(193,063)Deferred revenue 202,784 106,628 Net cash flows from operating activities (2,565,553)(3,292,217)Cash flows from investing activities: Purchases of property and equipment (3,134)(100,324)Net cash flows from investing activities (3,134)(100,324)Cash flows from financing activities: Proceeds from private equity offering 13.250,000 Offering costs (1,256,504)Net cash flows from financing activities 11,993,496 Net change in cash and cash equivalents 9,424,809 (3.392.541)Cash and cash equivalents, beginning of period 5,408,523 3,315,774 Cash and cash equivalents, end of period 12,740,583 2,015,982 SUPPLEMENTAL CASH FLOW INFORMATION Cash paid for: Income taxes Interest 146,611 739,323

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

NON-CASH INVESTING AND FINANCING TRANSACTIONS:

- During the six months ended June 30, 2017 and 2016, the Company recorded net transfers of ClearPoint reusable components having an aggregate net book value of \$32,503 and \$89,184 from inventory to loaned systems, which are included in property and equipment in the accompanying condensed consolidated balance sheets.
- As more fully described in Note 4, on June 30, 2016, the Company entered into amendments with Brainlab, with respect to the New Brainlab Note (defined below), and with two holders of the 2014 Secured Notes (defined below), that provided for, among other items, a reduction of the exercise prices of warrants held by such noteholders in the event the Company closes a qualified public offering (as defined in the amendments). This provision created down round strike price protection with respect to the warrants, thus requiring that the warrants be accounted for as derivatives. The fair value of the derivatives, amounting to \$192,173, was established as a liability with a corresponding charge to stockholders' deficit.

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

The Company has incurred net losses since its inception which has resulted in a cumulative deficit at June 30, 2017 of \$97.5 million. As a result, management historically has expressed substantial doubt as to the Company's ability to continue as a going concern. As discussed in Note 5, in May 2017 the Company completed a private offering of equity units (the "2017 PIPE") through which the Company received aggregate gross proceeds of approximately \$13.25 million, before deducting placement agents' fees and offering expenses aggregating approximately \$1.3 million. As a result, the Company's cash and cash equivalent balances at June 30, 2017 aggregated \$12.7 million, which, in management's opinion, is sufficient to support the Company's operations for at least the next twelve months and to alleviate doubt as to the Company's ability 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, 2016 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, 2016, which was filed with the SEC on March 9, 2017 (the "2016 Form 10-K"). The accompanying unaudited condensed consolidated balance sheet as of December 31, 2016 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 and six months ended June 30, 2017 may not be indicative of the results to be expected for the entire year or any future periods.

Reverse Stock Split

As discussed in Note 5, the Company effectuated a 1-for-40 reverse stock split of its issued common stock on July 26, 2016. All disclosure of common shares and per share data in the accompanying condensed consolidated financial statements and related notes have been adjusted retroactively to reflect the reverse stock split for all periods presented.

Derivative Liabilities

Derivative liabilities represent the fair value of conversion features of certain notes and of certain warrants to purchase common stock (see Note 6). 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 condensed consolidated 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 calculations:

	in A Ma	l Prices ctive rkets vel 1)	Significant Observable Inputs (Level 2)		Un	ignificant observable Inputs (Level 3)	Т	otal Fair Value
June 30, 2017								
Derivative liabilities - warrants	\$	-	\$	-	\$	163,753	\$	163,753
Derivative liabilities – debt conversion feature	\$	-	\$	-	\$	18,500	\$	18,500
<u>December 31, 2016</u>								
Derivative liabilities - warrants	\$	-	\$	-	\$	91,173	\$	91,173
Derivative liabilities – debt conversion feature	\$	-	\$	_	\$	40,000	\$	40,000

Inputs used in the Company's Level 3 calculation of fair value include the assumed dividend rate on the Company's common stock, risk-free interest rates and stock price volatility, all of which are further discussed in Note 6.

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 June 30, 2017:

			Ľ	stimated
	Carr	ying Values	Fa	ir Values
Senior secured note payable, including accrued interest	\$	2,027,805	\$	2,027,805
2014 junior secured notes payable, including accrued interest		1,902,023		2,042,625
2010 junior secured notes payable, including accrued interest		1,558,599		2,927,567

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, and 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.

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 comprise the entire amount of the Company's outstanding common stock options and warrants as described in Note 5, 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 June 30, 2017, the Company had \$146,518 in bank balances that were in excess of the insured limits.

Information with respect to customers that accounted for sales in excess of 10% of total sales in the three-month and six-month periods ended June 30, 2017 and 2016 is as follows:

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	I hree Months	Three Months Ended June 30,		
	2017	2016		
Customer - 1	11%	12%		
	Six Months E	nded June 30,		
	Six Months E 2017	nded June 30, 2016		
Customer - 1				

Information with respect to accounts receivable from those customers who comprised more than 10% of accounts receivable at June 30, 2017 and December 31, 2016 is as follows:

	June 30,	December 31,
	2017	2016
Customer – 1	18%	20%
Customer - 2	-	13%
Customer – 3	-	10%

Prior to granting credit, 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 June 30, 2017 and December 31, 2016 was \$22,525 and \$25,000, respectively.

The Company is subject to risks common to emerging companies in the medical device industry, including, but not limited to: new technological innovations; acceptance and competitiveness of its products; dependence on key personnel; dependence on key suppliers; changes in general economic conditions and interest rates; protection of proprietary technology; compliance with changing government regulations; uncertainty of widespread market acceptance of products; access to credit for capital purchases by customers; and product liability claims. Certain components used in manufacturing have relatively few alternative sources of supply, and establishing additional or replacement suppliers for such components cannot be accomplished quickly. The inability of any of these suppliers to fulfill the Company's supply requirements may negatively impact future operating results.

Recent Accounting Pronouncements

In August 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("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, and ASUs 2016-10, 2016-12 and 2016-20 discussed below, are effective for the Company beginning in 2018. Earlier application is permitted only as of 2017.

- In April 2016, the FASB issued ASU 2016-10, "Revenues from Contracts With Customers (Topic 606): Identifying Performance Obligations and Licensing," which clarified guidance related to identifying performance obligations and licensing implementation guidance contained in ASC Topic 606 as promulgated by ASU 2015-14 discussed above.
- In May 2016, the FASB issued ASU 2016-12, "Revenues from Contracts With Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients," which address narrow-scope improvements to the guidance on collectability, noncash consideration, and completed contracts at transition. Additionally, the amendments in this ASU provide a practical expedient for contract modifications at transition and an accounting policy election related to the presentation of sales taxes and other similar taxes collected from customers.
- In December 2016, the FASB issued ASU 2016-20, "Technical Corrections and Improvements to Topic 606, Revenue from Contracts With Customers," which provided for minor corrections and minor improvements that are not expected to have a significant effect on the Company's current accounting practice.

The Company believes, based on a preliminary assessment in which the Company considered such factors as the short duration of its contract terms with customers, that the adoption of ASU 2015-14, and the subsequently issued related ASUs discussed above, will not have a material effect on its 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. The Company currently has two leases for manufacturing and office space that would be subject to the provisions of ASU 2016-02. The Company believes that adoption of ASC Topic 842 will result in the establishment on the Company's consolidated balance sheet of an asset and liability for each such lease, but that neither such assets and liabilities nor the resulting lease expense recognition will have a material effect on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments," which addresses eight specific cash flow issues with the objective of reducing existing diversity in practice. The standard is effective for the Company beginning in 2018, and early adoption is permitted. The Company believes that adoption of ASU 2016-15 will not have a material effect on its consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718)," which clarifies and reduces both (i) diversity in practice and (ii) cost and complexity when a company changes the terms or conditions of a share-based payment award. The standard is effective for the Company beginning in 2018, and early adoption is permitted. The Company believes that adoption of ASU 2017-09 will not have a material effect on its consolidated financial statements.

In July 2017, the FASB issued ASU 2017-11, "Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception," which, among other items, changes the classification of certain equity-linked financial instruments (or embedded features) with down round features. The standard is effective for the Company beginning in 2019, and early adoption is permitted. Because the terms of the Company's currently existing derivative liabilities described in Note 6, all of which the Company believes are included in the scope of the standard, will have expired prior to the standard's effective date, the Company believes that adoption of the standard on its effective date will not have a material effect on the Company's consolidated financial statements.

3. Inventory

Inventory consists of the following as of:

	June 30,		ecember 31,
	2017		2016
Raw materials and work in process	\$ 1,129,530	\$	1,025,368
Software licenses	70,000		70,000
Finished goods	692,162		673,014
Inventory, net, included in current assets	 1,891,692		1,768,382
Software licenses – non-current	 889,400		976,900
	\$ 2,781,092	\$	2,745,282

4. Notes Payable

Senior Secured Note Payable

The indebtedness outstanding under the senior secured note payable to Brainlab, originally issued to Brainlab on April 5, 2011, and subsequently amended and restated on March 6, 2013 (the "Brainlab Note"), at December 31, 2015 was approximately \$5.0 million, including approximately \$740,000 of accrued interest which accrued at a rate of 5.5% and was payable in a single aggregate installment upon maturity of the indebtedness, and was to mature in April 2016.

On April 4, 2016 (the "Closing Date"), the Company and Brainlab finalized a securities purchase agreement (the "2016 Purchase Agreement"), as discussed below.

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 (the "License Agreement") 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, 99,310 units, consisting of: (a) one share of the Company's common stock; (b) warrants to purchase 0.4 share of common stock (the "2016 Series A Warrants"); and (c) warrants to purchase 0.3 shares of common stock (the "2016 Series B Warrants") (collectively, the "Equity Units"); and (v) entered into a 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.

As a result of the foregoing, on the Closing Date, the Company recorded a debt restructuring gain of approximately \$941,000 representing the difference between (a) the aggregate fair value of the License Agreement, which had no cost basis on the Company's consolidated balance sheets, and the Equity Units, and (b) the aggregate principal amount of the Brainlab Note cancelled as consideration.

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 \$16.23 per share (before giving effect to the Note Conversion as defined below) and \$21.10 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 the License Agreement, for software relating to our SmartFrame device, for use in neurosurgery. The License Agreement does not affect the Company's ability to continue to independently develop, market and sell its own software for the SmartFrame device.

The New 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 0.01 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 27,937 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. 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 New Brainlab Note.

The warrants issued to the investors (the "investor warrants") are exercisable, in full or in part, at any time prior to the fifth anniversary of the issuance date, at an original exercise price of \$70.00 per share, subject to adjustment from time-to-time for stock splits or combinations, stock dividends, stock distributions, recapitalizations and other similar transactions.

Under GAAP, the Company allocated the \$3,725,000 in proceeds proportionately between the 2014 Secured Notes and the investor warrants based on their relative fair values, with \$413,057 being allocated to the fair value of the investor warrants, recorded as equity and as a discount to the carrying amount at the date of issuance. After giving effect to the conversions discussed below under the heading "August 31, 2016 Amendments," the unamortized discount at June 30, 2017 and December 31, 2016 was \$94,877 and \$121,985, 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.

Assumptions used in calculating the fair value of the investor 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

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 (the "placement agent warrants") to purchase 1,818 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 \$45,725 and \$58,789 at June 30, 2017 and December 31, 2016, respectively, 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 267,857 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 New 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 million 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 and as a discount to the carrying value of the 2010 Secured Notes at their date of issuance. The unamortized discount at June 30, 2017 and December 31, 2016 was \$2,141,401 and \$2,302,472, 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 22,068 units in the offering for \$247,164. In addition, three non-employee directors of the Company also purchased an aggregate of 14,180 units in the offering for \$158,816.

June 30, 2016 Amendments

On June 30, 2016, the Company entered into amendments (the "June 2016 Amendments") with: (a) Brainlab, with respect to the New Brainlab Note; and (b) two holders of the 2014 Secured Notes (the "2014 Convertible Note Holders"), one of which is a trust for which one of the Company's then non-employee directors serves as a trustee, having an aggregate principal balance of \$3 million. Pursuant to the June 2016 Amendments, the parties agreed that, in the event the Company closes a qualified public offering: (i) \$500,000 of the principal balance of the New Brainlab Note and an aggregate \$1.5 million of the principal balance of the 2014 Secured Notes, plus all unpaid accrued interest on such principal amounts, would automatically convert into the security offered in the qualified public offering, based on the public offering price of that security; and (ii) the exercise price for 34,957 shares of common stock underlying warrants issued in connection with the New Brainlab Note and 11,250 shares of common stock underlying warrants issued in connection with the 2014 Secured Notes would be reduced to equal the greater of (x) the public offering price of the security offered in the qualified public offering, or (y) if the security offered in the qualified public offering is or includes convertible stock or common stock warrants, the highest price per whole share for which the Company's common stock is issuable upon conversion of such convertible stock or upon exercise of such common stock warrants. As discussed under the heading "August 31, 2016 Amendments," the 2014 Convertible Note Holders subsequently entered into the August 2016 Amendments (defined below), which superseded the June 2016 Amendments, and converted the 2014 Principal (defined below), under the terms of the August 2016 Amendments.

The provisions of the June 2016 Amendments created: (a) a conversion feature allowing for the principal balances described above, plus all unpaid related accrued interest, to be converted into the security offered in the public offering, and at a price that may be less than the market value per share of the Company's common stock; and (b) down round strike price protection with respect to the warrants, both of which, under GAAP, are required to be accounted for as derivatives, the calculation and accounting for which is described in Note 6.

In addition, based on the provisions of the June 2016 Amendments, the Company recorded a debt restructuring loss of approximately \$820,000 resulting from the restructuring of the New Brainlab Note and the 2014 Secured Notes subject to the June 2016 Amendments.

August 31, 2016 Amendments

On August 31, 2016, the Company entered into second amendments (the "August 2016 Amendments") with the 2014 Convertible Note Holders.

Pursuant to the August 2016 Amendments, the parties agreed that, in the event the Company closes a PIPE Transaction (as that term is defined in the August 2016 Amendments; the "2016 PIPE"): (i) an aggregate \$1.75 million of aggregate principal balance of the 2014 Convertible Note Holders' 2014 Secured Notes (the "2014 Principal") would automatically convert into the security offered by the Company in the 2016 PIPE, based on the offering price of that security in the 2016 PIPE (the "Note Conversion"); and (ii) the exercise price for 13,125 shares of common stock that may be purchased upon exercise of warrants issued in connection with the issuance of the 2014 Secured Notes (the "2014 Warrants") will be reduced to equal the greater of (x) the offering price of the security offered in the 2016 PIPE, or (y) if the security offered in the 2016 PIPE is or includes convertible stock or common stock warrants, the highest price per whole share for which the Company's common stock is issuable upon conversion of such convertible stock or upon exercise of such common stock warrants. These provisions maintained but modified: (a) the conversion feature allowing for the 2014 Principal to be converted into the security offered in the 2016 PIPE, and at a price that may be less than the market value per share of the Company's common stock; and (b) the down round strike price protection with respect to the 2014 Warrants, both of which, under GAAP, are required to be accounted for as derivatives, the calculation and accounting for which is described in Note 6.

As described in Note 5, the 2016 PIPE was completed on September 2, 2016, resulting in (i) conversion of the 2014 Principal, and (ii) establishment of a fixed exercise price and elimination of the down round price protection with respect to the 2014 Warrants, in conformity with the terms set forth in the August 2016 Amendments. Accordingly, concurrent with completion of the 2016 PIPE, derivative liabilities associated with the conversion feature of the 2014 Principal and the down round price protection for the 2014 Warrants were reduced by \$1,207,813, with a corresponding amount being recorded as an increase to stockholders' equity.

Scheduled Notes Payable Maturities

Scheduled principal payments as of June 30, 2017 with respect to notes payable are summarized as follows:

Years ending December 31,

1 cars chaing December 51,	
2018	\$ 2,000,000
2019	1,975,000
2020	3,000,000
Total scheduled principal payments	6,975,000
Less: Unamortized discounts	(2,236,278)
Unamortized deferred financing costs	(45,725)
	\$ 4,692,997

5. Stockholders' Equity

Reverse Stock Split

On July 26, 2016, the Company effectuated a 1-for-40 reverse stock split of its issued common stock. The reverse stock split did not cause an adjustment to the par value or the number of authorized shares of common stock. As a result of the reverse stock split, the share and per-share amounts under the Company's various share-based compensation plans, share-based compensatory contracts and warrants with third parties were adjusted. No fractional shares were issued in connection with the reverse stock split. All disclosure of common shares and per share data in the accompanying condensed consolidated financial statements and related notes have been adjusted retroactively to reflect the reverse stock split for all periods presented.

2016 Private Placement

On September 2, 2016, the Company completed the 2016 PIPE, pursuant to the terms of a Securities Purchase Agreement dated August 31, 2016 (the "2016 PIPE Purchase Agreement"), by and among the Company and certain investors (collectively, the "2016 PIPE Investors"). At the closing, in accordance with the terms and conditions of the 2016 PIPE Purchase Agreement, the Company sold to the 2016 PIPE Investors an aggregate of 851,000 units (the "2016 PIPE Units"), with each 2016 PIPE Unit consisting of: (i) one share of the Company's common stock; and (ii) a warrant to purchase 0.90 shares of the Company's common stock (each, a "2016 PIPE Warrant" and collectively, the "2016 PIPE Warrants").

In connection with the sale of the 2016 PIPE Units, the Company received aggregate gross proceeds of approximately \$4.25 million, before deducting placement agents' fees and offering expenses aggregating approximately \$418,000. In addition, the placement agents for the 2016 PIPE received, in the aggregate, warrants ("2016 PIPE Placement Agent Warrants") to purchase up to 29,680 shares of common stock.

Purchase Agreement

The 2016 PIPE Purchase Agreement contains representations and warranties by the Company and the 2016 PIPE Investors and covenants of the Company and the 2016 PIPE Investors (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.

Registration Rights Agreement

Concurrent with completion of the 2016 PIPE, the Company and the 2016 PIPE Investors entered into a Registration Rights Agreement (the "2016 PIPE Registration Rights Agreement") that required the Company to prepare and file a registration statement (the "2016 PIPE Registration Statement") with the SEC under the Securities Act of 1933, as amended (the "Securities Act"), covering the resale of the shares of common stock to be issued to the 2016 PIPE Investors under the 2016 PIPE Purchase Agreement, as well as the shares of common stock underlying the 2016 PIPE Warrants and the 2016 PIPE Placement Agent Warrants. The Company was required to file such 2016 PIPE Registration Statement on or before October 2, 2016, and was required to use its best efforts to have the 2016 PIPE Registration Statement declared effective as soon as practicable. The Company filed the 2016 PIPE Registration Statement on September 30, 2016, and the 2016 PIPE Registration Statement was declared effective by the SEC on October 11, 2016, both dates being in conformity with the foregoing requirements. Pursuant to the 2016 PIPE Registration Rights Agreement, if the Company fails to continuously maintain the effectiveness of the 2016 PIPE Registration Statement (with certain permitted exceptions), the Company will incur certain liquidated damages to the 2016 PIPE Investors. The 2016 PIPE Registration Rights Agreement also contains mutual indemnifications by the Company and each 2016 PIPE Investor, which the Company believes are customary for transactions of this type.

Warrants

The 2016 PIPE Warrants are exercisable, in full or in part, at any time prior to September 2, 2021, at an exercise price of \$5.50 per share. The 2016 PIPE 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. In the case of certain fundamental transactions affecting the Company, the holders of the 2016 PIPE Warrants, upon exercise of such warrants after such fundamental transaction, 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 PIPE Warrants been exercised immediately prior to such fundamental transaction. The 2016 PIPE 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 2016 PIPE Warrants. The 2016 PIPE Placement Agent Warrants have the same terms and conditions as the 2016 PIPE Warrants.

Related Debt Conversion

As discussed in Note 4, pursuant to the August 2016 Amendments, in addition to and simultaneously with the sale of the 2016 PIPE Units, on September 2, 2016: (i) the 2014 Principal automatically converted into 350,000 2016 PIPE Units on the same terms and conditions as applied to purchasers of 2016 PIPE Units; and (ii) the exercise price for 13,125 shares of common stock that may be purchased upon exercise of the holders' 2014 Warrants was reduced to \$5.50, which is equal to the exercise price of the 2016 PIPE Warrants.

2017 Private Placement

On May 26, 2017, the Company completed the 2017 PIPE pursuant to a Securities Purchase Agreement dated May 25, 2017 (the "2017 PIPE Purchase Agreement") with certain accredited investors (collectively, the "2017 PIPE Investors") for the private placement of 6,625,000 units (the "2017 PIPE Units") at a purchase price of \$2.00 per unit, with each unit consisting of: (i) one share of the Company's common stock; and (ii) a warrant to purchase one share of the Company's common stock (each, a "2017 PIPE Warrant" and collectively, the "2017 PIPE Warrants").

In connection with the sale of the 2017 PIPE Units, the Company received aggregate gross proceeds of approximately \$13.25 million, before deducting placement agents' fees and offering expenses aggregating approximately \$1.3 million. In addition, the placement agents for the 2017 PIPE received, in the aggregate, warrants ("2017 PIPE Placement Agent Warrants") to purchase up to 509,200 shares of common stock.

Purchase Agreement

The 2017 PIPE Purchase Agreement contains representations and warranties by the Company and the 2017 PIPE Investors and covenants of the Company and the 2017 PIPE Investors (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.

Registration Rights Agreement

Concurrent with completion of the 2017 PIPE, the Company and the 2017 PIPE Investors entered into a Registration Rights Agreement (the "2017 PIPE Registration Rights Agreement") pursuant to which the Company is required to prepare and file a registration statement (the "2017 PIPE Registration Statement") with the SEC under the Securities Act, covering the resale of the shares of common stock to be issued to the 2017 PIPE Investors under the 2017 PIPE Purchase Agreement as well as the shares of common stock underlying the 2017 PIPE Warrants and the 2017 PIPE Placement Agent Warrants. The Company was required to file such 2017 PIPE Registration Statement on or before June 26, 2017, and was required to use its best efforts to have the 2017 PIPE Registration Statement declared effective as soon as practicable. The Company filed the 2017 PIPE Registration Statement on June 26, 2017, and the 2017 PIPE Registration Statement was declared effective by the SEC on July 7, 2016, both dates being in conformity with the foregoing requirements. Pursuant to the Registration Rights Agreement, if the Company fails to continuously maintain the effectiveness of the 2017 PIPE Registration Statement (with certain permitted exceptions), the Company will incur certain liquidated damages to the 2017 PIPE Investors. The 2017 PIPE Registration Rights Agreement also contains mutual indemnifications by the Company and each 2017 PIPE Investor, which the Company believes are customary for transactions of this type.

Warrants

The 2017 PIPE Warrants are exercisable, in full or in part, at any time prior to the fifth anniversary of their issuance, at an exercise price of \$2.20 per share. The 2017 PIPE Warrants will 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. In the case of certain fundamental transactions affecting the Company, the holders of 2017 PIPE 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 2017 PIPE Warrants been exercised immediately prior to such fundamental transaction. The 2017 PIPE 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 2017 PIPE Warrants. The 2017 PIPE Placement Agent Warrants have the same terms and conditions as the 2017 PIPE Warrants.

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. No shares were issued to directors as payment for director fees during the three or six months ended June 30, 2017. During the three and six months ended June 30, 2016, 2,824 and 6,374 shares, respectively, were issued to directors as payment for director fees in lieu of cash.

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.

Since June 2015, the Company has granted share-based awards under the MRI Interventions, Inc. Amended and Restated 2013 Incentive Compensation Plan (the "Amended 2013 Plan"). Under the Amended 2013 Plan, a total of 156,250 shares of the Company's common stock are reserved for issuance. Of this amount, stock grants of 38,294 shares have been awarded and option grants, net of options terminated, expired or forfeited, of 97,750 shares were outstanding as of June 30, 2017. Accordingly, 20,206 shares remained available for grants under the Amended 2013 Plan as of that date.

Stock option activity under all of the Company's Plans during the six months ended June 30, 2017 is summarized below:

		Weighted Average Exercise	
	Shares		Price
Outstanding at December 31, 2016	337,441	\$	42.07
Granted	7,125		3.56
Forfeited	(40,129)		35.81
Outstanding at June 30, 2017	304,437	\$	30.11

The estimated grant date fair values of options granted during the three months ended June 30, 2017 were calculated using the Black-Scholes valuation model, based on the following assumptions:

Dividend yield	0%
Expected volatility	47.55% - 47.89%
Risk free interest rates	1.87% - 2.08%
Expected lives (in years)	6

The Company records share-based compensation expense on a straight-line basis over the related vesting period. For the three and six months ended June 30, 2017 and 2016, share-based compensation expense related to options was:

		Three Months Ended June 30,		
2017 2016			2016	
\$	222,130		\$	238,312
		Six Months Ended June 30,		
<u> </u>	2017			2016
\$	429.026		\$	498.881

As of June 30, 2017, there was unrecognized compensation expense of \$423,065 related to outstanding stock options, which is expected to be recognized over a weighted average period of 0.97 years.

Warrants

Warrants have generally been issued for terms of up to five years. Common stock warrant activity for the six months ended June 30, 2017 was as follows:

	Shares	Weighted - Average Exercise Price
Outstanding at December 31, 2016	1,991,293	\$ 13.00
Issued	7,134,200	2.20
Exercised	(3,845)	2.00
Terminated	(95,332)	29.09
Outstanding at June 30, 2017	9,026,316	\$ 4.17

6. Derivative Liabilities

As discussed in Note 4, on June 30, 2016, the Company entered into amendments with Brainlab, with respect to the New Brainlab Note, and with the 2014 Convertible Note Holders, the provisions of which created: (a) a conversion feature allowing for the principal balance described above to be converted at a public offering price that may be less than market value per share of the Company's common stock; and (b) down round strike price protection with respect to the warrants, both of which, under GAAP, are required to be accounted for as derivatives, thus requiring that the conversion feature and the warrants each be adjusted to estimated fair value at each balance sheet date and shown as liabilities in the accompanying condensed consolidated balance sheets.

In addition, warrants issued in 2012 and 2013 financing transactions contain either or both net-cash settlement and down round provisions. Under GAAP, such provisions require that these warrants be accounted for as derivatives, thus requiring that such warrants 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.

Under GAAP, the provisions described above require that the conversion feature and the warrants be accounted for as derivatives, thus requiring that they each be adjusted to estimated fair value at each balance sheet date and shown as liabilities in the accompanying condensed consolidated balance sheets.

The fair values of the conversion feature and the warrants were calculated using the Monte Carlo simulation valuation method.

Assumptions used in calculating the fair value of the conversion feature at June 30, 2017 are as follows:

Risk free interest rates	1.31%
Volatility	60.00%

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

Assumptions used in calculating the fair value of the warrants at June 30, 2017 are as follows:

Dividend yield	0%
Expected volatility	52.50 - 55.00%
Risk free interest rates	0.84 - 1.68%
Expected remaining term (in years)	0.01 - 3.76

In addition to the assumptions above, the Company also estimates the likelihood of whether it will participate in a future round of qualifying equity financing, as defined in either the amended note or warrant agreements, as applicable, that would trigger the conversion feature or the repricing of warrants, and, if so, the estimated timing and pricing of its offering of common stock.

The fair values and the changes in fair values of derivative liabilities during the six months ended June 30, 2017 and 2016 are as follows:

	Six Months Ended June 30,			
		2017		2016
Balance, beginning of period	\$	131,173	\$	658,286
Conversion of equity warrants to liabilities		-		192,173
Additions from debt restructuring		-		659,000
Reduction from warrant exercise		(10,659)		-
(Gain) loss on change in fair value for the period		61,739		(424,045)
Balance, end of period	\$	182,253	\$	1,085,414

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 and six months ended June 30, 2017 and 2016 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 June 30, 2017, we had accumulated losses of approximately \$98 million. We may continue to incur operating losses as we commercialize our ClearPoint system products, continue to develop our ClearTrace system, 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 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 \$1.9 million and \$3.8 million for the three and six months ended June 30, 2017 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 included elsewhere in 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.

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) seek to expand the application of our technological platforms. From our inception through June 30, 2017, we have incurred approximately \$50 million in research and development expenses.

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 either the further development of our ClearTrace system for commercialization, or in our efforts to expand the application of our technological platforms.

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 June 30, 2017 as compared to the critical accounting policies described in our 2016 Form 10-K.

Results of Operations

Three Months Ended June 30, 2017 Compared to the Three Months Ended June 30, 2016

	Three Months Ended June 30,		
	2017	2016	Percentage Change
Product revenues	\$ 1,892,638	\$ 1,066,551	77%
Other revenues	83,367	37,330	123%
Cost of revenues	798,498	520,987	53%
Research and development costs	1,084,202	749,942	45%
Selling, general and administrative expenses	1,915,601	1,888,056	1%
Other income (expense):			
Gain from change in fair value of derivative liabilities	31,307	263,927	(88)%
Gain from debt restructuring	-	121,224	(100)%
Other income (expense), net	(715)	139,239	(101)%
Interest expense, net	(212,709)	(251,250)	(15)%
Net loss	\$ (2,004,413)	\$ (1,781,964)	12%

Product Revenues. Product revenues were \$1.9 million for the three months ended June 30, 2017, and \$1.1 million for the same period in 2016, an increase of \$826,000, or 77%.

ClearPoint disposable product sales for the three months ended June 30, 2017 were \$1.4 million, compared with \$1.0 million for the same period in 2016, representing an increase of \$403,000, or 39%. 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 June 30, 2017, relative to the same period in 2016. Disposable product prices in effect during the three months ended June 30, 2017 were less than 1% higher than those prices in effect during the same period in 2016 for a typical customer order.

ClearPoint reusable product sales for the three months ended June 30, 2017 were \$457,000, compared with \$39,000 of such sales for the same period in 2016, representing an increase of \$403,000, or 1,033%. 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. Reusable product prices in effect during the three months ended June 30, 2017 were approximately 2% higher than those prices in effect during the same period in 2016 for a typical customer order.

Other Revenues. Other revenues for the three months ended June 30, 2017 were \$83,000, compared with \$37,000 for the same period in 2016, an increase of \$46,000, or 124%. This increase was due primarily to fees of \$31,000 earned during the three months ended June 30, 2017 from our rental of ClearPoint equipment to customers. There were no rentals to customers during the same period in 2016. Also contributing to the increase was a \$10,000 increase in fees earned from a greater number of ClearPoint service agreements in effect during the three months ended June 30, 2017, compared to the same period in 2016.

Cost of Revenues. Cost of revenues was \$798,000 for the three months ended June 30, 2017, representing a gross margin of 60%, compared to \$521,000 for the same period in 2016, representing a gross margin of 53%. The increase in gross margin was due primarily to greater production efficiencies achieved during the three months ended June 30, 2017 due to higher sales and production volumes, relative to the same period in 2016. Also, contributing to the gross margin improvement was a favorable mix of reusable products sold during the three months ended June 30, 2017, relative to the same period in 2016. During the three months ended June 30, 2017, reusable product revenues were derived primarily from sales of complete ClearPoint systems, which includes our proprietary ClearPoint software that bears higher margins relative to system hardware, as compared to sales solely of reusable hardware components during the same period in 2016.

Research and Development Costs. Research and development costs were \$1.1 million for the three months ended June 30, 2017, compared to \$750,000 for the same period in 2016, an increase of \$334,000, or 45%. The increase was due to upfront payments, aggregating \$522,000, the majority of which was in the form of shares of our common stock, required under certain license and product co-development agreements entered into in April 2017 (the "Co-Development Payments"). These payments were partially offset by reductions of \$81,000 in software development and \$79,000 in compensation, related primarily to a decrease in headcount.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were \$1.9 million for the each of the three-month periods ended June 30, 2017 and 2016, with a \$30,000 increase in sales and marketing expenses, and a \$12,000 increase in general and administrative expenses.

Other Income (Expense). During the three months ended June 30, 2017 and 2016, we recorded gains of \$31,000 and \$264,000, respectively, resulting from changes in the fair value of our derivative liabilities. For the three months ended June 30, 2017, such derivative liabilities related to: (a) warrants issued with either or both net-cash settlement and down-round price protection provisions in connection with 2012 and 2013 private placement transactions; and (b) the June 2016 Amendment of the Brainlab Note as discussed below. For the three months ended June 30, 2016, derivative liabilities also related to the August 2016 Amendments, entered into with the 2014 Convertible Note Holders, also as discussed below.

In April 2016, we entered into the 2016 Purchase Agreement with Brainlab under which the Brainlab Note was restructured and reissued as the New Brainlab Note, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report. As a result of the foregoing, we recorded a debt restructuring gain of \$941,000.

In June 2016, we entered into the June 2016 Amendments with Brainlab, with respect to the New Brainlab Note, and with the 2014 Convertible Note Holders, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report. Based on the provisions of the June 2016 Amendments, on June 30, 2016, we recorded a debt restructuring loss of \$820,000 resulting from the restructuring of the New Brainlab Note and those 2014 Secured Notes subject to the June 2016 Amendments.

During the three months ended June 30, 2017, we recorded other expense of \$715, as compared with other income of \$139,000 for the same period in 2016, a decrease in other income of \$140,000, or 101%. This decrease was due primarily to grant income from a U.S. federal agency of \$140,000 earned from a project in process during the three months ended June 30, 2016, which was discontinued by the agency later in 2016. We have not since undertaken any additional such projects.

Net interest expense for the three months ended June 30, 2017 was \$213,000, compared with \$251,000 for the same period in 2016. The decrease was due primarily to the reduced principal balance of: (a) the New Brainlab Note resulting from the restructuring of the Brainlab Note described above; and (b) the conversion into equity, in connection with the 2016 PIPE and pursuant to the terms of the August 2016 Amendments, of an aggregate of \$1.75 million in principal balances of the 2014 Secured Notes held by the 2014 Convertible Note Holders, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report.

	Six Months Ended June 30,		
	2017	2016	Percentage Change
Product revenues	\$ 3,814,853	\$ 2,432,705	57%
Other revenues	168,224	65,311	158%
Cost of product revenues	1,550,962	1,217,533	27%
Research and development costs	1,641,901	1,407,134	17%
Selling, general and administrative expenses	3,966,130	3,862,305	3%
Other income (expense):			
Gain (loss) from change in fair value of derivative liabilities	(61,739)	424,045	(115)%
Gain from debt restructuring	-	121,224	(100)%
Other income, net	3,412	214,380	(98)%
Interest expense, net	(425,908)	(596,475)	(29)%
Net loss	\$ (3,660,151)	\$ (3,825,782)	(4)%

Product Revenues. Product revenues were \$3.8 million for the six months ended June 30, 2017, and \$2.4 million for the same period in 2016, an increase of \$1.4 million, or 57%.

ClearPoint disposable product sales for the six months ended June 30, 2017 were \$3.1 million, compared with \$2.1 million for the same period in 2016, representing an increase of \$965,000, or 45%. 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 six months ended June 30, 2017, relative to the same period in 2016. Disposable product prices in effect during the six months ended June 30, 2017 were less than 1% higher than those prices in effect during the same period in 2016 for a typical customer order.

ClearPoint reusable product sales for the six months ended June 30, 2017 were \$718,000, compared with \$301,000 of such sales for the same period in 2016, representing an increase of \$464,000, or 154%. 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. Reusable product prices in effect during the three months ended June 30, 2017 were approximately 2% higher than those prices in effect during the same period in 2016 for a typical customer order.

Other Revenues. Other revenues for the six months ended June 30, 2017 were \$168,000, compared with \$65,000 for the same period in 2016, an increase of \$103,000, or 158%. This increase was due primarily to: (a) fees of \$66,000 earned during the six months ended June 30, 2017 from our rental of ClearPoint equipment to customers, as compared to no rental fees earned during the same period in 2016; and (b) a \$23,000 increase in fees earned from a greater number of ClearPoint service agreements in effect during the six months ended June 30, 2017, compared to the same period in 2016.

Cost of Product Revenues. Cost of product revenues was \$1.6 million for the six months ended June 30, 2017, representing gross margin of 61%, compared to \$1.2 million for the same period in 2016, representing gross margin of 51%. The increase in gross margin was due primarily to: (a) greater production efficiencies achieved during the six months ended June 30, 2017 due to higher sales and production volumes, relative to the same period in 2016; and (b) a favorable mix of reusable products sold during the six months ended June 30, 2017, relative to the same period in 2016. During the six months ended June 30, 2017, we sold a greater number of complete ClearPoint systems, which includes our proprietary ClearPoint software that bears higher margins relative to system hardware, as compared to the same period in 2016.

Research and Development Costs. Research and development costs were \$1.6 million for the six months ended June 30, 2017, compared to \$1.4 million for the same period in 2016, an increase of \$235,000, or 17%. The increase was due to: (a) the Co-Development payments, which were partially offset by reductions of \$83,000 in software development and \$135,000 in personnel costs related to a lower headcount during the six months ended June 30, 2017, relative to the same period in 2016, and recruiting costs that were incurred during the six months ended June 30, 2016 and not incurred in the same period in 2017.

Selling, General and Administrative Expenses. Selling, general and administrative expenses were \$4.0 million for the six months ended June 30, 2017 as compared with \$3.9 million for the same period in 2016, an increase of \$104,000, or 3%. The increase is due primarily to an increase of \$135,000 in sales and marketing expenses, partially offset by a \$24,000 decrease in general and administrative expenses.

Other Income (Expense). During the six months ended June 30, 2017, we recorded a loss of \$62,000, and during the six months ended June 30, 2016, we recorded a gain of \$424,000, resulting from changes in the fair value of our derivative liabilities. For the six months ended June 30, 2017, such derivative liabilities related to: (a) warrants issued with either or both net-cash settlement and down-round price protection provisions in connection with 2012 and 2013 private placement transactions; and (b) the June 2016 Amendment of the Brainlab Note as discussed below. For the six months ended June 30, 2016, derivative liabilities also related to the August 2016 Amendments, entered into with the 2014 Convertible Note Holders, also as discussed below.

In April 2016, we entered into the 2016 Purchase Agreement with Brainlab under which the Brainlab Note was restructured and reissued as the New Brainlab Note, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report. As a result of the foregoing, we recorded a debt restructuring gain of \$941,000.

In June 2016, we entered into the June 2016 Amendments with Brainlab, with respect to the New Brainlab Note, and with the 2014 Convertible Note Holders, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report. Based on the provisions of the June 2016 Amendments, on June 30, 2016, we recorded a debt restructuring loss of \$820,000 resulting from the restructuring of the New Brainlab Note and those 2014 Secured Notes subject to the June 2016 Amendments.

During the six months ended June 30, 2017 and 2016, we recorded other income of \$3,000 and \$214,000, respectively, representing a decrease of \$211,000, or 98%. This decrease was due primarily to grant income from a U.S. federal agency of \$203,000 earned from a project in process during the six months ended June 30, 2016, which was discontinued by the agency later in 2016. We have not since undertaken any additional such projects.

Net interest expense for the six months ended June 30, 2017 was \$426,000, compared with \$596,000 for the same period in 2016. The decrease was due primarily to the reduced principal balance of: (a) the New Brainlab Note resulting from the restructuring of the Brainlab Note described above; and (b) the conversion into equity, in connection with the 2016 PIPE and pursuant to the terms of the August 2016 Amendments, of an aggregate of \$1.75 million in principal balances of the 2014 Secured Notes held by the 2014 Convertible Note Holders, as discussed in Note 4 to the Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report.

Liquidity and Capital Resources

At June 30, 2017, we had cash and cash equivalent balances aggregating \$12.7 million, resulting primarily from completion of the 2017 PIPE discussed in Note 5 to the Condensed Consolidated Financial Statement included elsewhere in this Quarterly Report. Net cash used in operating activities was \$2.4 million and \$3.3 million for the six months ended June 30, 2017 and 2016, respectively.

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 resulting from greater utilization at existing installed sites and the installation of the ClearPoint system at new sites. Management also anticipates increases over the next twelve months in operating expenses to support the expected increase in revenues, with resulting decreases in loss from operations and in cash flow used in operations. There is no assurance, however, 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 we will have sufficient cash resources to support our operations for at least the next twelve months.

Cash Flows

Cash activity for the six months ended June 30, 2017 and 2016 is summarized as follows:

		Six Months Ended June 30,		
	2017	2016		
Cash used in operating activities	\$ (2,415,553)	\$ (3,292,217)		
Cash used in investing activities	(3,134)	(100,324)		
Cash provided by financing activities	11,843,496	-		
Net increase (decrease) in cash and cash equivalents	\$ 9,424,809	\$ (3,392,541)		

Net Cash Flows from Operating Activities. We used \$2.4 million and \$3.3 million of cash for operating activities during the six months ended June 30, 2017 and 2016, respectively.

During the six months ended June 30, 2017, uses of cash in operating activities primarily consisted of: (i) our \$3.7 million net loss; (ii) increases in inventory of \$68,000, and in prepaid expenses and other current assets of \$135,000; and (iii) a decrease in accounts payable and accrued expenses of \$129,000. These uses were partially offset by: (a) non-cash expenses included in our net loss aggregating \$1.3 million and consisting of depreciation and amortization, share-based compensation, expenses paid through the issuance of common stock, loss from change in fair value of derivative liabilities, and amortization of debt issuance costs and original issue discounts; (b) a decrease in accounts receivable of \$115,000; and (c) an increase in deferred revenue of \$203,000.

During the six months ended June 30, 2016, uses of cash in operating activities primarily consisted of: (i) our \$3.8 million net loss; (ii) the addition to net loss of the non-cash gains from debt restructuring and the change in fair value of derivative liabilities of \$121,000 and \$424,000, respectively; (iii) an increase in prepaid expenses and other current assets of \$162,000; (iv) an increase in other assets of \$228,000; and (v) a decrease in accounts payable and accrued expenses of \$193,000. These uses were partially offset by: (a) non-cash expenses included in our net loss aggregating \$966,000 and consisting of depreciation and amortization, share-based compensation, expenses paid through the issuance of common stock, loss from change in fair value of derivative liabilities, amortization of debt issuance costs and original issue discounts, and loss from retirement of fixed assets; (b) decreases in accounts receivable and inventory of \$448,000 and \$51,000, respectively; and (c) an increase in deferred revenue of \$107,000.

Net Cash Flows from Investing Activities. Net cash flows used in investing activities for the six months ended June 30, 2017 and 2016 were \$3,000 and \$100,000, respectively, and consisted of equipment acquisitions in both periods.

Net Cash Flows from Financing Activities. Net cash flows from financing activities for the six months ended June 30, 2017 consisted of net cash proceeds of \$11.8 million received from the 2017 PIPE. There were no cash flows from financing activities during the six months ended June 30, 2016.

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, complete the development of our ClearTrace system and pursue additional applications for our technology platforms. 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 cost of pursuing additional applications of our technology platforms under current collaborative arrangements, and 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 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 (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 June 30, 2017 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 June 30, 2017.

Changes in Internal Control Over Financial Reporting

During the quarter ended June 30, 2017, 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 2016 Form 10-K. 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 2016 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 2016 Form 10-K.

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

During the quarter ended June 30, 2017, the Company issued (i) 58,333 shares of the Company's common stock to Mayo Foundation for Medical Education and Research ("Mayo") as part of the consideration provided to Mayo under the Joint Development Agreement, dated as of April 14, 2017, by and between Mayo and the Company; and (ii) 30,000 shares of the Company's common stock to Acoustic Medsystems, Inc. ("AMS") as part of the consideration provided to AMS under the License and Collaboration Agreement, dated as of April 25, 2017, by and between AMS and the Company.

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: August 11, 2017

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 Warrant (Incorporated by reference to Exhibit 4.1 to MRI Interventions, Inc.'s Current Report on Form 8-K (File
	No. 001-34822) filed with the Securities and Exchange Commission on May 25, 2017)
10.1	Form of Securities Purchase Agreement by and between MRI Interventions, Inc. and the investors named therein
	(Incorporated by reference to Exhibit 10.1 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 001-
	34822) filed with the Securities and Exchange Commission on May 25, 2017)
10.2	Form of Registration Rights Agreement by and between MRI Interventions, Inc. and the investors named therein
	(Incorporated by reference to Exhibit 10.2 to MRI Interventions, Inc.'s Current Report on Form 8-K (File No. 001-
	34822) filed with the Securities and Exchange Commission on May 25, 2017)
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.