

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

FORM 8-K

CURRENT REPORT

**Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934.**

Date of Report: May 17, 2012
(Date of earliest event reported)

MRI INTERVENTIONS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

000-54575
(Commission File
Number)

58-2394628
(I.R.S. Employer
Identification No.)

One Commerce Square, Suite 2550
Memphis, Tennessee
(Address of principal executive offices)

38103
(Zip Code)

(901) 522-9300
(Registrant's telephone number, including area code)

Not Applicable
(Former Name or Former Address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the Registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01. Regulation FD Disclosure.

Kimble Jenkins, Chief Executive Officer of MRI Interventions, Inc. (the "Company"), is issuing a letter dated May 18, 2012 to stockholders of the Company. A copy of the letter is being furnished herewith as Exhibit 99.1 and will be posted to the Company's website at <http://ir.stockpr.com/mriinterventions/company-news>.

The Company is posting an investor presentation to its website at <http://ir.stockpr.com/mriinterventions/presentations>. A copy of the investor presentation is being furnished herewith as Exhibit 99.2. The Company may use the investor presentation from time to time in conversations with investors, analysts and others.

The Company is furnishing the information contained in Exhibits 99.1 and 99.2 pursuant to Regulation FD. Such information is furnished pursuant to Item 7.01 of Form 8-K and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

The information contained in Exhibits 99.1 and 99.2 is summary information that is intended to be considered in the context of the Company's filings with the Securities and Exchange Commission ("SEC") and other public announcements that the Company may make from time to time, by press release or otherwise. The Company undertakes no duty or obligation to publicly update or revise the information contained in this report, although it may do so from time to time as its management believes is warranted. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosure.

Item 8.01. Other Events

On May 17, 2012, the Financial Industry Regulatory Authority cleared the request of Canaccord Genuity, Inc., a registered brokerage firm, to submit a quote for the Company's common stock on the Over-The-Counter (OTC) Bulletin Board under the symbol "MRIC".

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

See Exhibit Index immediately following signature page.

SIGNATURE

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 hereunto duly authorized.

MRI INTERVENTIONS, INC.

Date: May 18, 2012

By: /s/ Kimble L. Jenkins

Kimble L. Jenkins
Chief Executive Officer

EXHIBIT INDEX

Exhibit No. Description

- | | |
|------|--|
| 99.1 | Letter dated May 18, 2012 from Kimble Jenkins to stockholders of MRI Interventions, Inc. |
| 99.2 | MRI Interventions, Inc. investor presentation dated May 2012 |



May 18, 2012

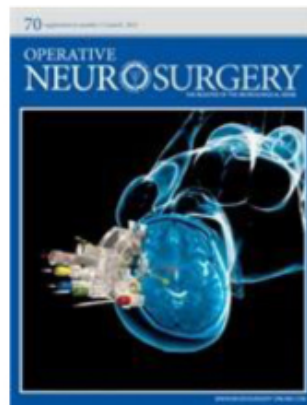
Dear Fellow Stockholders:

I am pleased to report to you several significant, positive developments at MRI Interventions.

We are cleared for trading! MRI Interventions will begin trading as a public company on Monday, under the symbol "MRIC". This achievement is the result of many months of work, including extensive regulatory filings with the Securities and Exchange Commission and a detailed review process conducted by the Financial Industry Regulatory Authority.

We made the cover! Our ClearPoint® Neuro Intervention System reached a significant milestone in March, being featured on the cover of the *Journal of Operative Neurosurgery*. As a leading peer-reviewed journal for neurosurgeons, we are very pleased with this recognition. You can access an abstract of the journal article by clicking on the following link:

<http://journals.lww.com/neurosurgery/toc/2012/03001>



Installations are growing! ClearPoint systems are installed at a growing number of hospitals, including many of the leading neurosurgical centers in the country. ClearPoint sites include UCSF Medical Center, Emory Healthcare, Memorial Sloan Kettering Cancer Center, the National Institutes of Health, Henry Ford Health Systems, MD Anderson, University of Pittsburg Medical Center, and University of Wisconsin among others. We are making progress outside the US as well. At the end of last year, we completed our first installation in Europe and expect to open additional ClearPoint sites in Europe over the coming quarters.

We are making a difference! ClearPoint neuro procedures are continuing to go very well. Neurosurgeons have now used the ClearPoint system as the minimally invasive neurosurgical platform in their treatment of patients suffering from a range of neuro diseases including Parkinson's disease, Dystonia, Pediatric Dystonia, Brain tumors, Epilepsy and Tourette's syndrome. We are gratified to have an opportunity to benefit a growing number of patients.

For a more detailed overview of the Company, I invite you to review our Investor Presentation, which can be found at the following link: <http://ir.stockpr.com/mriinterventions/presentations>. Also, if you haven't had a chance to see a demonstration of our ClearPoint system, please go to: <http://www.mriinterventions.com/clearpoint/demonstration-video>.



As we begin this exciting new chapter in the life of the company, I again want to thank our stockholders for their trust and confidence. With your support, we look forward to continuing our efforts to change people's lives with our innovative products and technologies.

Very truly yours,

A handwritten signature in black ink, consisting of a stylized 'K' followed by a cursive 'J' and a horizontal line extending to the right.

Kimble L. Jenkins
Chief Executive Officer



Ticker: MRIC
**Investor
Presentation**

May 2012



Forward-Looking Statements

Certain matters in this presentation may constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements often can be identified by words such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would,” or the negative of these words or other words of similar meaning. Forward-looking statements by their nature address matters that, to different degrees, are uncertain and involve risk. Uncertainties and risks may cause MRI Interventions’ actual results and the timing of events to differ materially from those expressed in or implied by MRI Interventions’ forward-looking statements. For MRI Interventions, particular uncertainties and risks include, among others: demand and market acceptance of its products; its ability to successfully complete the development of, and to obtain regulatory clearance or approval for, future products, including its current product candidates; availability of third party reimbursement; the sufficiency of its cash resources to maintain planned commercialization efforts and research and development programs; future actions of the FDA or any other regulatory body that could impact product development, manufacturing or sale; its ability to protect and enforce its intellectual property rights; its dependence on collaboration partners; the retention of its sales representatives and independent distributor; the impact of competitive products and pricing; and the impact of the commercial and credit environment on it and its customers and suppliers. More detailed information on these and additional factors that could affect MRI Interventions’ actual results are described in MRI Interventions’ filings with the Securities and Exchange Commission, including, without limitation, the quarterly report on Form 10-Q for the quarterly period ended March 31, 2012. Except as required by law, MRI Interventions undertakes no obligation to publicly update or revise any forward-looking statements contained in this presentation to reflect any change in MRI Interventions’ expectations or any change in events, conditions or circumstances on which any such statements are based.

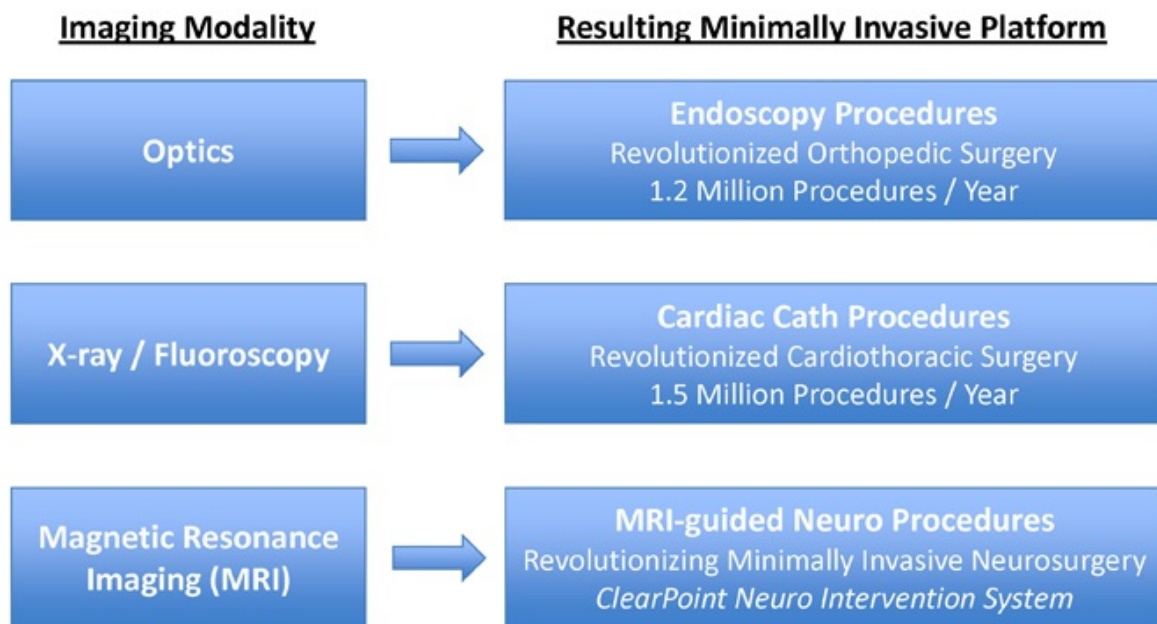
MRI Interventions, Inc. (MRIC)

**Creating MRI-based interventional platforms
for the next generation of minimally invasive surgical procedures.**

OPPORTUNITY HIGHLIGHTS

- ClearPoint® Neuro Intervention System, first-to-market platform, allows neurosurgeons to see inside the patient's brain during a procedure.
- Targeting 2.2 million late-stage neuro disease patients.
- ClearPoint is now installed in 15 prominent U.S. neurosurgery centers, and growing.
- ClearPoint has generated \$1.5M since commercial roll-out, and growing.
- MRIC is developing a second platform, ClearTrace™ System, for MRI-guided minimally invasive surgical procedures in the heart.

Minimally Invasive Procedures: A Revolution Driven by Imaging



Visualization is the Fundamental Building Block

Keystone for minimally invasive procedures is intra-procedural visualization. This capability wasn't available for neurosurgery until ClearPoint.

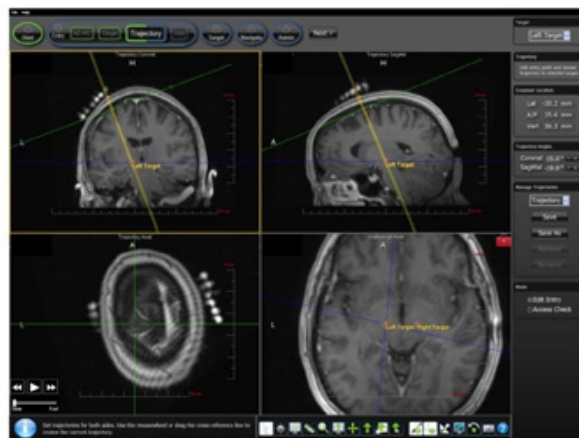
Conventional Procedure

Surgeon sees the outside of the patient's head during the procedure



ClearPoint Platform

Provides detailed visualization, inside the brain, during the procedure



ClearPoint: MRI-guided Neuro Intervention System



First-to-Market
FDA-Cleared, CE-Marked
Built on the Imaging Power of MRI

Enables Surgeons to:

- See inside the brain during procedures in real-time.
- Reach very small neuro targets, deep within the brain, with millimetric precision.
- Observe and assess therapies as they are being delivered.



Support from Clinicians, Industry, and Academics

Leading industry partners, academic institutions, and clinicians support MRIC technology and its application across multiple specialties.

INDUSTRY PARTNERS

SIEMENS  **BrainLAB**

**Boston
Scientific**

UNIVERSITY RESEARCH

UCSF

U THE UNIVERSITY OF UTAH

**JOHNS HOPKINS
MEDICINE**

SYSTEM COMPATABILITY

PHILIPS **SIEMENS**

BrainSUITE

IMRIS 

GE Healthcare

CLINICIAN ADVISORS



Dr. Philip Starr
UCSF



Dr. Paul Larson
UCSF & VA



Dr. Ali Rezai
Ohio State Univ



Dr. Russ Lonser
Nat Inst. of Health



Dr. Krys Bankiewicz
Bankiewicz Lab, UCSF

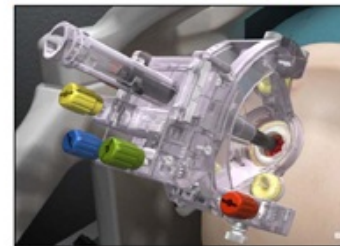
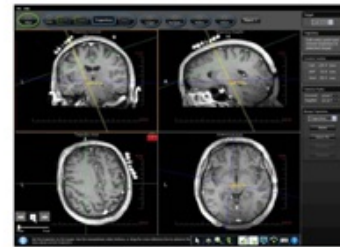


Dr. Nassir Marrouche
Univ of Utah

ClearPoint® Neuro Intervention System

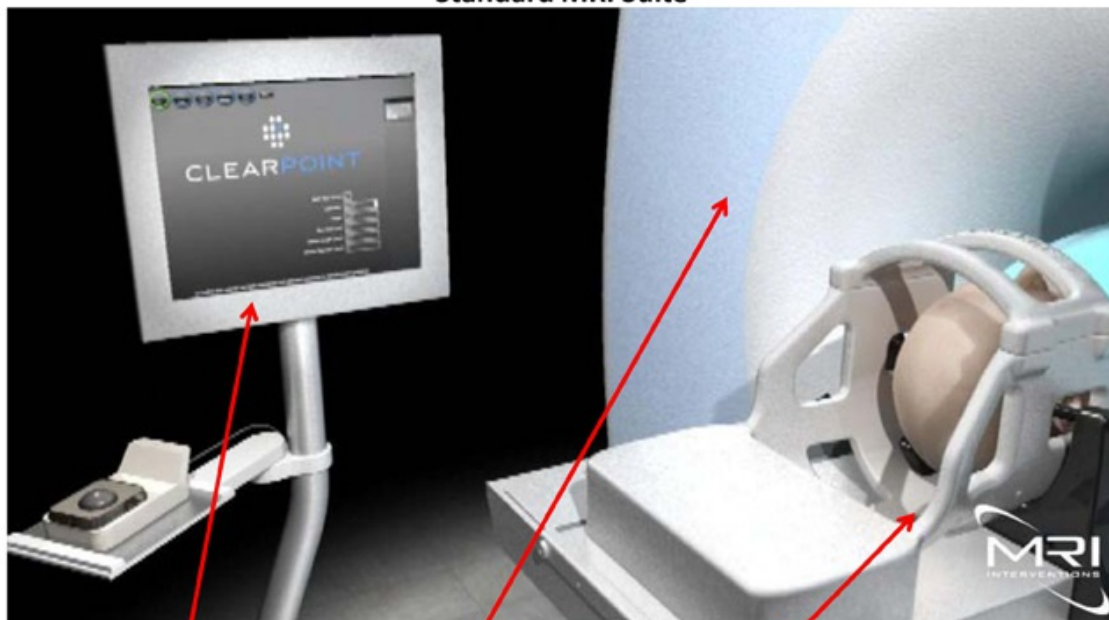
OVERVIEW

- ClearPoint procedures are performed in a hospital's existing MRI suite (diagnostic or intraoperative). There are over 4,500 such scanners in hospitals throughout the U.S.
- ClearPoint is an integrated platform of reusable hardware, software, and disposables components.
- With ClearPoint, a neurosurgeon can deliver therapies to treat a wide range of neurological diseases and disorders



ClearPoint Procedure Overview

Standard MRI Suite

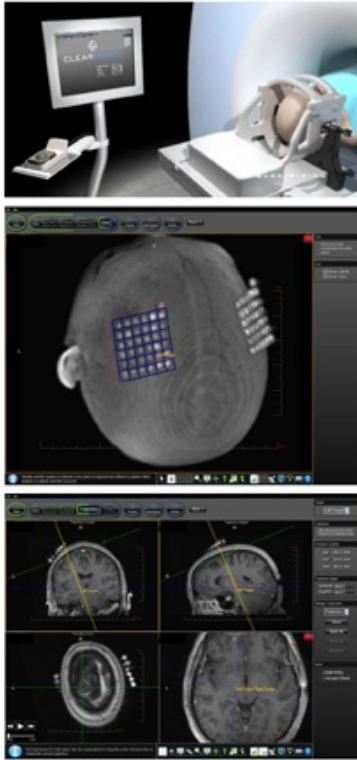


ClearPoint
Workstation Monitor

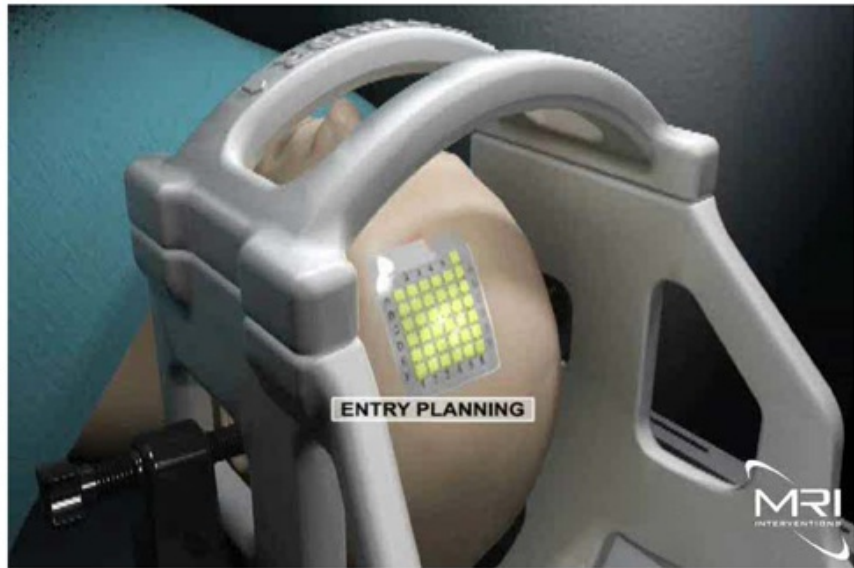
Standard Diagnostic
MRI Scanner

ClearPoint Imaging Coil and
Fixation Frame

ClearPoint Procedure Cont.



Target Selection & Entry Planning

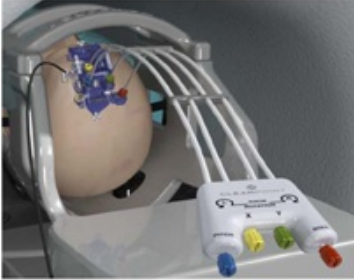


ClearPoint Procedure Cont.

SmartFrame Trajectory Guide



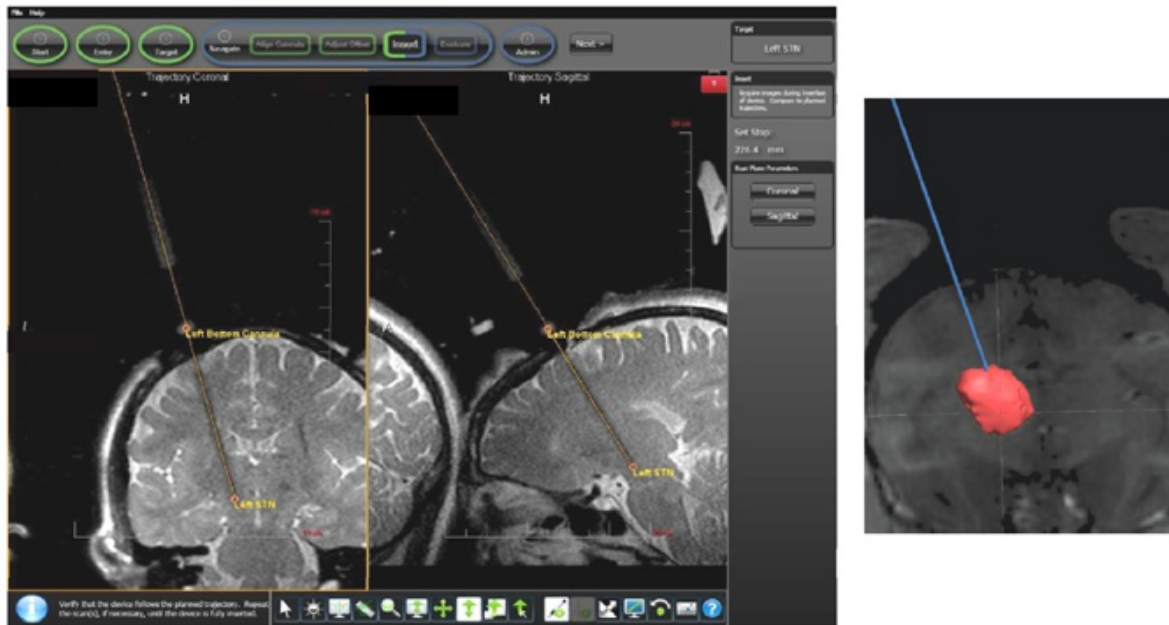
SmartFrame Hand Controller



Trajectory Alignment & Device Insertion



ClearPoint Procedure Cont.



ClearPoint: A Breakthrough Platform for Minimally Invasive Neurosurgery
...Now the Neurosurgeon can See

The ClearPoint Difference

Conventional Procedure	ClearPoint Procedure
No direct visualization, Performed in an operating room	Direct, high resolution visualization, Performed in an MRI Suite
Patient often must be awake for their own brain surgery	Patient under general anesthesia
Long procedures – up to 8 hours	Short procedures – 3 hours or less
Complex procedure, requires extensive training	Simple procedure, brief training
Requires specialized neurosurgeon - 300 in US	Not limited to specialized neurosurgeons - 3500 neurosurgeons in US
Poor economics for hospital and physician	Attractive economics for hospital and physician

ClearPoint Economics

BUSINESS MODEL – RAZOR / RAZORBLADE

- ClearPoint Hardware/Software: \$180,000 ASP (paid upfront or over time).
- ClearPoint Disposables: \$7,300 ASP per procedure with strong margins.
- Generate recurring revenue from the sale of disposables.
- Procedures covered by existing reimbursement codes.
- Single system accommodates multiple applications.

ATTRACTIVE ECONOMICS

- For Hospitals: increases revenue, improves efficiency, and utilizes existing infrastructure.
- For Surgeons: decreases procedure time and increases revenues generated per hour.

Market Opportunity for Minimally Invasive Neurosurgery

Addressable Patient Population

Indications	Patient Population	Treatment Resistant Addressable Market
Parkinson's Disease	1,500,000	150,000
Epilepsy	2,300,000	250,000
Brain Tumor	200,000	10,000
OCD	3,300,000	100,000
Major Depression	6,000,000	1,200,000
Dystonia	250,000	25,000
Alzheimer's	5,400,000	500,000
Huntington's	30,000	30,000

2.2 million,
and growing...

Therapeutic Approaches

Deep Brain Stimulation	Direct Drug Delivery	Focal Ablation
Today	In trials	Today
In trials	In trials	Today
N/A	In trials	Today
Today	In trials	Today
In trials	Future	Today
Today	N/A	Today
Early trials	Early trials	N/A
N/A	Early trials	N/A

All can be delivered in a
minimally invasive procedure

ClearPoint Adoption

CURRENT INSTALLED BASE



Neurosurgeon Comments on ClearPoint

The ClearPoint System “represents a major step forward in our ability to treat complex neurological diseases.”

Dr. Karl Sillay, Director of Adult Functional and Stereotactic Neurological Surgery at the University of Wisconsin, quoted in UW Health News, May 24, 2011

.....

“Yesterday’s [ClearPoint case] was 2 hours and 45 minutes, compared to about 6 hours for the standard approach,” ...some can take 12 hours...

“...the interventional MR approach allows the surgery to be done with a single brain penetration per side, so it’s less invasive.”

“They want a simple, accurate and fast solution and the new system makes that possible.”

Dr. Philip Starr, Professor of Neurological Surgery, Dolores Cakebread Endowed Chair in Neurological Surgery, UC San Francisco, quoted in UCSF News Feb 3, 2011



Drs. Sillay, Starr and Larson have no equity interest in the Company and they are not consultants to the Company

ClearPoint Market Opportunity

HIGHLIGHTS

- First-to-market in U.S. and Europe
- Strong support from leading clinicians
- Growing ClearPoint market awareness
- 4,500 MRI scanners in U.S. hospitals
- 3,500 neurosurgeons in U.S.
- 2.2 million late stage neuro patients
- Strong IP position in MRI-guided interventions with 60+ issued patents and 110+ patent applications



Our Next Platform in Development



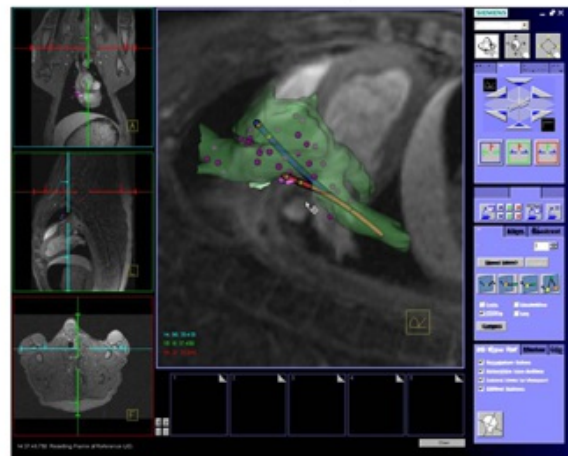
ClearTrace™ Cardiac Intervention System for minimally invasive surgical procedures in the heart.

Intra-procedural Visualization: Current Procedure vs. ClearTrace

Current Procedure



ClearTrace System



CAUTION: Investigational device. Limited by federal law to investigational use.

Personnel and Infrastructure

Research, development, manufacturing, and fulfillment takes place in the Company's ISO-certified facility in Irvine, CA

PERSONNEL

- 20 Employees
- 15+ years average med device experience

INFRASTRUCTURE

- Product development and prototyping performed in-house
- Product assembly in-house
- Full quality system; ISO 13485 certified
- Sales, order processing, and distribution in-house



Financial Highlights

MRIC is a commercial stage company, anticipating strong growth from its ClearPoint product line in 2012 and beyond. \$60M has been invested in MRIC, primarily research and development, since inception in 1998.

FINANCIAL RESULTS

2010 Results

- Pre-Revenue
- \$5.7M R&D spend
- \$9.5M loss from operations

2011 Results

- \$1.2M in product revenues
- \$4.3M R&D spend
- \$5.9M loss from operations

Near Term Growth Drivers

HIGHLIGHTS

- Growth in ClearPoint installations - driven by the hiring of additional sales and clinical support personnel, and positive PR from ClearPoint cases.
- Growth in ClearPoint procedures - driven by an expanding installed base, increased physician acceptance, and procedural experience.
- Co-distribution agreement with BrainLab, a leader in the image-guided surgery field, will drive both installations and systems use.
- Initial European ClearPoint sites now coming online.



Ticker: MRIC
MRI Interventions, Inc.
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Memphis, TN 38103

(901) 522-9300
info@mriinterventions.com

Descriptions of the Videos Included in this Presentation

This presentation includes three embedded videos. The following table provides the location of each video in the presentation and a description of each video:

Slide No.	Description
10 (right side)	<p>This video depicts the target selection and entry planning portion of a ClearPoint procedure. The video shows an animation of a patient and the ClearPoint system in use, along with images from the ClearPoint software that show MRI scans used to select a target site, trajectory to target and entry point on the MRIC SmartGrid® matrix.</p> <p>This video is an excerpt of the ClearPoint system demonstration video available on MRI Interventions' website at www.mriinterventions.com/clearpoint/demonstration-video.</p>
11 (right side)	<p>This video depicts the trajectory alignment and device insertion portion of a ClearPoint procedure. The video shows an animation of a patient and the ClearPoint system in use, along with images from the ClearPoint software that show MRI scans used to align the MRIC SmartFrame® trajectory guide along a planned trajectory and then depicts the insertion of a device into the target neuro anatomy.</p> <p>This video is an excerpt of the ClearPoint system demonstration video available on MRI Interventions' website at www.mriinterventions.com/clearpoint/demonstration-video.</p>
17	<p>In this video, Dr. Paul Larson, a neurosurgeon at UCSF Medical Center, speaks about his experience with the ClearPoint system. The following is a transcript of Dr. Larson's remarks in the video:</p> <p>"It was tremendous. The system performed exactly to our expectations. The patient was asleep. The targeting in the software worked flawlessly. We were able to place electrodes with one penetration of the brain as opposed to two or three or four that we would have done in that patient with the traditional implantation."</p> <p>"It changes things pretty substantially. The scanner allows us to see where we're going, in real time. For surgeons, the procedure time gets cut down by a half or a third. And you have this immediate feedback. Is the electrode going to the right spot? From a patient standpoint there are tremendous advantages. You know, who would want to have an awake brain operation if you could be asleep for it?"</p>

ClearPoint Neuro Intervention System

ClearPoint Draping in Preparation for a Case in a Diagnostic MRI Suite



ClearPoint Neuro Intervention System

Selected ClearPoint Disposable Components



