

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: September 25, 2015
(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.)

5 Musick
Irvine, California
(Address of principal executive offices)

92618
(Zip Code)

(949) 900-6833
(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))
-

Item 7.01. Regulation FD Disclosure.

MRI Interventions, Inc. (the “Company”) is posting an updated investor presentation to its website at <http://ir.stockpr.com/mriinterventions/presentations>. A copy of the investor presentation is being furnished herewith as Exhibit 99.1. The Company may use the investor presentation from time to time in conversations with analysts, investors and others.

The presentation is furnished by the Company pursuant to Item 7.01 of Form 8-K and will not be deemed to be “filed” for the purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities of that section, nor will it be deemed to be incorporated by reference in any filing under the Securities Act or the Exchange Act, except as expressly set forth by specific reference in such filing.

The information contained in Exhibit 99.1 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 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.

By: /s/ Harold A. Hurwitz

Harold A. Hurwitz
Chief Financial Officer

Date: September 25, 2015

EXHIBIT INDEX

Exhibit No.	Description
99.1	MRI Interventions, Inc. investor presentation dated September 2015



Ticker: MRIC

Investor Presentation

September, 2015



Transforming minimally invasive neurosurgery by enabling real-time visualization with MRI

Certain statements 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. Particular uncertainties and risks include, among others: demand and market acceptance of our products; our ability to successfully expand, and achieve full productivity from, our sales, clinical support and marketing capabilities; availability and adequacy of reimbursement from third party payors for procedures utilizing our products; the sufficiency of our 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; our ability to protect and enforce our intellectual property rights; our dependence on collaboration partners; the impact of competitive products and pricing; the impact of the commercial and credit environment on us and our customers and suppliers; and our ability to successfully complete the development of, and to obtain regulatory clearance or approval for, our ClearTrace system. More detailed information on these and additional factors that could affect MRI Interventions' actual results and the timing of events are described in our filings with the Securities and Exchange Commission, including, without limitation, the quarterly report on Form 10-Q filed on August 10, 2015. Except as required by law, MRI Interventions undertakes no obligation to publicly update or revise any forward-looking statements made 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.

Large Market

- Market is large and growing
 - 55,000 potential ClearPoint procedures across multiple therapies

Navigation System for Multiple Therapies

- **Electrode placement** for Deep Brain Stimulation
- **Laser Ablation** for ablation of epileptic foci or Brain Tumors
- **Brain Tumor Biopsy** for deep seated tumors
- **Precise Drug Delivery** to target lesions

Large Opportunity Attracting Multiple Players

- Area of interest to large medical device companies
 - Medtronic, St. Jude and Boston Scientific investing in neuro market
 - MRI Scanner Companies embracing MRI-guided therapies
 - Drug Companies pursuing direct delivery

Uniquely Positioned

- Focused commercial effort; FDA/CE approved products
 - Delivery platform for multiple therapies
 - Strong, proprietary position
 - Recent restructuring complete

MRI Interventions: *Real Time MRI Guided Surgery*



First-to-market technology platform enabling real-time MRI guided surgery; FDA-cleared, CE-marked and 40+ ClearPoint sites

Focused commercialization of neuro platform underway, gaining traction; recent restructuring complete

Attractive razor/razorblade business model with strong margins

Compatible with all major MRI manufacturers; Interoperability w/ Medtronic, Monteris, neuro products

Strong intellectual property portfolio

Strong management team with extensive medical device commercialization experience: Intuitive, Medtronic, Kyphon, Boston Scientific, Edwards Lifescience, Cordis

Leadership – Significant Med Device Experience



Key Management

<i>Executive</i>	<i>Title</i>	<i>Prior Experience</i>
Frank Grillo	President, CEO	INTUITIVE SURGICAL, KYPHON, Boston Scientific
Peter Piferi	COO	Edwards, HeartWare, Cordis
Wendelin Maners	VP Marketing	Boston Scientific, CSA MEDICAL
Robert Korn	VP Sales	Medtronic, Codman
Hal Hurwitz	CFO	pwc, ev3

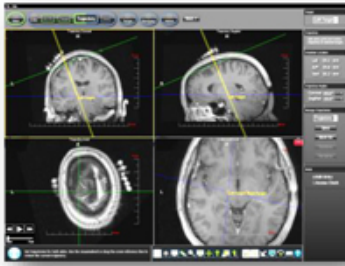
Board of Directors

Kimble Jenkins, Exec Chair Morgan Keegan	Maria Sainz CARDIOKINETICS concentric. stryker GUIDANT	Dr. Phillip Pizzo Stanford University Medical Center	Pascal Girin WRIGHT. ev3	Timothy Richards VNUS COVIDIEN B BRAUN SHARING EXPERTISE	Frank Grillo, CEO Boston Scientific KYPHON INTUITIVE SURGICAL
	Jack Spencer ERNST & YOUNG	Charles Koob Simpson Thacher	Andrew Rooke Major Investor		

Navigation System consisting of Integrated Devices and Software for Real-Time, MRI Guided, Minimally Invasive Neurosurgical Procedures

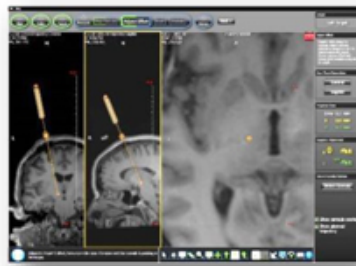
Visualize

- Identify target



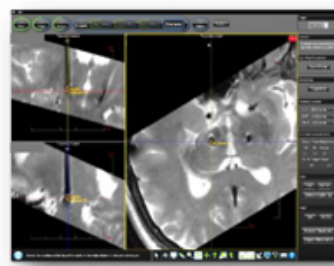
Verify

- Observe progress to target



Confirm

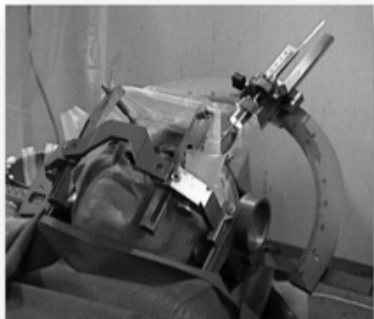
- Confirm precise placement at target



Without ClearPoint, minimally invasive neuro procedures are performed "blind"



Conventional Stereotactic Procedure

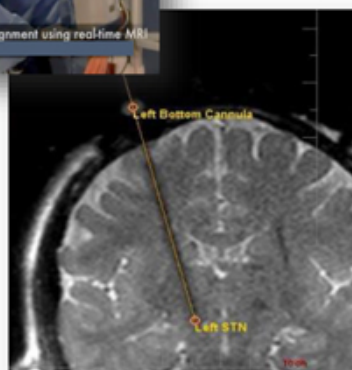


No real-time visualization

ClearPoint Neuro Procedure



dialing in the correct alignment using real-time MRI



Next generation platform enabling real-time, MRI-guided, minimally invasive brain surgery

ClearPoint® Neuro Navigation System

1.5T or 3T MR Scanners, also works in intraop MRI Suites



MRI Safe Disposable Components:

SmartGrid® and SmartFrame® – Integrated ClearPoint Targeting and Trajectory Precision

ClearPoint® Drape provides sterile procedural field in any diagnostic or intraoperative MRI scanner



Emory University Hospital



UCSF Medical Center



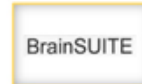
University of Pittsburgh Medical Center

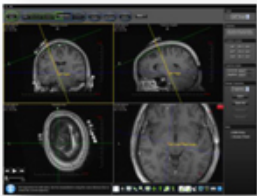
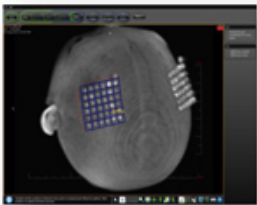


Brigham and Women's Hospital*

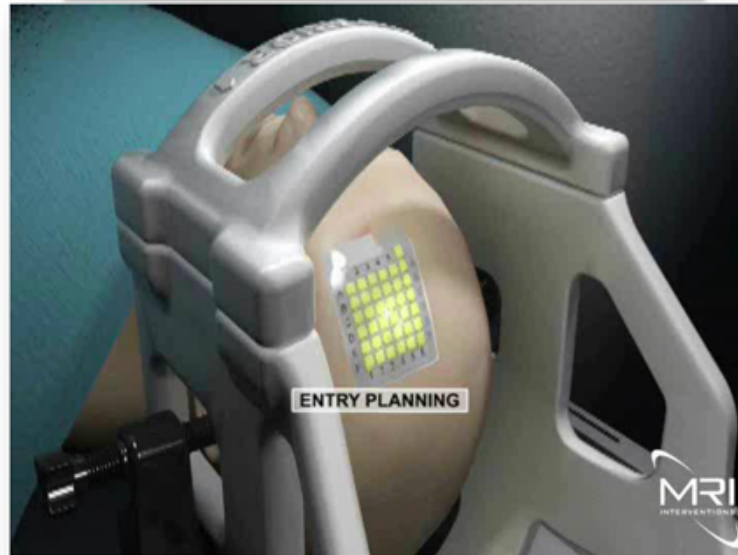
** Image courtesy of IMRIS*

Integrates with All Major Scanner Platforms

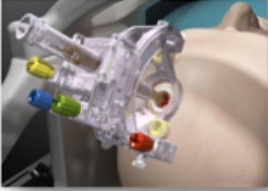




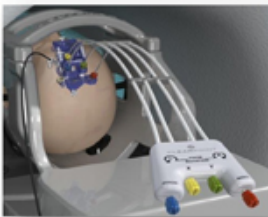
Target Selection & Entry Planning



SmartFrame® Trajectory Guide



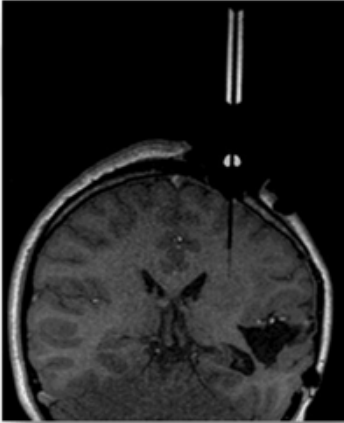
SmartFrame® Hand Controller



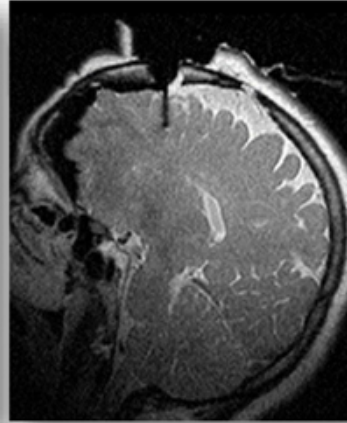
Trajectory Alignment & Device Insertion



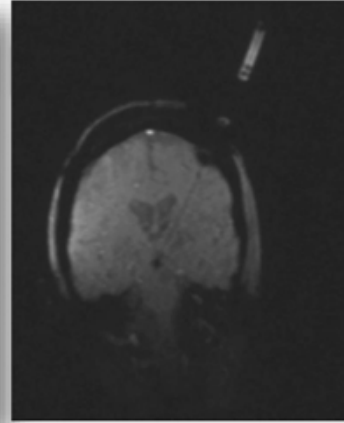
Delivery of Neurological Therapy



Drug Delivery¹



Electrode Placement



Laser Ablation²

- (1) Drug Delivery - The SmartFlow[®] cannula received 510(k) clearance for injection of cytarabine, a chemotherapy drug, to the ventricles or removal of CSF from the ventricles during intracranial procedures. Delivery of other therapeutic agents, and delivery of agents to other areas of the brain, using the SmartFlow cannula is investigational.
- (2) Laser Ablation - MR Thermometry is an MRI-based functionality available on most MR scanner platforms and it is a feature built into products from several third party vendors. The ClearPoint system enables MRI-guided procedures and allows physicians to use this inherent MR capability during a procedure.

Increase Patients

- Better patient experience provides hospitals the opportunity to reach additional patient populations that may otherwise forego surgery
- 65% of eligible DBS patients refuse treatment, due to fear of surgery⁽¹⁾

Established, Attractive Reimbursement

- Move procedures from the more expensive OR to the less expensive MR suite, with equivalent reimbursement

Improved Utilization of Existing MRI's

- 1 hour of MR Scanner time used for diagnostic imaging could generate \$1,200⁽²⁾
- 1 hour of MR scanner time used for a ClearPoint procedure could generate \$5,275⁽³⁾
- Utilizes existing MRI's already in hospital



(1) Medtronic Investor Presentation, June, 2014

(2) Estimated average US hospital-based MRI suite revenue per hour for outpatient diagnostic scans, based on data gathered by MRI Interventions. Excludes professional fees. Actual revenues will vary by hospital, procedure and payor.

(3) Based on a weighted average payment to MRI Interventions' customers (as of September 2014) for an electrode placement procedure for Medicare and private insurance patients, calculated by MRI Interventions using a payor mix weighted 67% to average Medicare reimbursement and 33% to average private insurance reimbursement. Average Medicare reimbursement calculated as the weighted average Medicare payment for MRI Interventions' customers (as of September 2014) for an electrode placement procedure under MS-DRGs 025, 026 and 027. Average private insurance reimbursement calculated as 1.5x Medicare reimbursement, based on published data. Hourly amount assumes 4.5 hour procedure duration. Excludes professional fees. Actual revenues will vary by hospital, procedure and payor.

Multi-Therapy MRI-Guided Navigational System



Leading Neurosurgeon Supporters



Dr. Philip Starr
ASSFN Past President



Dr. Paul Larson
UCSF & VA



Dr. Robert Gross
Emory University



Dr. Robert Wharen, Jr.
Mayo Clinic -
Jacksonville



Dr. Krys Bankiewicz
Bankiewicz Lab, UCSF

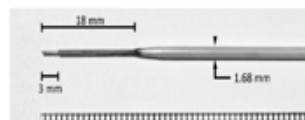


Dr. Russ Lonser
OSU - NIH

Strong Peer-Reviewed Journal Support



Compatible With Multiple Therapies



SmartFlow™ cannula for
local drug delivery

Strong Intellectual Property
Close to 100 issued patents around the world



50+ U.S. Patents

45+ OUS Patents

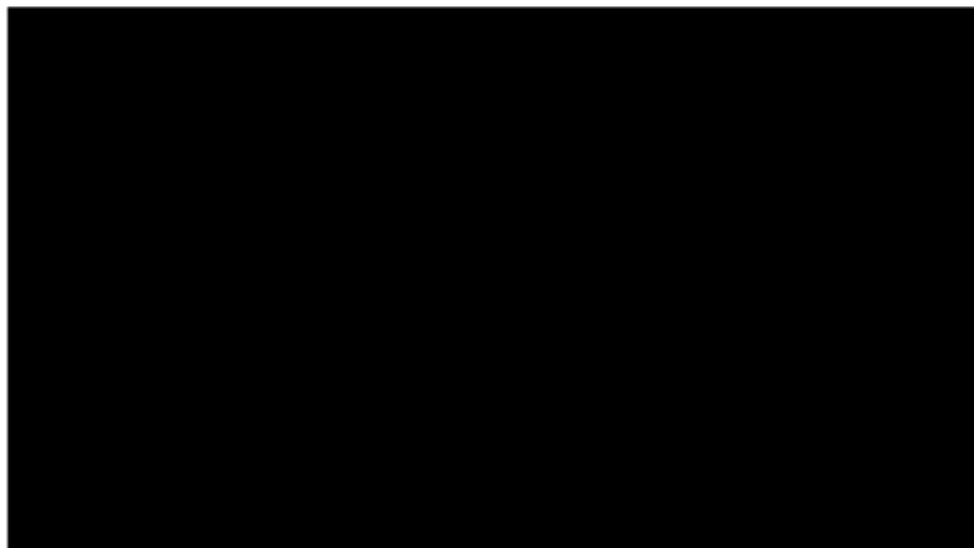
40+ U.S.
Patent Applications

50+ OUS
Patent Applications



- ***Issued patents cover areas such as:*** MRI-guided surgical systems that include software and devices; the SmartFrame® trajectory guide; other ClearPoint® disposable components; active intracranial probes; MRI-compatible catheters; MRI-safety technology
- Key ClearPoint-related patents do not begin to expire until 2027

Martin's Story ClearPoint-Enabled Electrode Placement



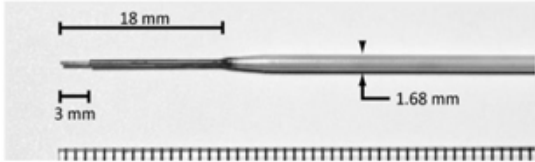
7 days after ClearPoint procedure – Arrow Indicates Surgery Site



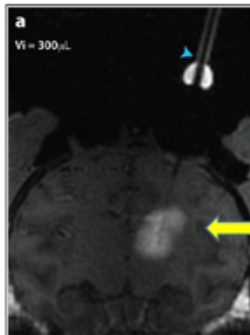
ClearPoint Drug Delivery



- MR visualization of neuro target
- MR-guided placement of catheter
- Therapeutic agent delivered under MR-guidance*



Specialized drug delivery cannula's / catheters



Drug infusion is visible real time under MRI

Laboratory Investigation

Stroke Vasc Resear 2015, 8(4):1-11
DOI: 10.1186/s12916-015-0224-4

Received: September 16, 2015
Published online: September 15, 2015

Novel Platform for MRI-Guided Convection-Enhanced Delivery of Therapeutics: Preclinical Validation in Nonhuman Primate Brain

R. Mark Richardson^{1*}, Adam P. Kabb¹, Philip A. Stass¹, Peter G. P. Kraybill¹, Kathryn H. Rosenbluth¹, Krystof S. Barankiewicz¹

¹Departments of Neurological Science and Therapeutics, Inc., Irvine, CA, USA

Interventional MRI-guided Putaminal Delivery of AAV2-GDNF for a Planned Clinical Trial in Parkinson's Disease

R. Mark Richardson¹, Adam P. Kabb¹, Kathryn H. Rosenbluth¹, Ernesto Aguilar Salgado¹, Mauricio S. Fandiari², Paul S. Larson¹, Philip A. Stass¹, Ronald J. Harlow¹, Russell K. Lunsford¹, Krystof S. Barankiewicz¹, John B. Koranyi¹ and Krystof S. Barankiewicz¹

Conclusion: The ClearPoint system allows Real-time Convection-enhanced Delivery to be performed with a high level of precision, predictability, and safety.

CAUTION: SmartFlow™ Cannula is approved for injection of Cytarabine or removal of CSF from the ventricles during intracranial procedures. Uses other than the approved indication are limited by Federal law to investigational use.

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Provides MRIC with “biotech-like upside” without “all or nothing downside”

Major Challenges in Delivering Drugs to the Brain

- Blood brain barrier blocks systemic delivery of almost all drugs – 98% of small molecules
- Direct injection without ClearPoint is blind, so target is frequently missed
 - *Neopharm Trial - 51% of 572 catheters failed to meet all positioning criteria*

Major Benefits of Drug Delivery with ClearPoint

- Neurosurgeon sees that target is reached
- Eliminates the blood brain barrier issue; Reduces/eliminates unwanted systemic side effects; Reduces dosage levels (as little as 1/300th of systemic volumes)

Business Model – MRIC Partners with Drug Companies and Researchers

- MRIC provides ClearPoint; Drug company provides drug candidate
- Drug company/sponsor pays for trial
- If drug is approved, MRIC gets device revs (~\$7000/case); Drug co gets drug revs

	IL13 for Brain Tumor – Phase 1 study at NIH - Sponsored by NIH		AAV2-hAADC for Parkinson's disease - Phase 1 study at UCSF - Sanofi – Genzyme; Michael J. Fox Foundation
	Radio Immunotherapy for Brain Tumor – Phase 1 Study at MSK - Sponsored by the Memorial Sloan-Kettering Cancer Center		AAV2-GDNF for Parkinson's disease - Phase 1 study at the NIH - uniQure, B.V.
	Nanoliposomal Irinotecan for Brain Tumor – Phase 1 Study at UCSF - Merrimack Pharmaceutical		

The ClearPoint Difference



Without ClearPoint (Stereotactic)	With ClearPoint
No direct visualization; Performed in an operating room	Direct, high resolution visualization; Performed in an MRI Suite
Patient may be awake for own brain surgery ⁽¹⁾	Patient may be under general anesthesia ⁽¹⁾
Long procedures – Can be up to 8 hours	Shorter procedures – Can be 3 hours or less
Accuracy to target based on prior images	Highly accurate, based on real time images
May require OR and MRI for same procedure (laser ablation)	One procedure, one place
Poor economics for hospital and physician	Attractive economics for hospital and physician

Better for Patients

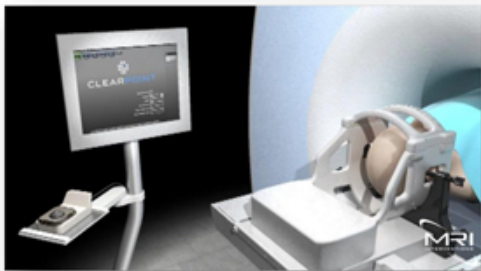
Better for Surgeons

Better for Hospitals

(1) Microelectrode recording and macrostim are processes that involve listening to neuronal firings (i.e., physiological recordings) and observing physiological responses to stimuli during brain surgery. In connection with our 510(k) clearance in 2010, the FDA requested a warning within ClearPoint's Instructions for Use based on the lack of data with respect to deep brain stimulation (DBS) procedures. The warning states that the ClearPoint system, alone, should not be used to guide a DBS lead to a specific brain target and that final placement of DBS leads requires physiological recordings to confirm that they are located in the correct brain target and functioning as intended.

BUSINESS MODEL – RAZOR / RAZORBLADE

- ClearPoint Hardware/Software: \$100,000 - \$150,000 ASP
- ClearPoint Disposables: \$7,500 (average) ASP per procedure with strong margins
- Recurring revenue from the sale of disposables
- Procedures covered by existing inpatient DRG reimbursement codes



Growing the ClearPoint Footprint

Installed Base of 39 sites in the US





	<i><u>Parkinson's</u></i>	<i><u>Epilepsy</u></i>	<i><u>Brain Tumors</u></i>
Total Prevalence (US)	1,500,000	2,200,000	80,000 <i>(annual diagnosis)</i>
Prevalence – Drug Treatment Resistant (DTR)	125,000	264,000	
Incidence – DTR	7,500	18,000	Resections: 80,000 Stereotactic Biopsy: 10,000
ClearPoint Enabled Therapy	Electrode Placement (DBS)	Laser Ablation RNS ¹	Biopsy / Laser Ablation / Drug Delivery
Potential ClearPoint Procedures, Annually²	12,500	28,000	14,500

55,000+ Potential Procedures Per Year

Note: Prevalence and Incidence based on either market research conducted by a third party on behalf of MRI Interventions or research conducted by MRI Interventions of publicly available sources.

(1) Responsive neurostimulation device (RNS)

(2) Potential Annual ClearPoint Procedures based upon 5% of prevalence and 85% of incidence; Potential Annual ClearPoint Procedures for brain tumors based on market research conducted by a third party on behalf of MRI Interventions.

ClearPoint Future Opportunities

Multiple Therapies for Future Growth

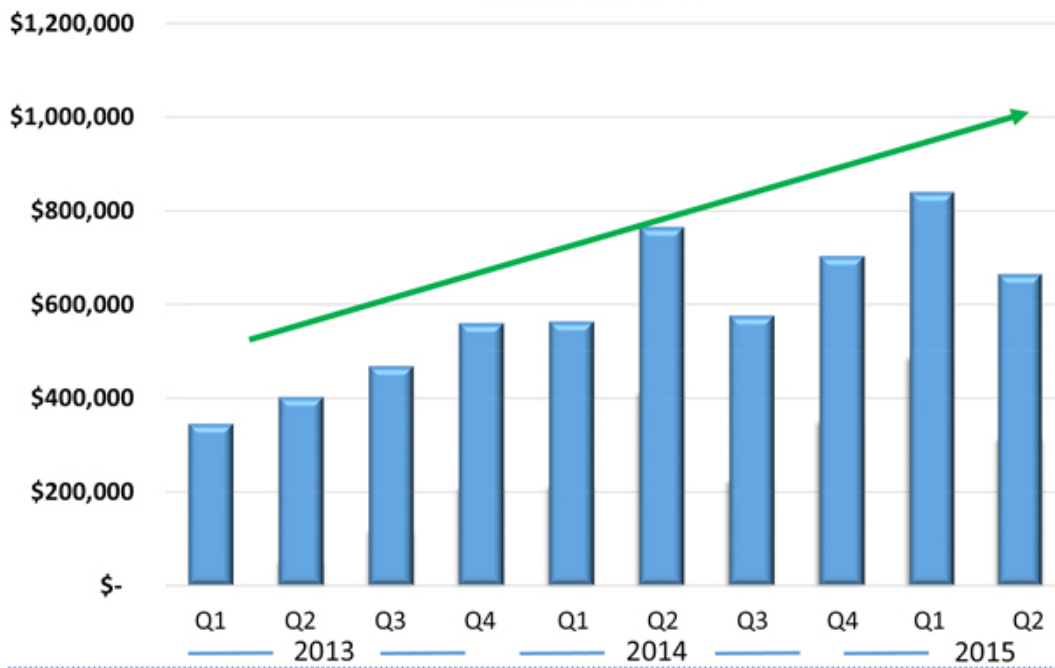


<u>Neuro Disorder</u>	<u>Patient Population</u>	<u>Treatment Resistant Patient Population</u>	<u>ClearPoint Enabled Therapy</u>	<u>Current Status</u>
Dystonia	250,000	25,000	DBS	Active Use, HDE
OCD	3,300,300	100,000	DBS	Active Use, HDE
Severe Depression	6,000,000	1,200,000	DBS	IDE Trials (DBS)
Parkinson's Disease	1,500,000	125,000	Drug Delivery	Clinical Trials – Phase 1
Brain Tumors (GBM)	11,000	11,000	Drug Delivery	Clinical Trials – Phase 1
Huntington's	30,000	30,000	Drug Delivery	Pre-Clinical
ALS	30,000	30,000	Drug Delivery	Pre-Clinical
Alzheimer's	5,400,000	500,000	DBS	Research

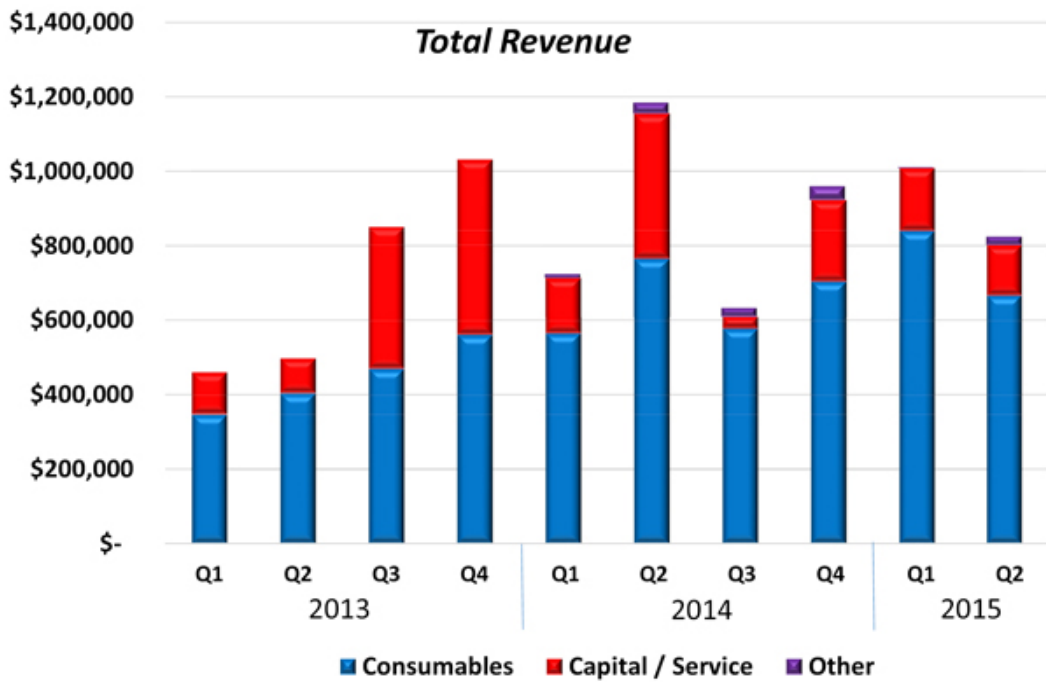
ClearPoint Consumable Revenues



■ Consumables



Total Revenue, 2013 - 2015



Increase Utilization

- Focus on adding surgeons at existing accounts
- Target high volume sites, including epilepsy and tumor neurosurgeons within each account; gain greater share of their procedures
- Add Clinical Specialists and sales reps to commercial team; compensate for utilization growth

Enhance Communication

- Increase peer-to-peer events, presence at trade shows
- Highlight existing data on ClearPoint applications to neurologists and neurosurgeons
- Communicate value proposition across procedures:
 - Accuracy
 - Real time visualization
 - Improved workflow
 - Increase patient volume

Expand Account Base

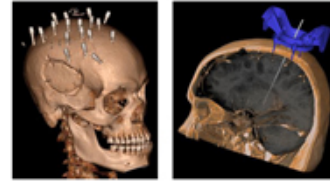
- Identify highest volume potential accounts across multiple procedures
- Support local hospital marketing efforts
- Capitalize on interest in drug delivery to expand in oncology accounts
- Add sales reps

Achieve Cash Breakeven

- Tightly control working capital, consumption of cash
- Hire additional personnel only in key functions – commercial team; engineering

Software 2.0

- Significant upgrade to existing software; includes real time fusion, enhanced graphic and User Interface
- Technology licenses near complete with three additional software companies for this effort



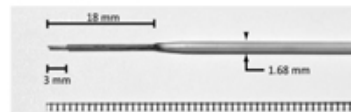
OR SmartFrame

- Through partnership(s), expand our products and brand into the operating room for CT based neuro procedures



Drug Delivery

- Establish additional drug delivery partnerships, and participate in additional clinical trials
- Become the neuro ***drug delivery device*** partner of choice



Procedure Enhancements

- Continue to enhance product line with a focus on procedure simplification and consistency



*Bolt Driver
for
Laser Ablation*



MRI is at the point of convergence in an industry trend impacting some of the most influential and innovative medical device companies in the world



Ticker: MRIC

MRI Interventions, Inc.
Irvine, CA

949.900.6833

mriinterventions.com



Transforming minimally invasive neurosurgery by enabling real-time visualization with MRI

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