

# Benefits of Asleep Deep Brain Stimulation (DBS) Lead Placement With ClearPoint Neuro Intervention System Indicated in Study of Pediatric Primary Dystonia Patients

IRVINE, CA -- (Marketwired) -- 07/15/13 -- MRI Interventions, Inc. (OTCQB: MRIC) today announced the presentation of data and results indicating the benefits of its ClearPoint® Neuro Intervention System as a platform for iMRI-guided deep brain stimulation (DBS) lead placement in pediatric patients. A research team led by Dr. Philip Starr (neurosurgeon) and Dr. Jill Ostrem (neurologist) from the University of California, San Francisco (UCSF) presented an abstract at the 2013 International Congress of Parkinson's Disease and Movement Disorders in Sydney, Australia outlining data collected from the treatment and post-operative follow up of six children with pediatric primary dystonia who underwent iMRI-guided DBS procedures with the ClearPoint system. Leslie Markun, MSc, lead author on the abstract, showed that iMRI-guided DBS surgery, which allows patients to sleep through the procedure, is a technically simple and accurate option for a patient population that traditionally exhibits a low tolerance for conventional awake DBS surgery. The UCSF team plans to submit its findings for publication in a peer-reviewed journal.

# Highlights of the presentation included:

- Only a single brain penetration was used for placement of the DBS leads;
- The average accuracy of the lead placement was under one millimeter;
- The average surgical time for lead placement was just over three hours;
- At 12 months follow up, the patients' movement scores improved an average of 88% on the Burke-Fahn-Marsden Dystonia Rating Scale (BFMDRS);
- Clinical outcomes were comparable to the best reported outcomes that have been achieved using traditional methods.

"The data from this study suggest that 'asleep DBS' can be performed extremely accurately when guided by ClearPoint," said Philip A. Starr, MD, PhD, at UCSF, who collaborated with MRI Interventions in developing the iMRI procedure, but holds no intellectual property rights to it. "The clinical outcomes indicate that this is an excellent surgical method in children, and on a MRI system providing high resolution imaging, the procedure is straightforward to perform."

Deep brain stimulation surgery for children has long presented a challenge to stereotactic neurosurgeons because the procedure traditionally has required patients to remain awake and provide feedback to help confirm accurate placement of the DBS leads. Children often have not been considered good candidates for DBS surgery due to this requirement.

IMRI-guided surgery with the ClearPoint system opens up the possibility of DBS as a treatment option for these children by allowing patients to undergo an "asleep DBS" procedure. Using the ClearPoint system, a surgeon can see, in real time, the inside of a patient's brain and the location of surgical tools and devices, which can eliminate the need for a patient's conscious feedback. The ClearPoint system easily integrates with a hospital's existing MRI scanner, which is ideal for real-time imaging throughout surgery because it provides high-quality visualization of the soft tissue of the brain and does not expose patients to ionizing radiation, unlike other imaging methods such as computed tomography (CT) and X-ray. In addition to DBS lead placement, the ClearPoint system can be used as a delivery platform for neurological therapies and interventions such as focal laser ablation, brain biopsy, and drug delivery.

The UCSF study included six patients, aged 7 to 15, with primary dystonia. Patients were candidates for surgery if they had marked disability and other medical therapy was ineffective. Patients received bilateral globus pallidus or subthalamic nucleus DBS. Funding for the study was provided by Medtronic, Inc. and MRI Interventions, as well as a grant from the NIH.

# About MRI Interventions, Inc.

Founded in 1998, MRI Interventions (OTCQB: MRIC) is a publicly traded company creating innovative platforms for performing the next generation of minimally-invasive surgical procedures in the brain and heart. Utilizing a hospital's existing MRI suite, the company's FDA-cleared and CE-marked ClearPoint® system is designed to enable a range of minimally-invasive procedures in the brain. MRI Interventions has a co-development and co-distribution agreement with Brainlab, a leader in software-driven medical technology, relating to the ClearPoint system. In partnership with Siemens Healthcare, MRI Interventions is developing the ClearTrace® system to enable MRI-guided catheter ablations to treat cardiac arrhythmias, including atrial fibrillation. Building on the imaging power of MRI, the company's interventional platforms strive to improve patient care while reducing procedure costs and times. MRI Interventions is also working with Boston Scientific Corporation to incorporate its MRI-safety technologies into Boston Scientific's implantable leads for cardiac and neurological applications. For more information, please visit <a href="https://www.MRIInterventions.com">www.MRIInterventions.com</a>.

# About the ClearPoint® Neuro Intervention System

The ClearPoint system is designed to allow real-time, direct visualization during neurosurgery by utilizing the powerful imaging capabilities of MRI. The ClearPoint system is intended to be used as an integral part of procedures, such as biopsies and catheter and electrode insertions, which have traditionally been performed using stereotactic methods.

# Forward-Looking Statements

Certain matters in this press release 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 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 our sales and clinical support capabilities; availability of third party reimbursement; 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; and the impact of the commercial and credit environment on us and our 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, MRI Interventions' Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 10, 2013. Except as required by law, MRI Interventions undertakes no obligation to publicly update or revise any forwardlooking statements contained in this press release to reflect any change in MRI Interventions' expectations or any change in events, conditions or circumstances on which any such statements are based.

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