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: February 15, 2013 (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)

One Commerce Square, Suite 2550 Memphis, Tennessee (Address of principal executive offices) (I.R.S. Employer Identification No.)

38103

(Zip Code)

58-2394628

(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))

Item 7.01. Regulation FD Disclosure.

On February 15, 2013, MRI Interventions, Inc. (the "Company") issued a press release announcing (i) the total number of installations of the Company's ClearPoint[®] system as of December 31, 2012, and (ii) the number of ClearPoint disposable units sold by the Company for the twelve months ended December 31, 2012. A copy of the press release is furnished herewith as Exhibit 99.1.

The Company is furnishing the information contained in Exhibit 99.1 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 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: <u>/s/ Oscar L. Thomas</u> Oscar L. Thomas

Vice President, Business Affairs

Date: February 15, 2013

EXHIBIT INDEX

Exhibit No.Description99.1Press Release of the Company dated February 15, 2013

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MRI Interventions Announces Milestone Achievements

MEMPHIS, TN, February 15, 2013 – MRI Interventions, Inc. (OTCBB: MRIC) announced today that the company ended 2012 having achieved the 20th installation of its ClearPoint® Neuro Intervention System. ClearPoint systems are in clinical use with MRI scanners from the three major manufacturers, Siemens, GE Healthcare and Philips Healthcare, as well as the two major interventional MR/OR platforms that are manufactured by IMRIS and Brainlab.

MRI Interventions' innovative ClearPoint system is an integrated platform for performing a wide range of minimally-invasive neurological procedures under direct, real-time MRI guidance. ClearPoint is an integrated system of reusable components, disposable components and intuitive menu-driven software, which provides guidance for the placement and operation of instruments during neurological procedures performed within the MRI environment. Using the ClearPoint system, a surgeon sees and selects a neurological target, aims the ClearPoint SmartFrame® targeting device, and watches in real-time as the surgical instrument is advanced to the target.

As of December 31, 2012, ClearPoint systems have been installed at 20 sites worldwide. This includes 18 hospitals in the United States and two hospitals in Europe. In addition to the growth in its customer base, the company announced another milestone in having sold 200 disposable units of its SmartFrame kits in 2012. Depending on the type of neurological procedure being performed, a ClearPoint procedure will utilize either one or two SmartFrame kits. The SmartFrame targeting device is an MRI-compatible trajectory frame that serves as the centerpiece of the ClearPoint system's disposable components.

"We finished 2012 with significant business momentum, including the addition of two more prestigious institutions to our customer base, The Johns Hopkins University and the University of California, San Diego Health System. We are pleased to be associated with these clinical thought leaders. We are also pleased that we continue to see increased traction with significant growth in our disposable units sold," said Kimble Jenkins, CEO of MRI Interventions.

About MRI Interventions, Inc.

Founded in 1998, MRI Interventions is 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 ClearPoint® system is designed to enable a wide 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 ClearTraceTM 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 www.MRI interventions.com.

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 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 our sales and marketing capabilities; our ability to successfully complete the development of, and to obtain regulatory clearance or approval for, future products, including our current product candidates; 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' most recent quarterly report on Form 10-Q. Except as required by law, MRI Interventions undertakes no obligation to publicly update or revise any forward-looking 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.

Contact Information:

MRI Interventions, Inc. David Carlson, CFO, 901-522-9300