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 (Date of earliest event reported): May 1, 2017

MRI INTERVENTIONS, INC.

(Exact name of registrant as specified in its charter)

DELAWARE (State or other jurisdiction of incorporation) 001-34822 (Commission File Number) 58-2394628 (I.R.S. Employer Identification Number)

5 Musick Irvine, Ca. 92618 (Address of principal executive offices, zip code)

(949) 900-6833 (Registrant's telephone number, including area code)

k the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under if 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 under the Exchange Act (17 CFR 240.12b-2). ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure

On May 1, 2017, MRI Interventions, Inc. posted an updated investor presentation to its website at http://ir.stockpr.com/mriinterventions/investor-presentation. 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 information in Item 7.01 of this Form 8-K, as well as Exhibit 99.1 attached hereto, shall not be deemed "filed" for the purposes of Section 18 of the Exchange Act, nor shall it be deemed incorporated by reference in any filing under the Securities Act, or the Exchange Act, except as shall be expressly set forth by specific reference in such a 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 investor presentation, although it may do so from time-to-time as its management believes is warranted. Any such updating may be made through the filing or other reports or documents with the SEC, through press releases or other public disclosure.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

The following exhibits are furnished herewith:

Exhibit 99.1 Investor Presentation dated May 2017.

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 hereunto duly authorized.

Date: May 1, 2017 MRI INTERVENTIONS, INC.

By: /s/ Harold A. Hurwitz

Harold A. Hurwitz Chief Financial Officer

INDEX TO EXHIBITS

Exhibit

<u>Description</u>
Investor Presentation dated May 2017. Number Exhibit 99.1



Investor Presentation

May 2017



Forward Looking Statements

Statements herein concerning MRI Interventions, Inc. (the "Company") plans, growth and strategies may include forward-looking statements within the context of the federal securities laws. Statements regarding the Company's future events, developments and future performance, as well as management's expectations, beliefs, plans, estimates or projections relating to the future, are forward-looking statements within the meaning of these laws. Uncertainties and risks may cause the Company's actual results to differ materially from those expressed in or implied by forward-looking statements. Particular uncertainties and risks include those relating to: the Company's ability to obtain additional financing; estimates regarding the sufficiency of the Company's cash resources; future revenues from sales of the Company's ClearPoint System products; and the Company's ability to market, commercialize and achieve broader market acceptance for the Company's ClearPoint System products. More detailed information on these and additional factors that could affect the Company's actual results are described in the "Risk Factors" section of the Company's Annual Report on Form 10-K for the year ended December 31, 2016, which has been filed with the Securities and Exchange Commission, and our most recently filed quarterly report on form 10-Q.



MRIC: The Platform Company for MRI-Guided Therapies

- MRI Interventions: Leader in the Delivery of MRI-Guided Therapies
 - · Primary Innovator in the Field, grown out of the Advanced MR department at Johns Hopkins
 - · Extensive Intellectual Property position: 70+ issued US patents, 45 international
 - Proven track record for conceiving, developing, commercializing and securing clinical adoption for our MRI-guided therapy platform
- Rapidly Growing Commercial Business; Established the Industry Platform for MRI-guided, Minimally-Invasive Neurosurgery
 - · Strong and growing clinical footprint: 48 hospitals in the US
 - · Accelerating adoption, revenue growth: 8 successive quarters of record procedures
 - Current procedures include DBS electrode placement, laser ablation, biopsy, drug delivery
 - MRIC's platform integrates with products from multiple companies (med device companies, imaging companies, biotechs)
- Expanding Platform into Adjacent Areas to Address Additional Unmet Medical Needs
 - · Expanding platform into the stroke market; Joint Development Agmt with Mayo Clinic
 - Expanding our capabilities, adding novel ultrasound ablation technology via Co-Dev Agmt with Acoustic MedSystems; initial market is pancreatic cancer
 - Leveraging our existing platform, install base and technologies to enable a rapid, cost-effective path to additional markets



Why MRI-Guided Therapies?

- Image-guided Therapeutic Procedures Have Become a Mainstay in U.S. Healthcare
 - · 1.2 Million Arthroscopic Procedures
 - · 1.5 million Fluoroscopic Procedures
 - · 4.0 Million Laparoscopic Procedures
- MRI Guided Therapeutic Procedures are the Next Step in this Trend
 - · Unique capabilities that no other imaging modality can provide
 - · High resolution, three-dimensional, continuous, no radiation
- MRI-Guided Procedures are Uniquely Positioned to Address Significant Unmet Medical Needs
 - · Functional neurological diseases (e.g., Parkinson's disease, Epilepsy)
 - · Untreatable hemorrhagic stroke (e.g., intracerebral hemorrhage)
 - · Certain cancers (e.g., brain, pancreas)



Our MRI-Guided Therapy Platform is Currently Being Used to:

Implant Neuro Stimulation Products from:

- Medtronic
- · St. Jude Medical
- NeuroPace







Place Laser Ablation Probes from:

- · Medtronic-Visualase
- · Monteris Medical





Deliver Drugs and Biologics from:

- · Voyager
- Medicenna
- · Oxford Biomedica
- · International Stem Cell Corporation









MRIC Platform Runs on All Major Scanners:

- · Siemens
- GE
- · Philips
- IMRIS











Broad and Growing User Base of Leading Neurosurgeons

ClearPoint® Is Installed in 48 Top US Hospitals and Growing

UC San Francisco San Francisco VA Stanford Univ **UCSF Benioff Childrens** USC UC San Diego Univ of Colo Univ of Utah Univ of Arizona Cook Children's MD Anderson Methodist Hosp Texas Children's Hosp Riverside Nationwide Children's Children's Mercy Kansas Univ Med Center Univ of Wisconsin Spectrum Health Ohio State Univ Univ of Michigan



Brigham & Women's Boston Children's Yale Univ Univ of Pitt Med Center Memorial Sloan Kettering Hackensack Univ Med Center Nat. Institutes of Health Children's Hosp of Philadelphia Univ of Virginia **Emory University** Carillion **Duke University** Children's of Alabama **CHOA Scottish Rite** Willis Knighton Mayo Clinic Jacksonville Miami Children's

Strong Commercial Sales and Clinical Support Teams in Place



Foundation of Our Platform:

ClearPoint Neuro Navigation System



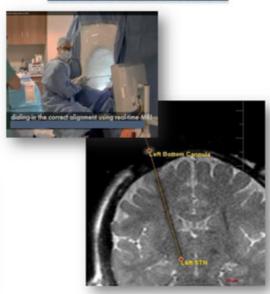
Without ClearPoint, Minimally Invasive Neuro Procedures Are Performed "Blind"

Conventional Stereotactic Procedure



No real time images – images from earlier in the day or week

ClearPoint Neuro Procedure





ClearPoint Neuro Navigation System: MRI-Guided NeuroSurgical Platform

ClearPoint Components:

Capital Sale

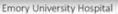
Reusable Hardware Components











MZI



Univ. of California San Francisco Medical Center



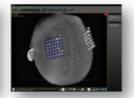
Univ. of Pittsburgh Medical Center

Details on Our ClearPoint Neuronavigation System Platform

ClearPoint Procedure Overview:









ClearPoint Video **Entry and Trajectory**

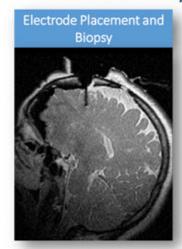


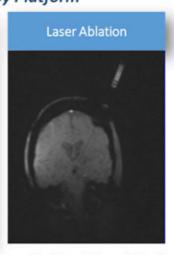
ClearPoint Video Alignment and Insertion

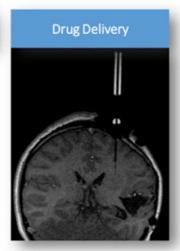




Multiple Clinical Applications for Our ClearPoint System MRI-Guided Therapy Platform







Delivering Therapies to Address Significant Unmet Medical Needs:

- Parkinson's disease, Epilepsy, Brain Tumor, Dystonia

Enabling Multiple Therapies from Multiple Companies:

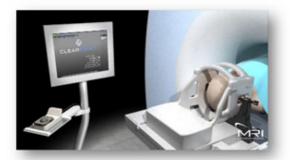
- Electrode Placement: Medtronic, St. Jude, Neuropace Laser Ablation: MDT/Visualase, Monteris Drug Delivery: Voyager, Medicenna, Oxford Biomedica, Int'l Stem Cell
- (1) Laser Ablation MR Thermometry is an MRI-based functionality available on most MR scanner platforms and it is a feature built into products from several third party vendors. The ClearPoint
- 147 Lose: Industrial Not intermometry 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.

 (2) Drug Delivery The SmartFlow* cannula received \$10(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.



Strong Business Model for Our Core MRI-Guided Navigation Platform

- ClearPoint Hardware/Software: \$100,000 \$150,000 ASP
- ClearPoint Disposables: ~\$7,500 ASP per procedure with strong margins
- Recurring revenue from the sale of disposables
- Procedures covered by existing inpatient DRG reimbursement codes
- Same razor/razorblade model applies to future product sales



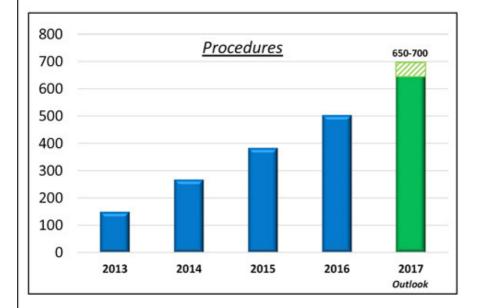




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ClearPoint Neurosurgical Procedure Growth



CAGR, 2013 - 2016: 46%

- Q1, 2017: 146 Procedures
- · Eight quarters in a row of procedure growth



Expanding Our Platform:

New Procedural Applications



Expanding MRIC's MRI-Guided Therapy Platform Benefits Larger Patient Populations

First, MRIC established the Capability of the Platform...

- ✓ Began with Electrode Placement (DBS) Parkinson's disease, dystonia
 - ✓ Expanded to Biopsy Brain Tumor
 - ✓ Expanded to Laser Ablation Probe Placement Epilepsy and Brain Tumor
 - ✓ Expanded to Drug Delivery Parkinson's Disease and Brain Tumor

...now, Expanding the Reach of the MRI-Guided Platform

- ✓ Expanding into the Stroke Market − Intra-Cranial Hemorrhage
- ✓ Adding Novel Ablation Technology to Platform Initial focus in Pancreatic Cancer



Expanding into the Stroke Market

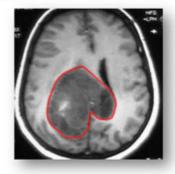
Leveraging Existing Capabilities and Install Base

Expanding the Reach of the MRIC Platform into the Stroke Market

- · Joint Development Agreement with Mayo Clinic
- · Dr. Bernard Bendok, Chair of Neurosurgery, Mayo Arizona

Large Stroke Market

- · 5th leading cause of death in US
- · Leading cause of permanent disability
- · Affects 800,000 people in the US every year



Initial Stroke Product (ClearAway™) Targets Intracerebral Hemorrhage (ICH)

- · Only major stroke subtype w/o clearly effective therapy major unmet medical need
- Affects 80,000 to 100,000 people in the US each year
- MRIC market opportunity is 12,000 to 15,000 cases/year



Our MRI-Guided Approach to Intra Cerebral Hemorrhagic Stroke

Current Approaches for Hemorrhage Removal and Decompression are Inadequate:

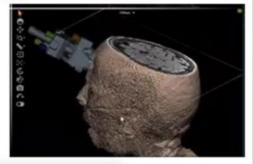
- · Open craniotomy provides visibility but is highly invasive, destroys brain tissue
- Minimally Invasive approach has very limited ability to quantify volume reduction of the hemorrhage or monitor subsequent bleeds

Our Unique ClearAway MRI-Guided Therapy Approach to ICH

- · Detailed, continuous, high resolution, 3 dimensional visibility
- · Minimally invasive approach

Expected Path to Market

- · Builds directly on our ClearPoint Platform
 - · ClearPoint software and hardware; SmartFrame
 - Hemorrhage aspiration components
- Potential 510(k) regulatory path
- · Projected market introduction as soon as 12-18 months



U.S. Market Opportunity = \$72 million to \$90 million

95% of Our Existing ClearPoint Adult Sites Have a Stroke Program!



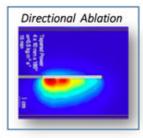
Expanding our Platform with a Novel Ablation Technology Co-Development Agreement Will Add Additional Capabilities

License and Co-Development Agreement with Acoustic MedSystems (AMS)

- · Leading developer of ultrasound ablation technologies and systems
- · Base technology has 510k clearance
- · Initial license areas: WW Excl. for Pancreatic Cancer, Excl. Option for Brain Applications

AMS Ultrasound Technology Provides Unique Capabilities over Other Ablative Energy Sources

- · Precision ablation over small and large areas
- · Directional and depth control
- · "Protected Zone" between transducer and ablated tissue



AMS Ultrasound Technology Works with MRI Interventions' Technology

- · MRI-friendly components
- · Enhanced by real-time, MRI-guidance
- · Can incorporate real-time MRI-thermometry



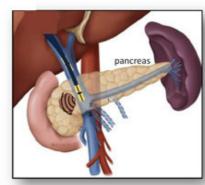
Co-Development Focused First on Pancreatic Cancer Market

Pancreatic Cancer Market - Major Unmet Medical Need

- · 50,000 patients in US diagnosed annually
- 10,000 to 15,000 cases annually are localized, non-metastatic tumors, but untreatable because of the tumor location

Our Therapeutic Approach Targets Untreatable Tumors

- · Vascular access to get near the tumor
- · Apply ultrasound energy to ablate the tumor
- · Destroy the tumor
- · Preserve the vessel



Expected Path to Market

- · Begin limited sales of existing AMS products in September
- Projected market introduction of integrated pancreatic cancer product as soon as 18 - 24 months
- · Potential 510(k) regulatory path

U.S. Market Opportunity = \$50 million to \$75 million



Strong Pipeline of New Products to Add to our Existing Products Leveraging our MRI-Guided Therapy Platform Projected Development Pipeline New Products in Development ClearPoint Software 2.0 ClearPoint Drug Delivery Cannula – CE Mark ClearPoint – Adjustable Drug Delivery Cannula ClearAway™ - Intracerebral Hemorrhage ClearAblate[™] – Pancreas (Gen 1) ClearAblate[™] + ClearTrace – Pancreas (Gen 2) Drug Trials in Progress Voyager (Parkinson's disease) Medicenna (GBM Brain Tumors) Oxford Biomedica (Parkinson's disease) Lysogene (Sanfilippo A) International Stem Cell (for Parkinson's disease) Phase I 510(k) filed Commercializing Phase II MZI © 2017 MRI INTERVENTIONS, INC. | 20

Addressable Markets for our MRI-Guided Therapy Platform

	Functional Neurosurgery Market			Stroke	Oncology	Drug Delivery Market		
	Parkinsons	Epilepsy	Brain Tumor	ICH	Pancreas	Parkinson's	Brian Tumor	
Prevalence	1,500,000	2,200,000	80,000	90,000	50,000	1,500,000	80,000	
Annual Potential Procedures	12,500	28,000	15,000	13,500	12,500	25,000	26,000	
Est. Average Selling Price	\$7,500	\$7,500	\$7,500	\$6,000	\$5,000	\$14,000	\$8,000	
Annual Market Opportunity	\$93 Million	\$210 Million	\$112 Million	\$81 Million	\$62 Million	\$350 Million	\$208 Million	

Growing Current Market

12-18 Months

18-24 Months

24+ Months

Continue to Grow Install Base and Increase Utilization

Same Hospital Same MRI Suite Neurosurgery

New Physician

Current Trials

New Application

New Application

Note: Market sizes for brain tumor, ICH are Pancreatic cancer are incidence numbers because of the nature of those diseases. Prevalence numbers are 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.



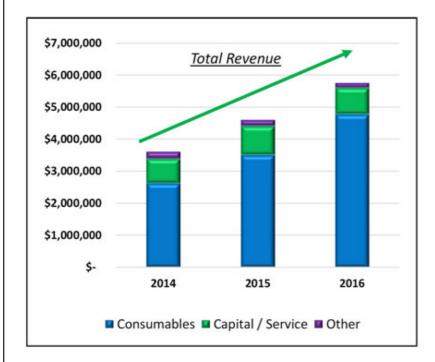
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Add New Trials





Revenue Growth Accelerating...



Total CAGR since 2014: 26%

Disposable Product CAGR: 35%

Other Results of Note:

- · 8 Quarters in a row of increasing procedures as of Q1, 2017
- Installed at 48 of 250+ target US neurosurgery centers
- Q1 2017 revenue of \$2.01 mm, highest ever



... Cash Burn Declining





Income Statement, Last 4 Quarters

		Quarter Ended							
		Jun-16		Sep-16	T	Dec-16	N	/lar-17	
Revenues:									
Disposable product revenues	\$	1,030	\$	1,272	\$	1,363	\$	1,663	
Reusable product revenues	_	37		309		224		259	
Total product revenues	\$	1,067	\$	1,581	\$	1,587	\$	1,922	
Service revenues	92	37		35		48		85	
Total revenues		1,104		1,616		1,635		2,007	
Cost of product revenues		521		748		677		752	
Gross profit		583		868		958		1,255	
Gross profit %		53%		54%		59%		63%	
Total operating expenses		2,638		2,578		2,748		2,608	
Operating loss		(2,055)		(1,710)		(1,790)		(1,354)	



Experienced Medical Device Management Team

Management Team

Frank Grillo CEO INTUITIVE KYPHON Scientific

Peter Piferi COO HeartWare Cordis

Wendelin Maners VP Sales & Mrktg Scie

Hal Hurwitz CFO





Board of Directors





Summary

- · Significant Value in Owning the MRI-Guided Therapy Platform
- · Leader in this Field
 - Primary Innovator, Established Clinical Footprint, Industry Integration, IP
- · World-Class Research Institutions Behind All Major Initiatives
- · Proven Ability to Develop, Commercialize and Secure Clinical Adoption of our Platform
- Leveraging our Prior Investment to Cost-Effectively Expand into Stroke Market
- Adding a Unique Ultrasound Ablation Capability to Broaden our Platform
- · Strong Revenue Growth and a Strong Product Pipeline

