## FORM 3

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

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# INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities
Exchange Act of 1934, Section 17(a) of the Public Utility
Holding Company Act of 1935 or Section 30(h) of the
Investment Company Act of 1940

(Print or Type Responses) 1. Name and Address of 2. Date of Event 3. Issuer Name and Ticker or Trading Symbol Requiring Statement Reporting Person -MRI INTERVENTIONS, INC. [NONE] (Month/Day/Year) Conway Bruce C. 02/27/2012 (Last) (First) (Middle) 4. Relationship of Reporting 5. If Amendment, Date C/O MRI Person(s) to Issuer Original Filed(Month/Day/Year) (Check all applicable) INTERVENTIONS, X Director 10% INC., ONE COMMERCE Owner Officer Other SQUARE, SUITE 2550 (give title below) (specify below) (Street) 6. Individual or Joint/Group Filing(Check Applicable Line) X\_ Form filed by One Reporting MEMPHIS, TN 38103 Person Form filed by More than One Reporting Person (City) (State) (Zip) Table I - Non-Derivative Securities Beneficially Owned 4. Nature of Indirect Beneficial 1. Title of Security 2. Amount of Securities Beneficially Ownership (Instr. 4) Ownership Owned Form: (Instr. 5) Direct (D) (Instr. 4) or Indirect **(I)** (Instr. 5) Common Stock 1,776,929 D  $D^{(1)}$ Common Stock 32,891 Common Stock 222,250 By wife 1 By Alden M. Conway Trust Common Stock 406,137 1 Common Stock 406,137 By Chase T. Conway Trust Common Stock 406,137 By Merritt E. Conway Trust By Edna N. Conway Common Stock 750 Irrevocable Trust FBO Alden M. Conway By Edna N. Conway Common Stock Irrevocable Trust FBO 750 1 Chase T. Conway By Edna N. Conway 750 1 Irrevocable Trust FBO Common Stock Merritt E. Conway

Reminder: Report indirectly.	t on a separate line for each class of securities beneficially owned directly or	SEC 1473 (7-02)
	Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible secu
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	1. Title of Derivative Security (Instr. 4)	and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		Conversion or Exercise	Ownership	6. Nature of Indirect Beneficial Ownership (Instr. 5)	
		Date Exercisable	Expiration Date		Amount or Number of Shares	Derivative Direct (D) Security or Indirect (I) (Instr. 5)			

#### **Reporting Owners**

Reporting Owner Name / Address	Relationships				
neporting Owner Name / Address		10% Owner	Officer	Other	
Conway Bruce C. C/O MRI INTERVENTIONS, INC. ONE COMMERCE SQUARE, SUITE 2550 MEMPHIS, TN 38103	Х				

### **Signatures**

/s/ Oscar Thomas by power of attorney for Bruce C. Conway	02/27/2012	
-Signature of Reporting Person	Date	

#### **Explanation of Responses:**

- \* If the form is filed by more than one reporting person, see Instruction 5(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Held jointly with wife.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *See* Instruction 6 for procedure.

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