FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. *See* Instruction 1(b).

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

STATEMENT OF CHANGES IN 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 Reporting Person [*] SPENCER JOHN N JR	2. Issuer Name **and** Ticker or Trading Symbol MRI INTERVENTIONS, INC. [MRIC]	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) __X__ Director _____ 10% Owner _____ Officer (give title below) _____ Other (specify below)
(Last) (First) (Middle) C/O MRI INTERVENTIONS, INC., ONE COMMERCE SQUARE, STE 2550	3. Date of Earliest Transaction (Month/Day/Year) 03/31/2014	
(Street) MEMPHIS, TN 38103	4. If Amendment, Date Original Filed(Month/Day/Year)	6. Individual or Joint/Group Filing(Check Applicable Line) _X_ Form filed by One Reporting Person ___ Form filed by More than One Reporting Person
(City) (State) (Zip)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1.Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	03/31/2014		A		4,086	A	$ 1.24 (1)	78,181	D (2)	
Common Stock								1,500	I	By Daughter's IRA

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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.

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Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(*e.g.*, puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Underlying Securities (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of Derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
SPENCER JOHN N JR C/O MRI INTERVENTIONS, INC. ONE COMMERCE SQUARE, STE 2550 MEMPHIS, TN 38103	X			

Signatures

/s/ Oscar Thomas, by Power of Attorney for John N. Spencer, Jr.		04/02/2014
**Signature of Reporting Person		Date

Explanation of Responses:

*   If the form is filed by more than one reporting person, *see* Instruction 4(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) These shares were issued pursuant to the issuer's Non-Employee Director Compensation Plan, in payment of fees owed to the reporting person under such plan. The shares were issued at a price of $1.24 per share, representing the volume-weighted average price of the issuer's common stock for the 5-trading day period ending March 31, 2014.

(2) Includes 74,431 shares held jointly with spouse.

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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