

FORM 4

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

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

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) <input checked="" type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)	
(Last) (First) (Middle) C/O MRI INTERVENTIONS, INC., ONE COMMERCE SQUARE, SUITE 2550		3. Date of Earliest Transaction (Month/Day/Year) 07/03/2012			
(Street) MEMPHIS, TN 38103		4. If Amendment, Date Original Filed (Month/Day/Year)		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> 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
Common Stock	07/03/2012		P		9,981	A (1)	27,787 (2)	D	
Common Stock							3,750	D	

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. SEC 1474 (9-02)

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
Warrants (right to buy)	\$ 1.45	07/03/2012		P		4,991	07/03/2012 (3)	07/03/2017	Common Stock	4,991	(4)	4,991	D (5)	

Reporting Owners

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

Signatures

/s/ Oscar Thomas, by power of attorney for John N. Spencer, Jr.	07/06/2012
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) The reported securities are included within 9,981 units purchased by the reporting person for \$1.10 per unit. Each unit consists of one share of common stock and one warrant to purchase 0.5 share of common stock.
- (2) Held jointly with spouse.
- (3) The shares subject to this warrant are immediately exercisable.
- (4) The reported securities are included within 9,981 units purchased by the reporting person for \$1.10 per unit. Each unit consists of one share of common stock and one warrant to purchase 0.5 share of common stock.
- (5) 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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