

THYAGARAJAN VENKATRAMAN
 Form 4
 November 19, 2010

FORM 4

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

OMB APPROVAL

OMB Number: 3235-0287
 Expires: January 31, 2005
 Estimated average burden hours per response... 0.5

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 *
 THYAGARAJAN
 VENKATRAMAN

2. Issuer Name and Ticker or Trading Symbol
 VARIAN MEDICAL SYSTEMS
 INC [VAR]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)
 11/18/2010

Director 10% Owner
 Officer (give title below) Other (specify below)

C/O VARIAN MEDICAL SYSTEMS, INC., 3100 HANSEN WAY, MAIL STOP E-327

(Street)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

PALO ALTO, CA 94304-1030

(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 Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|--|
| | | | Code | V | Amount | (A) or (D) | Price |
| Common Stock | 11/18/2010 | | M | | 5,000 | A | \$ 37.17 |
| Common Stock | 11/18/2010 | | S | | 5,000 | D | \$ 63.9855 |
| | | | | | | | (1) |

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

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number.

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) | Amount or Number of Shares |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|----------------------------|
| Non Qualified Stock Option (Right to Buy) | \$ 37.17 | 11/18/2010 | | M | 5,000 | 02/13/2009 ⁽²⁾ 02/13/2016 | Common Stock | 5,000 |

Reporting Owners

Reporting Owner Name / Address

Relationships

Director 10% Owner Officer Other

THYAGARAJAN VENKATRAMAN
C/O VARIAN MEDICAL SYSTEMS, INC.
3100 HANSEN WAY, MAIL STOP E-327
PALO ALTO, CA 94304-1030

X

Signatures

/s/ Franco N. Palomba, attorney-in-fact for Venkatraman
Thyagarajan

11/19/2010

__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 5,000 shares were sold in multiple transactions executed on the same day at prices ranging from \$63.981 to \$63.99. The detailed breakdown will be furnished upon request.

(2) Stock option granted under the Varian Medical Systems, Inc. Second Amended and Restated 2005 Omnibus Stock Plan, which complies with Rule 16b-3.

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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