

Martin David
 Form 4
 November 17, 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 *
 Martin David

2. Issuer Name and Ticker or Trading Symbol
 Cardiovascular Systems Inc [CSII]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)

3. Date of Earliest Transaction (Month/Day/Year)
 11/15/2010

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

President and CEO

651 CAMPUS DRIVE

(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

ST. PAUL, MN 55112

(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 Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V | Amount | (D) | Price |
| Common Stock | 11/15/2010 | | S ⁽¹⁾ | | 16,960 | D | \$ 8.7956 (2) |
| Common Stock | 11/16/2010 | | S ⁽¹⁾ | | 22,370 | D | \$ 8.7931 (3) |

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)

Edgar Filing: Martin David - Form 4

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. Pri Deriv Secur (Instr | |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|---------------------------|----------------------------|
| | | | | Code | V (A) (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares |
| Stock Option (right to buy) | \$ 8.83 | | | | | (4) 07/16/2016 | Common Stock | 71,170 | |
| Stock Option (right to buy) | \$ 8.83 | | | | | (4) 08/14/2016 | Common Stock | 38,820 | |
| Stock Option (right to buy) | \$ 8.83 | | | | | (4) 02/14/2017 | Common Stock | 349,380 | |
| Stock Option (right to buy) | \$ 7.9 | | | | | (4) 06/11/2017 | Common Stock | 90,580 | |
| Stock Option (right to buy) | \$ 12.15 | | | | | (5) 12/11/2017 | Common Stock | 242,625 | |
| Stock Option (right to buy) | \$ 8.75 | | | | | (6) 03/01/2019 | Common Stock | 32,350 | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|----------------------------------|---------------|-----------|-------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Martin David 651 CAMPUS DRIVE | X | | President and CEO | |

ST. PAUL, MN 55112

Signatures

/s/ John R. Remakel as Attorney-in-Fact for David L. Martin pursuant to Power of Attorney
previously filed.

11/17/2010

__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 sales reported in this Form 4 were effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on August 27, 2009, as modified on August 30, 2010.

The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$8.57 to \$8.95 inclusive. The reporting person undertakes to provide Cardiovascular Systems, Inc., any security holder of Cardiovascular Systems, Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- (2) The price reported in Column 4 is a weighted average price. These shares were sold in multiple transactions at prices ranging from \$8.67 to \$8.95 inclusive. The reporting person undertakes to provide Cardiovascular Systems, Inc., any security holder of Cardiovascular Systems, Inc. or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the range set forth in this footnote.
- (3) Fully exercisable.
- (4) Exercisable: 121,313 on 2/25/10 and 121,312 on 2/25/11.
- (5) Exercisable: 16,175 on 3/2/10 and 3/2/11.
- (6)

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.