

Cardiovascular Systems Inc  
Form SC 13G  
July 10, 2017

SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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SCHEDULE 13G  
(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED  
PURSUANT TO RULE 13d-2(b)

(AMENDMENT NO.   0  )\*

Cardiovascular Systems, Inc.

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(Name of Issuer)

Common Stock, Par Value \$0.001

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(Title of Class of Securities)

141619106

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(CUSIP Number)

June 30, 2017

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(Date of Event Which Requires Filing of This Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
  - Rule 13d-1(c)
  - Rule 13d-1(d)
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\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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NAMES OF REPORTING PERSONS

1

Brown Capital Management, LLC

CHECK THE APPROPRIATE BOX

2

IF A MEMBER OF A GROUP

(a)

(b)

SEC USE ONLY

3

CITIZENSHIP OR PLACE OF ORGANIZATION

4

State of Maryland

SOLE VOTING POWER

5

1,510,874

NUMBER OF SHARES

SHARED VOTING POWER

BENEFICIALLY OWNED BY

6

None

EACH

SOLE DISPOSITIVE POWER

REPORTING

7

PERSON WITH

2,471,674

SHARED DISPOSITIVE POWER

8

None

AGGREGATE AMOUNT

BENEFICIALLY OWNED BY EACH REPORTING PERSON

9

2,471,674

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES

10

PERCENT OF CLASS

REPRESENTED BY AMOUNT IN ROW 9

11

7.56%

TYPE OF REPORTING PERSON

12

IA

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Item 1. (a) Name of Issuer:  
Cardiovascular Systems, Inc.

(b) Address of Issuer's Principal Executive Offices:  
1225 Old Highway 8 Northwest  
St. Paul, Minnesota 55112-6416

Item 2. (a) Name of Person Filing:  
Brown Capital Management, LLC

(b) Address of Principal Business Office or, if None, Residence:  
1201 N. Calvert Street  
Baltimore, Maryland 21202

(c) Citizenship:  
Brown Capital Management, LLC is a Maryland Limited Liability Company

(d) Title of Class of Securities:  
Common Stock, Par Value \$0.001

(e) CUSIP Number:  
141619106

Item 3. If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:

- (a)  Broker or dealer registered under Section 15 of the Exchange Act.
  - (b)  Bank as defined in Section 3(a)(6) of the Exchange Act.
  - (c)  Insurance company as defined in Section 3(a)(19) of the Exchange Act.
  - (d)  Investment company registered under Section 8 of the Investment Company Act.
  - (e)  An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
  - (f)  An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
  - (g)  A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
  - (h)  A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
  - (i)  A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
  - (j)  Group, in accordance with Rule 13d-1(b)(1)(ii)(J).
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Item 4. Ownership.

(a) Amount beneficially owned:	2,471,674
(b) Percent of class:	7.56%
(c) Number of shares as to which the person has:	
(i) Sole power to vote or to direct the vote:	1,510,874
(ii) Shared power to vote or to direct the vote:	None
(iii) Sole power to dispose or to direct the disposition of:	2,471,674
(iv) Shared power to dispose or to direct the disposition of:	None

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following [ ]

Item 6. Ownership of More than Five Percent on Behalf of Another Person.

All of the shares of Common Stock set forth in Item 4 are owned by various investment advisory clients of Brown Capital Management, LLC, which is deemed to be a beneficial owner of those shares pursuant to Rule 13d-3 under the Securities Exchange Act of 1934, due to its discretionary power to make investment decisions over such shares for its clients and/or its ability to vote such shares. In all cases, persons other than Brown Capital Management, LLC have the right to receive, or the power to direct the receipt of, dividends from, or the proceeds from the sale of the shares. No individual client holds more than five percent of the class.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of Group.

Not applicable

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Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Brown Capital  
Management, LLC

By: /s/ Eddie C. Brown

Name: Eddie C. Brown  
Title: CEO

Date: July 10, 2017