

Cardiovascular Systems Inc  
Form SC 13G/A  
February 12, 2010

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934  
(Amendment No. 1)\*

Cardiovascular Systems, Inc.  
(f/k/a Replidyne, Inc.)  
(Name of Issuer)

Common Stock, par value \$0.001 Per Share  
(Titles of Class of Securities)

141619106  
(CUSIP Number)

December 31, 2009  
(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)

\* The remainder of this cover page shall be filled out of 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 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).

CUSIP No. 141619106

13G

1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON (ENTITIES ONLY)

Tarrant Advisors, Inc.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a)   
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

Texas

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: 6 - 0 - SHARED VOTING POWER

7 275,290 SOLE DISPOSITIVE POWER

8 - 0 - SHARED DISPOSITIVE POWER

275,290

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
275,290

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
1.9% (1)

12 TYPE OF REPORTING PERSON

CO

(1) Based on a total of 14,832,698 shares of Common Stock outstanding as of January 12, 2010 as reported on the Issuer's Definitive Proxy Statement filed January 26, 2010.

CUSIP No. 141619106

13G

1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON (ENTITIES ONLY)

David Bonderman

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: 6 - 0 - SHARED VOTING POWER

7 275,290 SOLE DISPOSITIVE POWER

8 - 0 - SHARED DISPOSITIVE POWER

275,290

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
275,290

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
1.9% (2)

12 TYPE OF REPORTING PERSON

IN

(2) Based on a total of 14,832,698 shares of Common Stock outstanding as of January 12, 2010 as reported on the Issuer's Definitive Proxy Statement filed January 26, 2010.

CUSIP No. 141619106

13G

1 NAME OF REPORTING PERSON  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON (ENTITIES ONLY)

James G. Coulter

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)

(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

5 SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH: 6 - 0 - SHARED VOTING POWER

7 275,290 SOLE DISPOSITIVE POWER

- 0 -

8 SHARED DISPOSITIVE POWER

275,290

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
275,290

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9  
1.9% (3)

12 TYPE OF REPORTING PERSON

IN

(3) Based on a total of 14,832,698 shares of Common Stock outstanding as of January 12, 2010 as reported on the Issuer's Definitive Proxy Statement filed January 26, 2010.

Item 1(a). Name of Issuer:

Cardiovascular Systems, Inc. (f/k/a Replidyne, Inc.) (the "Issuer")

Item 1(b). Address of Issuer's Principal Executive Offices:

651 Campus Drive  
St. Paul, MN 55112-3495

Item 2(a). Name of Person Filing:

This Schedule 13G is being filed by Tarrant Advisors, Inc., a Texas corporation ("Advisors"), David Bonderman and James G. Coulter (collectively, the "Reporting Persons"). Advisors is the general partner of TPG Ventures Professionals, L.P., a Delaware limited partnership, which is the managing member of TPG Ventures Holdings, L.L.C., a Delaware limited liability company, which is the sole member of each of TPG Ventures Advisors, L.L.C. and TPG Biotech Advisors, L.L.C, which are Delaware limited liability companies. TPG Ventures Advisors, L.L.C. is the general partner of TPG Ventures GenPar, L.P., a Delaware limited partnership, which is the general partner of TPG Ventures, L.P., a Delaware limited partnership ("TPG Ventures"). TPG Biotech Advisors, L.L.C. is the general partner of TPG Biotechnology GenPar, L.P., a Delaware limited partnership, which is the general partner of TPG Biotechnology Partners, L.P., a Delaware limited partnership ("TPG Biotech," and together with TPG Ventures, the "TPG Funds"). The TPG Funds directly own certain shares of the Common Stock, par value \$0.001 per share ("Common Stock") of the Issuer. Mr. Bonderman and Mr. Coulter are officers and directors of, and together are the sole shareholders of, Advisors. Because of Mr. Bonderman's and Mr. Coulter's relationships with Advisors, and because of Advisors' relationship with the TPG Funds, the Reporting Persons may be deemed to beneficially own the Common Stock of the Issuer owned by the TPG Funds.

Item 2(b). Address of Principal Business Office or, if none, Residence:

The address of the principal business office of each of the Reporting Persons is as follows:

c/o TPG Capital, L.P.  
301 Commerce Street, Suite 3300  
Forth Worth, Texas 76102

Item 2(c). Citizenship:

See response to Item 4 of each of the cover pages.

Item 2(d). Titles of Classes of Securities:

Common Stock, par value \$0.001

Item 2(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(n):

- (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 of 1940 (15 U.S.C 80a-8).
- (e)  Investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).
- (f)  Employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).
- (g)  Parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).
- (h)  Savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.
- (i)  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 §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership

(a) Amount Beneficially Owned:

See response to Item 9 of each of the cover pages.

(b) Percent of Class:

See response to Item 11 of each of the cover pages.

(c) Number of shares as to which the person has:

(i) Sole power to vote or to direct the vote:

See response to Item 5 of each of the cover pages.

(ii) Shared power to vote or to direct the vote:

See response to Item 6 of each of the cover pages.

(iii) Sole power to dispose or to direct the disposition of:

See response to Item 7 of each of the cover pages.

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(iv) Shared power to dispose or to direct the disposition of:

See response to Item 8 of each of the cover pages.

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 [x]. (4)

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

Not Applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company.

See Item 2(a) hereto.

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

Each of the TPG Funds was a party to an Amended and Restated Shareholders' Agreement (the "Shareholders' Agreement"), dated August 17, 2005, by and among the Issuer and the Original Shareholders and Investors and Warrant Holders (as defined in the Shareholders' Agreement) (collectively, the "Shareholders"). On March 16, 2009, the Shareholders' Agreement was terminated concurrently with the execution of a registration rights agreement, which granted each of the TPG Funds and certain other stockholders of the Issuer demand, shelf and piggy-back registration rights, as further specified therein.

The Reporting Persons expressly disclaim beneficial ownership of all shares of the Common Stock held by any other stockholders of the Issuer.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certification.

Not applicable.

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(4) Following the merger of Cardiovascular Systems, Inc. into Replidyne, Inc., effective February 25, 2009, the TPG Funds no longer hold over 5% of the Shares.

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.

Dated: February 12, 2010

Tarrant Advisors, Inc.

By: /s/ Clive D. Bode  
Name: Clive D. Bode  
Title: Vice President

David Bonderman

By: /s/ Clive D. Bode  
Name: Clive D. Bode, on behalf of David Bonderman (5)

James G. Coulter

By: /s/ Clive D. Bode  
Name: Clive D. Bode, on behalf of James G. Coulter (6)

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(5) Clive D. Bode is signing on behalf of Mr. Bonderman pursuant to the authorization and designation letter dated September 1, 2009, previously filed with the Commission as an exhibit to a Form 13D filed by Mr. Bonderman on September 3, 2009.



(6) Clive D. Bode is signing on behalf of Mr. Coulter pursuant to the authorization and designation letter dated September 1, 2009, previously filed with the Commission as an exhibit to a Form 13D filed by Mr. Coulter on September 3, 2009.

Exhibit Index

Exhibit 1      Agreement of Joint Filing as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934.\*

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\* Incorporated herein by reference to the Agreement of Joint Filing, dated as of November 12, 2007, which was previously filed with the Commission as Exhibit 1 to the Schedule 13D filed on November 13, 2007 (SEC File No. 005-57845) by TPG Advisors II, Inc., TPG Advisors III, Inc., TPG Advisors IV, Inc., TPG Advisors V, Inc., T(3) Advisors II, Inc., Tarrant Advisors, Inc., Tarrant Capital Advisors, Inc., David Bonderman and James G. Coulter.

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