

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. 2)**

**Cardiovascular Systems, Inc.**

**(f/k/a Replidyne, Inc.)**

(Name of Issuer)

**Common Stock, par value \$0.001 per share**

(Title 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 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 on 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 ("Act") 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

Page 2 of 7 Pages

**1** NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

**2** Duquesne Capital Management, L.L.C.  
CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP\*

(a)

(b)

**3** SEC USE ONLY

CITIZENSHIP OR PLACE OF ORGANIZATION

**4** Pennsylvania  
**5** SOLE VOTING POWER

0

NUMBER OF **6** SHARED VOTING POWER  
SHARES

BENEFICIALLY **7** 138,389  
OWNED BY SOLE DISPOSITIVE POWER

EACH **8** 0  
REPORTING  
PERSON  
WITH

SHARED DISPOSITIVE POWER

138,389

**9** AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

138,389

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

N/A

**11** PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.9%

**12** TYPE OF REPORTING PERSON\*

OO

CUSIP No. 141619106

13G

Page 3 of 7 Pages

**1** NAME OF REPORTING PERSON  
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Stanley F. Druckenmiller

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

(a)

(b)

**3** SEC USE ONLY

CITIZENSHIP OR PLACE OF ORGANIZATION

**4** United States

**5** SOLE VOTING POWER

NUMBER OF **6** 0  
SHARES SHARED VOTING POWER

BENEFICIALLY **7** 138,389  
OWNED BY SOLE DISPOSITIVE POWER

EACH **8** 0  
REPORTING PERSON  
WITH

SHARED DISPOSITIVE POWER

**9** 138,389  
AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

**10** 138,389  
CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES\*

**11** N/A  
PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

**12** 0.9%  
TYPE OF REPORTING PERSON\*

IN

## Edgar Filing: Cardiovascular Systems Inc - Form SC 13G/A

This Amendment No. 2 to Schedule 13G (this “Amendment No. 2”) is filed with respect to the common stock, par value \$0.001 per share of Cardiovascular Systems, Inc., a corporation organized under the laws of the State of Delaware and formerly known as Replidyne, Inc. (the “Company”), to amend the Schedule 13G filed on July 7, 2006, as previously amended by Amendment No. 1 on February 9, 2007 (as so amended, the “Schedule 13G”), in accordance with the annual amendment requirements and to report beneficial ownership of less than 5% of the total outstanding Common Stock by the Reporting Persons. Capitalized terms used but not defined herein have the meaning ascribed thereto in the Schedule 13G.

Item 1(a):            Name of Issuer:

Item 1(a) of the Schedule 13G is hereby amended and restated as follows:

The name of the issuer is Cardiovascular Systems, Inc. (the “Company”).

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

Item 1(b) of the Schedule 13G is hereby amended and restated as follows:

The Company’s principal executive office is located at 651 Campus Drive, St. Paul, Minnesota 55112-3495.

Item 2(a):            Name of Person Filing:

Item 2(a) of the Schedule 13G is hereby amended and restated as follows:

This Schedule 13G (this “Schedule 13G”) with respect to the Common Stock of the Company is filed by:

1. Duquesne Capital Management, L.L.C., a Pennsylvania limited liability company (“Duquesne Capital”), which serves as the investment manager to several investment funds (the “Funds”), with respect to shares of Common Stock directly beneficially owned by the Funds (collectively, the “Shares”); and
2. Mr. Stanley F. Druckenmiller (“Mr. Druckenmiller”), who serves as the managing member of Duquesne Capital, with respect to the Shares. Mr. Druckenmiller also serves as the managing member of Duquesne Holdings, LLC, a limited liability company organized under the laws of Anguilla, British West Indies (“Duquesne Holdings”), which acts as general partner to certain of the Funds, and which has the power to replace Duquesne Capital as investment manager of those Funds within 60 days or less.

Duquesne Capital may be deemed to beneficially own the Shares by virtue of its position as investment manager of the Funds. Mr. Druckenmiller may be deemed to beneficially own the Shares by virtue of his position as managing member of Duquesne Capital and as managing member of Duquesne Holdings. Duquesne Capital and Mr. Druckenmiller are hereinafter sometimes collectively referred to as the “Reporting Persons.” Any disclosures herein by each Reporting Person with respect to other persons are made on information and belief after making inquiry to the appropriate party.

## Edgar Filing: Cardiovascular Systems Inc - Form SC 13G/A

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

Item 2(b) of the Schedule 13G is hereby amended and restated as follows:

The address of the principal business offices of Duquesne Capital and Mr. Druckenmiller is 40 West 57th Street, 25th Floor, New York, New York 10019.

Item 2(c):            Citizenship:

Item 2(a) of the Schedule 13G is hereby amended and restated as follows:

Duquesne Capital is organized under the laws of the Commonwealth of Pennsylvania. Mr. Druckenmiller is a citizen of the United States of America.

Item 2(e):            CUSIP Number:

Item 2(b) of the Schedule 13G is hereby amended and restated as follows:

141619106

Item 4:                Ownership:

Item 4 of the Schedule 13G is hereby amended and restated as follows:

A. Duquesne Capital

(a) Amount beneficially owned: 138,389.

(b) Percent of class: 0.9%. The percentages used herein and in the rest of this Amendment No. 2 are calculated based upon a total of 14,691,397 shares of Common Stock outstanding as of November 9, 2009, as reflected in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2009.

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

- (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 138,389
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 138,389

B. Mr. Druckenmiller

(a) Amount beneficially owned: 138,389

(b) Percent of class: 0.9%

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

- (i) Sole power to vote or direct the vote: -0-
- (ii) Shared power to vote or direct the vote: 138,389
- (iii) Sole power to dispose or direct the disposition: -0-
- (iv) Shared power to dispose or direct the disposition: 138,389

Edgar Filing: Cardiovascular Systems Inc - Form SC 13G/A

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

-5-

---

Item 10:            Certification:

Each Reporting Person hereby makes the following 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.

-6-

---

**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

DUQUESNE CAPITAL MANAGEMENT, L.L.C.

By: /s/ Gerald Kerner  
Name: Gerald Kerner  
Title: Managing Director

STANLEY F. DRUCKENMILLER

By: /s/ Gerald Kerner  
Name: Gerald Kerner  
Title: Attorney-in-Fact

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SCHEDULE 13G  
WITH RESPECT TO CARDIOVASCULAR SYSTEMS, INC.]