

CARDIOVASCULAR SYSTEMS INC  
Form SC 13G  
February 13, 2009

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
SCHEDULE 13G  
Under the Securities Exchange Act of 1934  
(Amendment No. \_\_\_\_\_)\*  
Cardiovascular Systems, Inc.**

(Name of Issuer)  
**Common Stock, no par value per share**

(Title of Class of Securities)  
**Kenneth J. Collins  
President and Chief Executive Officer  
Replidyne, Inc.  
1450 Infinite Dr.  
Louisville, CO 80027  
(303) 996-5500**

(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)  
**Not applicable**

(CUSIP Number)  
**December 31, 2008**

(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 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 (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).

**1** NAMES OF REPORTING PERSONS  
Replidyne, Inc.

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

**2**  
(a)   
(b)

**3** SEC USE ONLY

**4** CITIZENSHIP OR PLACE OF ORGANIZATION  
Delaware, United States of America

	<b>5</b>	SOLE VOTING POWER
NUMBER OF		0
SHARES	<b>6</b>	SHARED VOTING POWER
BENEFICIALLY		3,345,895 shares of Common Stock
OWNED BY		
EACH	<b>7</b>	SOLE DISPOSITIVE POWER
REPORTING		0
PERSON		
WITH	<b>8</b>	SHARED DISPOSITIVE POWER
		0

**9** AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON  
3,345,895 shares of Common Stock

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

10

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

19.7%

TYPE OF REPORTING PERSON\*

12

CO

**Item 1(a). Name of Issuer:**

Cardiovascular Systems, Inc.

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

651 Campus Drive

St. Paul, Minnesota 55112-3495

**Item 2(a). Name of Person Filing:**

Replidyne, Inc.

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

1450 Infinite Drive

Louisville, CO 80027

**Item 2(c). Citizenship:**

Delaware, United States of America

**Item 2(d). Title of Class of Securities:**

Common Stock, no par value per share

**Item 2(e). CUSIP Number:**

Not applicable

**Item 3. If this statement is filed pursuant to §§240.13d-1(b), or 240.13d-2(b) or (c), check whether the person filing is a:**

Not applicable.

**Item 4. Ownership.**

(a) Amount Beneficially Owned: 3,345,895 shares of Common Stock

(b) Percent of Class: 19.7%

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

(i) Sole power to vote or to direct the vote: 0

(ii) Shared power to vote or to direct the vote: 3,345,895

(iii) Sole power to dispose or to direct the disposition of: 0

(iv) Shared power to dispose or to direct the disposition of: 0

On November 3, 2008, Replidyne, Inc., a Delaware corporation ( Replidyne ), entered into an Agreement and Plan of Merger and Reorganization (the Merger Agreement ) with Cardiovascular Systems, Inc., a Minnesota corporation ( CSI ), and Responder Merger Sub, Inc., a Minnesota corporation and wholly owned subsidiary of Replidyne ( Merger Sub ), pursuant to which Merger Sub will be merged with and into CSI, the separate existence of Merger Sub shall cease, and CSI will be the surviving corporation (the Merger ). As an inducement for Replidyne to enter into the Merger Agreement, contemporaneously with the execution of the Merger Agreement, certain stockholders of CSI entered into voting agreements and irrevocable proxies in favor of Replidyne agreeing, among other things, to vote shares representing approximately 19.7% of CSI's outstanding capital stock in favor of adoption of the Merger Agreement and approval of the Merger and the other matters contemplated by the Merger Agreement. The CSI stockholders that entered into voting agreements and irrevocable proxies with Replidyne are Brent Blackey, Easton Hunt Capital Partners L.P., Geoffrey O. Hartzler, TTEE Geoffrey O. Hartzler Rev Trust dtd 1/8/97, as amended, GDN Holdings LLC, Charles Schwab & Co., Inc. Cust FBO Michael J. Kallok IRA, David L. Martin, Maverick Fund II, Ltd., Gary M. Petrucci, Sonora Web LLLP, Whitebox Hedged High Yield Partners, LP and Whitebox Combined Partners, LP. These stockholders represented the maximum number of the outstanding shares of CSI capital stock that could be made subject to these voting agreements under Minnesota corporate law. All of these stockholders are executive officers, directors, or entities controlled by such persons, or 5% stockholders, of CSI.



**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 o.

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

The record holders of these securities have the right to receive dividends from, and the proceeds from the sale of, these shares of Common Stock.

**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 a Group.**

Not applicable.

**Item 10. Certification.**

Not applicable.

Page 4 of 5 pages

---

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.

Date: February 13, 2009

REPLIDYNE, INC.

By: /s/ Kenneth L. Collins  
Kenneth L. Collins  
Chief Executive Officer

Page 5 of 5 pages