REPLIDYNE INC Form 8-K December 10, 2007

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 FORM 8-K CURRENT REPORT

Pursuant to Section 13 or 15(d) of

The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 10, 2007 (December 10, 2007) REPLIDYNE, INC.

(Exact name of registrant as specified in its charter)

Delaware000-5208284-1568247(State or other jurisdiction of incorporation or organization)(Commission File Number)(I.R.S. Employer1450 Infinite Drive,1450 Infinite Drive,80027Louisville, Colorado(Zip Code)

(Address of principal executive offices)

303-996-5500

(Registrant s telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 Regulation FD Disclosure.

On December 10, 2007, Replidyne issued a press release regarding an operational restructuring to align resources with strategic priorities. A copy of the press release is furnished as Exhibit 99.1 to this Form 8-K.

In accordance with General Instruction B.2. of Form 8-K, the information presented under this Item 7.01 and attached as Exhibit 99.1 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such a filing.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits.

Press Release, dated December 10, 2007, Entitled Replidyne Provides Strategic Update - Initiatives Include Restructuring and Pipeline Prioritization.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

REPLIDYNE, INC.

Dated: December 10, 2007 By: /s/ Mark L. Smith

Mark L. Smith

Chief Financial Officer

Principal Accounting Officer

EXHIBIT INDEX

Exhibit No. Description

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