

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-A/A

Amendment No. 1

FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES

Pursuant to Section 12(b) or (g) of The
Securities Exchange Act of 1934

AngioDynamics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other Jurisdiction
of Incorporation)

000-50761
(Commission
File Number)

11-3146460
(IRS. Employer
Identification No.)

14 Plaza Drive, Latham, New York
(Address of Principal Executive Offices)

12110
(Zip Code)

Registrant's telephone number, including area code: (518) 798-1400

(Former name or former address if changed since last report.)

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A. (c), please check the following box:

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A. (d), please check the following box:

Securities Act registration statement file number to which this form relates: **Not Applicable**

Securities to be registered pursuant to Section 12(b) of the Act: **Not Applicable**

Securities to be registered pursuant to Section 12(g) of the Act:

Preferred Stock Purchase Rights
(Title of Each Class)

AngioDynamics, Inc. ("AngioDynamics") hereby amends and supplements the following items, exhibits and portions of its Registration Statement on Form 8-A filed with the Securities and Exchange Commission ("SEC") on October 27, 2004, related to the Rights Agreement, dated May 26, 2004, by and between AngioDynamics and Registrar and Transfer Company, as Rights Agent (the "Rights Agreement").

Item 1. Description of Registrant's Securities to be Registered.

Item 1 of the Form 8-A is amended and supplemented by adding the following:

On January 30, 2012, AngioDynamics, Inc. entered into a Stock Purchase Agreement (the "Purchase Agreement") with NM Holding Company, Inc., a Delaware corporation ("Navilyst"), the stockholders of Navilyst who are, or will be before the closing set forth on the signature pages thereto (the "Sellers"), solely with respect to, and as specified in, Sections 2.4 and 7.11(b) thereof, the Optionholders who execute joinder agreements thereto, and, solely with respect to, and as specified in, Section 2.6 and Article XII thereof, Avista Capital Partners GP, LLC, in its capacity as sellers' representative, pursuant to which AngioDynamics has agreed to acquire from the Sellers all of the issued and outstanding capital stock of Navilyst. In connection with the closing of the transactions contemplated by the Purchase Agreement, AngioDynamics and certain of the Sellers (the "Stockholders") will enter into a Stockholders Agreement (the "Stockholders Agreement").

In connection with the Purchase Agreement, AngioDynamics entered into a First Amendment to Rights Agreement, dated as of January 30, 2012 (the "First Amendment"), which amended the Rights Agreement, dated May 26, 2004, by and between the Company and Registrar and Transfer Company, as Rights Agent (the "Rights Agreement").

The First Amendment amends the Rights Agreement to provide (i) that none of the Stockholders or any of their permitted transferees (to the extent such transferees would be deemed to beneficially own the Common Stock) will be deemed to be an Acquiring Person (as defined in the Rights Agreement) unless the Stockholders or their permitted transferees are the beneficial owners of shares of Common Stock that constitute 15% or more of the shares of Common Stock then outstanding (the "Stockholder Cap"), except that the Stockholder Cap will exclude the shares of Common Stock acquired pursuant to the Purchase Agreement (the "Shares") then beneficially owned by the Stockholders or their permitted transferees so long as (A) beneficial ownership of the Shares by the Stockholders or their permitted transferees constitutes 15% or more of the shares of Common Stock then outstanding and (B) the Stockholders and their permitted transferees do not beneficially own shares of Common Stock other than the Shares, except to the extent specifically permitted under the Stockholders Agreement, and (ii) that neither (A) the approval, execution, delivery and performance of the Purchase Agreement and the consummation of the transactions contemplated thereby nor (B) any transfer to a permitted transferee or any acquisition of Common Stock by a Stockholder or any permitted transferee, to the extent specifically permitted under the Stockholders Agreement, shall be deemed an Acquisition Transaction (as defined in the Rights Agreement) for purposes of the Rights Agreement.

The foregoing description of the First Amendment does not purport to be complete and is qualified in its entirety by reference to the First Amendment, which is filed as Exhibit 4.2 hereto, and is incorporated herein by reference.

Item 2. Exhibits.

Item 2 of the Form 8-A is hereby amended and supplemented by adding the following:

4.2 First Amendment to Rights Agreement, dated as of January 30, 2012, by and between AngioDynamics, Inc. and Registrar and Transfer Company, as Rights Agent (incorporated herein by reference to Exhibit 4.1 of AngioDynamics' Current Report on Form 8-K filed with the SEC on February 3, 2012).

SIGNATURE

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

ANGIODYNAMICS, INC.

Date: February 3, 2012

/s/ D. Joseph Gersuk

D. Joseph Gersuk
Chief Financial Officer

Exhibit Index

- 3.1 Amended and Restated Certificate of Incorporation (incorporated herein by reference to Exhibit 3.1 of AngioDynamics' quarterly report on Form 10-Q filed with the SEC on October 7, 2005).
- 3.2 Amended and Restated By-laws (incorporated herein by reference to Exhibit 3.2 of AngioDynamics' quarterly report on Form 10-Q filed with the SEC on October 7, 2005).
- 4.1 Rights Agreement, dated as of May 26, 2004, between AngioDynamics, Inc. and Registrar and Transfer Company, as Rights Agent (incorporated herein by reference to Exhibit 99.1 to AngioDynamics' registration statement on Form 8-A filed with the SEC on October 27, 2004).
- 4.2 First Amendment to Rights Agreement, dated as of January 30, 2012, by and between AngioDynamics, Inc. and Registrar and Transfer Company, as Rights Agent (incorporated herein by reference to Exhibit 4.1 of AngioDynamics' Current Report on Form 8-K filed with the SEC on February 3, 2012).