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): February 2, 2012

LANTHEUS MEDICAL IMAGING, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

333-169785

(Commission File Number)

51-0396366 (IRS Employer Identification No.)

331 Treble Cove Road, North Billerica, MA 01862 (Address of principal executive offices) (Zip code)

Registrant's telephone number, including area code: (978) 671-8001

Not Applicable

(Former name or former address, 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 (see General Instruction A.2. below):

Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On February 2, 2012, the registrant, Lantheus Medical Imaging, Inc. (the "Company"), entered into a Manufacturing and Supply Agreement (the "Agreement"), effective as of February 1, 2012, with Jubilant HollisterStier LLC ("HollisterStier") for the manufacture of DEFINITY®. Under the Agreement, HollisterStier has agreed to manufacture product for an initial term of five years. The Company has the right to extend the Agreement for an additional five-year period, with automatic renewals for additional one year periods thereafter. The Agreement requires the Company to place orders for a minimum percentage of its product requirements during such term.

SIGNATURES

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.

LANTHEUS MEDICAL IMAGING, INC.

By: /s/ Michael P. Duffy

Name: Michael P. Duffy

Title: Vice President and General Counsel

Date: February 7, 2012