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): July 3, 2013

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))

D 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 July 3, 2013, the registrant, Lantheus Medical Imaging, Inc. (the "Company"), entered into an Amended and Restated Credit Agreement dated as of July 3, 2013 (the "New Facility"), by and among the Company, as borrower, Lantheus MI Intermediate, Inc., the immediate parent of the Company ("Lantheus Intermediate") and Lantheus MI Real Estate, LLC, a subsidiary of the Company ("Lantheus Real Estate"), each as guarantors, and Wells Fargo Bank, National Association, a national banking association ("Wells Fargo"), as sole lead arranger, bookrunner, administrative agent and syndication agent , consisting of a revolving credit facility in an aggregate principal amount not to exceed \$42.5 million. The revolving loans under the New Facility bear interest subject to a pricing grid based on average historical excess availability under the New Facility, with pricing based from time to time at the election of the Company at (i) LIBOR plus a spread ranging from 2.00% to 2.50% or (ii) the Reference Rate (as defined in the agreement) plus a spread ranging from 1.00% to 1.50%. The New Facility also includes an unused line fee of 0.375% or 0.5%, depending on the average unused revolving credit commitments. The New Facility expires on the earlier of (i) July 3, 2018 or (ii) if the outstanding 9.750% senior notes due in 2017 are not refinanced in full, the date that is 91 days before the maturity thereof, at which time all outstanding borrowings are due and payable .

The New Facility is secured by a pledge of substantially all of the assets of each of the Company, Lantheus Intermediate and Lantheus Real Estate, including each such entity's inventory, accounts receivable and machinery and equipment, and is guaranteed by each of Lantheus Intermediate and Lantheus Real Estate. Borrowing capacity is determined by reference to a borrowing base, which is based on (i) a percentage of certain eligible accounts receivable, inventory and machinery and equipment minus (ii) any reserves. As of July 3, 2013, the aggregate borrowing base was approximately \$38.4 million, with an outstanding \$9.2 million unfunded Standby Letter of Credit and an \$8.0 million loan balance for net borrowing base availability of approximately \$21.2 million.

The New Facility contains affirmative and negative covenants, as well as restrictions on the ability of Lantheus Intermediate, the Company and the Company's subsidiaries to: (i) incur additional indebtedness or issue preferred stock; (ii) repay subordinated indebtedness prior to its stated maturity; (iii) pay dividends on, repurchase or make distributions in respect of capital stock or make other restricted payments; (iv) make certain investments; (v) sell certain assets; (vi) create liens; (vii) consolidate, merge, sell or otherwise dispose of all or substantially all of the Company 's assets; and (viii) enter into certain transactions with the Company's affiliates. The New Facility also contains customary default provisions as well as cash dominion provisions which allow the lender to sweep the Company's accounts during the period certain specified events of default are continuing under the New Facility or excess availability under the New Facility falls below (i) 15% of the then-current borrowing base for a period of more than five consecutive Business Days or (ii) \$3.5 million. During a cash dominion period, the Company is required to comply with a consolidated fixed charge coverage ratio of not less than 1:00:1:00. The fixed charge coverage ratio is calculated on a consolidated basis for Lantheus Intermediate and its subsidiaries for a trailing four-fiscal quarter period basis, as (i) EBITDA minus capital expenditures minus certain restricted payments divided by (ii) interest plus taxes paid or payable

2

in cash plus certain restricted payments made in cash plus scheduled principal payments paid or payable in cash.

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. DuffyTitle:Vice President and Secretary

Date: July 10, 2013