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): October 14, 2011

LANTHEUS MEDICAL IMAGING, INC.

(Exact name of registrant as specified in its charter)

Delaware 333-169785

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

(State or other jurisdiction of incorporation)

51-0396366 (IRS Employer Identification No.)

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

(Commission File Number)

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

Not Applicable

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

eck 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 visions (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))

Item 1.01 Entry into a Material Definitive Agreement.

Amendment No. 2 to Ablavar® Manufacturing and Supply Agreement

On October 14, 2011, Lantheus Medical Imaging, Inc. (the "Company") entered into a second amendment ("Amendment No. 2") to the Manufacturing and Supply Agreement, dated as of April 6, 2009 (the "Agreement"), between the Company and Mallinckrodt LLC ("Mallinckrodt"). The Agreement, as amended by Amendment No. 2, provides for the manufacture and supply by Mallinckrodt of Ablavar® active pharmaceutical ingredient and finished drug product for the Company. Among other things, Amendment No. 2 (i) extends the term of the Agreement from September 30, 2012 until September 30, 2014, (ii) reduces the amount of active pharmaceutical ingredient Mallinckrodt is obligated to supply to the Company and the Company is obligated to purchase from Mallinckrodt over the term of the Agreement, and (iii) increases the amount of finished drug product Mallinckrodt is obligated to supply to the Company and the Company is obligated to purchase from Mallinckrodt over the term of the Agreement. As a result of Amendment No. 2, the aggregate future purchase obligations of the Company under the Agreement have been reduced from approximately \$33.8 million to approximately \$20.9 million, a difference of approximately \$12.9 million.

Item 7.01 Regulation FD.

Update on Estimated Financial Impact of Recall and Neurolite® Inventory Stock-Out

As previously disclosed, as a result of recent U.S. Food and Drug Administration ("FDA") inspections of Ben Venue Laboratories, Inc. ("BVL") and of the Company's own facilities in North Billerica, MA, the Company filed a field alert and initiated a voluntary recall of six lots of Cardiolite® (Kit for the Preparation of Technetium Tc99m Sestamibi for Injection) and Neurolite® (Kit for the Preparation of Technetium Tc99m Bicisate Injection) manufactured for the Company by BVL prior to the shutdown as described in Item 8.01. In connection with the voluntary recall, the Company currently believes that its revenue in the third quarter of 2011 will be negatively impacted by less than \$1.0 million and the Company does not anticipate a significant negative financial impact to the fourth quarter of 2011 as a result of the recalled lots.

In connection with the temporary shutdown of BVL as described in Item 8.01, Neurolite® has experienced stock-outs in different international markets through the third quarter. Neurolite® accounted for approximately five percent of the Company's total revenue in 2010. In connection with the delayed distribution of Cardiolite® product inventory and the Neurolite® stock-out, the Company currently believes that revenue in the third quarter of 2011 will be negatively impacted by approximately \$2.5 million to \$3.0 million. In addition, depending on the timing of the return to production of Cardiolite® product and Neurolite® at BVL, the Company's fourth quarter of 2011 results could be further negatively impacted.

Some of the statements contained in this Item 7.01 are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to risks and uncertainties, including, in particular, statements about the Company's plans, strategies, prospects and industry estimates. These statements identify prospective information and include words such as "anticipates," "intends," "plans," "seeks,"

"believes," "estimates," "expects," "should," "predicts," "hopes," "could," "will" and similar expressions.

Forward-looking statements are based on the Company's current expectations and assumptions regarding the Company's business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict.

Any forward-looking statement made by the Company herein speaks only as of the date hereof. Factors or events that could cause the Company's actual results to differ may emerge from time to time, and it is not possible for the Company to predict all of them. The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

Item 8.01 Other Events.

Update on BVL

As previously disclosed, the Company relies on BVL for sole source manufacturing of DEFINITY® Vial for (Perflutren Lipid Microsphere) Injectable Suspension, Neurolite®, and certain TechneLite® (Technetium Tc99m Generator) accessories. The Company also relies on BVL for a majority of its Cardiolite® product supply. In July 2010, BVL temporarily shut down the facility where it manufactures products for a number of customers, including the Company, in order to upgrade the facility to meet certain regulatory requirements.

As previously disclosed, BVL resumed manufacturing of Cardiolite® product on September 29, 2011 and has informed the Company that it anticipates resuming manufacturing of Neurolite®, DEFINITY®, and TechneLite® accessories in the fourth quarter of 2011. Before the Company can distribute to its customers products that BVL has manufactured following the shutdown, BVL must successfully complete an additional regulatory submission — a "changesbeing-effected in 30 days" or "CBE-30" submission — with the FDA reporting the changes in manufacturing process implemented following the shutdown. BVL has now informed the Company that it submitted the CBE-30 regulatory filing to the FDA on October 17, 2011. The FDA has 30 days to respond as to whether the reported changes are appropriate without further information, documentation or regulatory consideration. If BVL does not hear from the FDA by the end of the 30-day period, it can assume that the implementation of the changes reported in the CBE-30 is permissible. The Company can give no assurances that the FDA will not respond to BVL's CBE-30 submission or will request additional information, documentation or regulatory consideration that could delay the Company's ability to distribute products manufactured by BVL following the shutdown.

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: October 19, 2011