



## Lantheus Announces the Approval of DEFINITY® (Perflutren Lipid Microsphere) by China's NMPA

Nov 28, 2022

*DEFINITY is the leading diagnostic ultrasound enhancing agent for patients with suboptimal echocardiograms*

NORTH BILLERICA, Mass., Nov. 28, 2022 (GLOBE NEWSWIRE) -- Lantheus Holdings, Inc. (the Company) (NASDAQ: LNTH), a company committed to improving patient outcomes through diagnostics, radiotherapeutics and artificial intelligence solutions that enable clinicians to Find, Fight and Follow disease, today announced that the Center for Drug Evaluation (CDE) of China's National Medical Products Administration (NMPA) has approved the Import Drug License (IDL) for Perflutren Lipid Microsphere Injectable Suspension (marketed as DEFINITY® in the U.S.), the Company's diagnostic ultrasound enhancing agent for patients with suboptimal echocardiograms. The Company's partner, China Resources Double-Crane Pharmaceutical Co., Ltd (CR Double-Crane), will be responsible for commercializing DEFINITY in China under a local brand name. Under the distribution agreement, Lantheus will supply DEFINITY to CR Double-Crane for a launch in China.

With this approval, DEFINITY is indicated in China for use in patients with suboptimal conventional echocardiography and to better identify the left ventricular endocardial border.

"We congratulate our partner, CR Double-Crane, on the successful approval of DEFINITY in China, which further expands our global presence," said Mary Anne Heino, President and CEO, Lantheus. "Heart disease has been on the rise in China over the last decade and an estimated one in five adults there has cardiovascular disease. This public health emergency has created a significant need for high quality imaging agents like DEFINITY. We are excited to join with CR Double-Crane to improve patient outcomes in China."

Lantheus entered into a development and distribution arrangement with CR Double-Crane for the commercialization of DEFINITY in China, Hong Kong and Macau. As part of the agreement with Lantheus, CR Double-Crane conducted confirmatory clinical trials with DEFINITY on Lantheus' behalf in pursuit of cardiac, liver and kidney imaging indications, as well as a pharmacokinetic study.

The efficacy of DEFINITY administration during echocardiography was assessed in a prospective independent blinded evaluation of non-contrast and DEFINITY contrast images for left ventricular endocardial border delineation (i.e., assessment of left ventricular endocardial segments) and left ventricular opacification in more than 600 subjects. These subjects came from clinical trials that enrolled similar patient populations with suboptimal echocardiography images, study designs and imaging procedures. The confirmatory study conducted in China in 120 subjects (DEFINITY 311) confirmed the findings reported for the North American population.

The safety data included several clinical trials that evaluated the use of activated DEFINITY in 1,716 patients (1063; 61.9% were male and 653; 38.1% were female) with a mean age of 56.1 (range 18 to 93). Of these, 144 (8.4%) patients had at least one treatment-related adverse reaction. Among the 1,716 DEFINITY patients studied, serious adverse events were reported in 30 patients. None of the serious adverse events were considered related to DEFINITY administration. Adverse events appeared within minutes (1 - 15 min) of the drug administration and were of moderate intensity, resolving usually without treatment within minutes or hours after onset. Sub-analyses by age, gender and race were performed. The overall incidence of adverse events was similar for the <65-year age group and the ≥65-year age group, similar in males and in females, and similar among all racial or ethnic groups. The most frequent adverse events were reported for the central and peripheral nervous system (3.1%), body as a whole (2.4%) and gastrointestinal system (1.8%). The most frequently occurring treatment-related adverse experiences were headache (2.3%), back/renal pain (1.2%), flushing (1.1%) and nausea (1.0%).

### About DEFINITY in the United States

DEFINITY Vial for (Perflutren Lipid Microsphere) Injectable Suspension (activated) is approved in the U.S. as an ultrasound enhancing agent for use in patients with suboptimal echocardiograms (see Indications and Important Safety Information below and find full Prescribing Information at [www.definityimaging.com](http://www.definityimaging.com)).<sup>1</sup> DEFINITY is engineered to produce small and consistently sized durable microbubbles to fully evaluate the left ventricle.<sup>1</sup> DEFINITY has extensive safety experience and a consistent safety profile.<sup>2</sup> Since its launch in 2001, more than 21 million echo studies have been performed with DEFINITY, and it is the most prescribed ultrasound enhancing agent in the U.S.<sup>3</sup>

DEFINITY is not approved in the U.S. for stress echocardiography.

### DEFINITY® Vial for (Perflutren Lipid Microsphere) Injectable Suspension

#### INDICATIONS

Activated DEFINITY® (Perflutren Lipid Microsphere) Injectable Suspension is indicated for use in patients with suboptimal echocardiograms to opacify the left ventricular chamber and to improve the delineation of the left ventricular endocardial border.

## CONTRAINdications

Do not administer DEFINITY® to patients with known or suspected hypersensitivity to perflutren lipid microsphere or its components.

## IMPORTANT SAFETY INFORMATION

### **WARNING: Serious Cardiopulmonary Reactions**

**Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutren-containing microsphere administration [see *Warnings and Precautions (5.1)*. Most serious reactions occur within 30 minutes of administration.**

- **Assess all patients for the presence of any condition that precludes DEFINITY® administration [see *Contraindications (4)*].**
- **Always have resuscitation equipment and trained personnel readily available.**

In post-marketing use, rare but serious cardiopulmonary or hypersensitivity reactions have been reported during or shortly following perflutren-containing microsphere administration [see *Adverse Reactions (6)*]. The risk for these reactions may be increased among patients with unstable cardiopulmonary conditions [see *Adverse Reactions (6.2)*]. It is not always possible to reliably establish a causal relationship to drug exposure due to the presence of underlying cardiopulmonary disease.

Please see accompanying full Prescribing Information, including boxed **WARNING** regarding serious cardiopulmonary reactions, on [www.definityimaging.com](http://www.definityimaging.com).

## About Lantheus

With more than 60 years of experience in delivering life-changing science, Lantheus is committed to improving patient outcomes through diagnostics, radiotherapeutics and artificial intelligence solutions that enable clinicians to Find, Fight and Follow disease to deliver better patient outcomes. Lantheus is headquartered in Massachusetts and has offices in New Jersey, Canada and Sweden. For more information, visit [www.lantheus.com](http://www.lantheus.com).

## Safe Harbor for Forward-Looking and Cautionary Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, that are subject to risks and uncertainties and are made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements may be identified by their use of terms such as "will" and other similar terms. Such forward-looking statements are based upon current plans, estimates and expectations that are subject to risks and uncertainties that could cause actual results to materially differ from those described in the forward-looking statements. The inclusion of forward-looking statements should not be regarded as a representation that such plans, estimates and expectations will be achieved. Readers are cautioned not to place undue reliance on the forward-looking statements contained herein, which speak only as of the date hereof. 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. Risks and uncertainties that could cause our actual results to materially differ from those described in the forward-looking statements include (i) our dependency on Double-Crane's ability to successfully launch DEFINITY as a commercial product in China; (ii) the market receptivity to DEFINITY in China; (iii) the existence, availability and profiles of competing products in China; (iv) Double-Crane's ability to obtain and maintain adequate coding, coverage and payment for DEFINITY; (v) the intellectual property protection of DEFINITY in China; and (vi) the risks and uncertainties discussed in our filings with the Securities and Exchange Commission (including those described in the Risk Factors section in our Annual Reports on Form 10-K and our Quarterly Reports on Form 10-Q).

<sup>1</sup>DEFINITY® (Package Insert), North Billerica, MA, Lantheus Medical Imaging, Inc.

<sup>2</sup>Data on file, Lantheus Medical Imaging, Inc.

<sup>3</sup>DRG Echo Monthly Monitor 2022

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