

# PTISON™ (Perflutren Protein-Type A Microspheres Injectable Suspension, USP)

## Since 1997, over 3 million doses shipped worldwide<sup>1</sup>

## December 1997



Approved by the FDA for ultrasound enhancing imaging in the US



Positive updates to Optison label approved by the FDA

#### January 1998



Launched as the first second-generation ultrasound enhancing agent for the US market

### May 1998



Launched in the European market

## December 2002



Transfer of Optison from Mallinckrodt Pharmaceuticals to Amersham Health

## April 2004



GE Healthcare acquires Amersham Health

## November 2005



GE Healthcare voluntarily recalled Optison due to manufacturing issues at Mallinckrodt

## November 2007



Optison relaunched for US echocardiography market



FDA revises Boxed Warning for ultrasound enhancing agents

#### December 2013



1.5 million doses shipped worldwide in 15 years

#### January 2014



GE Healthcare moves manufacturing to company's Oslo site

## **April 2016**



New 18-vial carton

# September 2016



FDA removes cardiac shunt contraindication

## March 2021



FDA approves storage at room temperature up to 24 hours

## **July 2021**



Optison no longer requires temperature controlled shipping, though should be refrigerated upon receipt

## September 2021



FDA removes blood and blood products hypersensitivity contraindication, further confirming Optison is not a blood product

#### IMPORTANT SAFETY INFORMATION ABOUT OPTISON

#### WARNING: SERIOUS CARDIOPULMONARY REACTIONS

Serious cardiopulmonary reactions, including fatalities, have occurred uncommonly during or following perflutrencontaining microsphere administration. Most serious reactions occur within 30 minutes of administration

- · Assess all patients for the presence of any condition that precludes OPTISON administration
- Always have resuscitation equipment and trained personnel readily available
- **CONTRAINDICATION:** Do not administer OPTISON to patients with known or suspected hypersensitivity to perflutren or albumin