

DEFINITY® A Diagnostic Enhancing Agent for Echocardiogram

Nursing Fact Sheet

ACTIVATED DEFINITY® (PERFLUTREN LIPID MICROSPHERE) IS AN INJECTABLE SUSPENSION ENHANCING AGENT 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. ADMINISTERED BY NURSES VIA THE DILUTED IV BOLUS TECHNIQUE.^{1,2}

PREPARATION & SUPPLIES

- DEFINITY® vial
 - VIALMIX® activation machine
 - 10 mL normal saline pre-filled syringe (3)
 - 18-gauge pink unfiltered needle
 - Yellow filtered needle
1. Allow vial of DEFINITY® to warm to room temperature
 2. Activate with VIALMIX® for 45 seconds (once activated DEFINITY® appears as a milky white suspension and may be used at room temperature for up to 12 hours)
 3. Attach 18-gauge needle to 10 mL pre-filled normal saline syringe and waste 2 mL. Expel all air from syringe
 4. Following activation of DEFINITY® remove cap and insert filtered needle into the vial to vent (do not remove)
 5. Insert 18-gauge needle attached to saline syringe into the vial. Invert vial and ensure the needle tip is positioned approximately in the middle of the suspension
 6. **DO NOT INJECT ANY AIR INTO THE VIAL.** If air is injected discard and obtain new
 7. Slowly withdraw contents of activated DEFINITY® vial (approx. 1.5 mL) for a total volume of approximately 10 mL in syringe



ADMINISTRATION

1. If the product is not used within 5 minutes of activation, or if contrast separation occurs at any point, the microspheres should be re-suspended with 10 seconds of gentle hand rolling agitation of the syringe
2. DEFINITY® can be injected directly into any intravenous line (CVC, PICC, Port-a-Cath or PIV)
3. There is no need to stop infusions going into different lumens (this includes chemotherapy or blood products)
4. Flush lumen with normal saline and check for blood return before injecting DEFINITY® solution
5. Slowly push up to 3 mL of DEFINITY®. Repeat 0.5 mL as necessary and directed by Echo personnel. Do not exceed a maximum dose of 10 mL
6. Flush lumen with 10 mL normal saline post administration
7. This is considered an enhancing agent and is *not* a dose specific medication

CONTRAINDICATIONS & WARNINGS

- Do not administer DEFINITY® to patients with known or suspected cardiac shunts, with a hypersensitivity to perflutren or by intra-arterial injection
- Assess all patients for the presence of any condition that excludes DEFINITY® administration
- Serious cardiopulmonary reactions have occurred uncommonly during or following perflutren-containing microsphere administration. Most serious reactions occur within 30 minutes
- Treatment-related adverse events (occurring in less than 0.5% of patients) headache, back/renal pain, flushing, nausea, chest pain, dizziness, injection site reactions (PIV). Flank pain is most frequently reported