

Multi-Modality Breast Biopsy and Sonographic Trainer

Model 073



DURABLE TRAINING PHANTOM FOR ULTRASOUND, MAMMOGRAPHY, X-RAY AND MRI

The Multi-Modality Breast Biopsy and Sonographic Trainer is designed to train users in various aspects of breast imaging and image-guided interventional procedures. The phantom accurately mimics the heterogeneous appearance of breast tissue under ultrasound, mammography and MRI, and has cystic and dense lesions embedded within the breast background. Half of the dense lesions are spherical and have a 100-300 micron microcalcification embedded within it, while the other half have a spiculated shape. In addition to helping users identify different types of masses in the complex structure of the breast, the calcifications are useful markers for image registration between modalities.

The phantom includes a patent-pending¹ Z-Skin™ membrane that simulates the look and feel of skin during scanning and biopsy. The skin material closes up on itself after puncture with a needle, providing good protection from desiccation even after multiple training sessions.

The material inside the phantom is formulated to minimize

the effect of needle tracks while practicing biopsy techniques on the embedded masses. This material also has remarkable self-healing properties, and tracks will usually disappear within minutes (sometimes seconds) of needle removal. Each mass may be biopsied multiple times.

Features

- Compatible with X-ray, Ultrasound, and MRI
- Heterogeneous tissue to simulate imaging of human breast
- Encased in flexible membrane for increased durability
- Self-healing material for extended phantom use
- Cystic, dense, high stiffness and attenuative masses for biopsy training

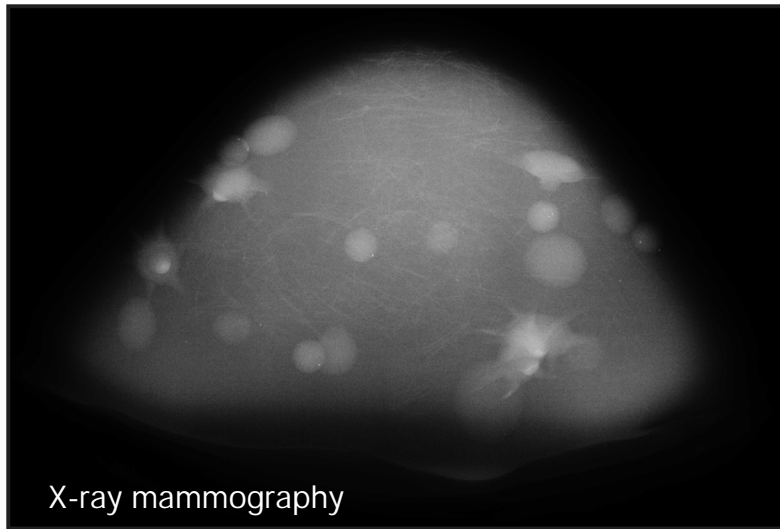
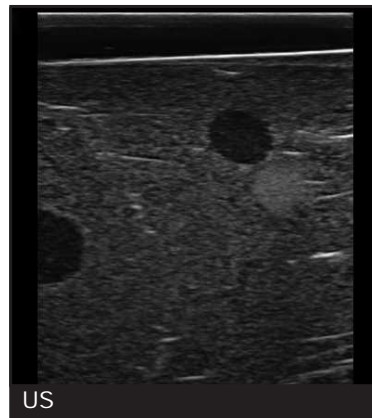
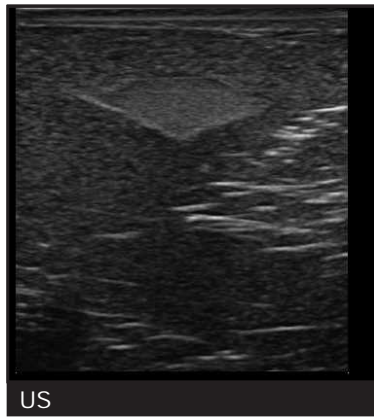
¹PCT/US2006/039597

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SPECIFICATIONS

TRAY DIMENSIONS	26 cm x 23 cm x 7.5 cm (10" x 9" x 3")
BREAST SIZE	500 cc (14 cm x 11 cm at base, 8 cm high)
TOTAL WEIGHT	1 lb (0.4 kg)
MEMBRANE MATERIAL	Z-Skin™ elastomer
BACKGROUND GEL MATERIAL	Zerdine®
CYSTIC MASSES	Qty: 5-10 Material: Zerdine®-based, anechoic under ultrasound Size: 5 -10 mm in diameter Shape: Spherical shape
DENSE MASSES	Qty: 10-15 Material: Zerdine-based, hyperechoic under ultrasound Size: 5-10 mm in diameter Half spherical with embedded micro-calcifications (100-300 microns) Half spiculated

Custom lesions available upon request.

MODEL 073 INCLUDES

QTY	COMPONENT DESCRIPTION
1	Multi-Modality Breast Biopsy and Sonographic Trainer
1	User Guide
-	12-Month Warranty*

*Please note: once any device has been inserted into the phantom (such as biopsy needles, localization wires, etc.) the 12 month warranty will not cover claims related to material desiccation or needle tracking.

