

# Image-Guided Abdominal Biopsy Phantom

- Improve performance of freehand abdominal biopsies
- Minimal needle tracking-- Z-skin™ fat layer and softer gel provide better self-healing properties
- Validate automated biopsy systems
- Suitable for CT, MRI and Ultrasound



## Designed for Image-Guided Training and Demonstration

The Image-Guided Abdominal Biopsy Phantom is a simplified abdominal phantom suitable for training and demonstrating image-guided needle biopsy navigation tools or procedures that require a constant visual reference for needle placement. The background gel is designed to minimize needle tracks when punctured, allowing many uses over time. It is soft enough to allow puncture with 21 gauge needles or larger, yet stiff enough that the lesions remain stable in position.

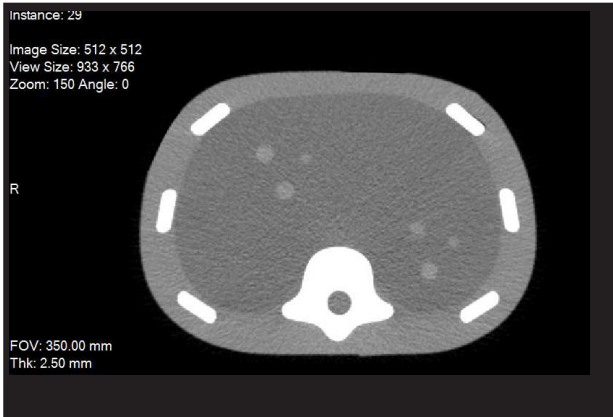
The phantom contains 12 lesions, 5-12 mm in diameter, positioned in groups of three in consistent locations within the phantom. It also includes simulated spine and ribs, and an "H" marker within the spine to assist in determining the head side within a CT image. The lesions and spine are visible under ultrasound, CT and MRI. The solid polymer gel background is anechoic and will not leak with punctured.\*

<sup>(1)</sup>US Patent #5196343

\*NOTE: Some permanent tracking may be evident if debris and air bubbles are entrained in the gel during the biopsy procedure. To extend the lifetime of the phantom, the use of higher gauge needles that have been wetted and de-aired prior to insertion is recommended.

## Phantom In Use

The Image-Guided Abdominal Biopsy Phantom can be imaged using ultrasound, CT and MR.



CT image



Ultrasound image

## Specifications

<b>Dimensions</b>	28 cm x 20 cm x 12.5 cm (11" x 7.9" x 4.9")
<b>Weight</b>	12.1 lbs (5.5 kg)
<b>Materials</b>	Background: Optically clear Zerdine® gel, 1540 m/s (nominal) Ribs & Vertebrae: Radio-opaque epoxy Scan Surface: Z-skin™ elastomer Masses: Zerdine, soft tissue Muscle Layer: Hyperechoic Zerdine® gel (ensures phantom retains shape over time)
<b>Masses</b>	5-12 mm diameter Qty: 12
<b>Other</b>	CT visible "H" marker to indicate head/ foot orientation (made from lead- MRI compatible)

## Items Included with the Image-Guided Abdominal Biopsy Phantom

Quantity	Description
1	Image-Guided Abdominal Biopsy Phantom
1	Carry case
1	User guide

## Items Included with Model 071B-35

Quantity	Description
1	Image-Guided Abdominal Biopsy Phantom
1	CT DICOM Data Set (Serial number specific, 1.5 mm slice thickness @ 120 kvp)
1	Carry case
1	User guide