Image-Guided Abdominal Biopsy Phantom

Anthropomorphic 3D Skull Phantom

Gillian QA Phantom

Stereotactic Needle Biopsy Training Phantom

TE Phantom for Mammography

Mammography Research Set

Features:
- Images well on T1, T2 and 3DTOF MRI acquisitions
- Images well on CT scans
- Stereotactic frame can be applied to special reinforced pads (included)
- Images can be imported into stereotactic localization program
- CT scans can be used to assess MRI accuracy

The CIRS Stereotactic Needle Biopsy Training Phantom is a disposable training tool and practice medium for mammographic needle biopsy procedures. The phantom also serves as an excellent quality assurance device for stereotactic systems and should be used whenever a new system is installed or repaired to insure accurate needle placement. The phantom can be used to perform the localization accuracy test in the American College of Radiology’s stereotactic breast biopsy accreditation program.

The stereotactic training phantom offers an easy, low cost option to create a relaxed learning environment. The phantom can be reused multiple times with no special storage requirements.

The CIRS mammography research set includes tissue equivalent phantoms 4, 5 and 6.7 mm thick. Each phantom contains identical embedded detail (see map O11A). The glandular content of each phantom is 50%, 30% and 20% respectively. Also included are phototimer compensation plates enabling a range of thickness from 0.5 cm to 7 cm with a glandular content of 30%, 50% and 70%. One compensation plate contains embedded details for evaluation of image quality. A hand held micro- and heavy duty foam lined carry case are included.

CIRS resin material mimics the photon attenuation coefficients of a range of breast tissues. Average elemental composition of the human breast being mimicked is based on the individual elemental composition of adipose and glandular tissue reported by Hammerstein. The Model O11A Breast Phantom contains targets that are engineered to test the threshold of the new generation of mammography machines. The Model O11A is 4.5 cm thick and simulates an average glandular tissue composition.

The Model O10A phantoms contain the same detail plates as the O11A but are manufactured in 4 cm, 5 cm and 6 cm thicknesses with various glandular equivalencies.

The methodology and design of these phantoms was developed by Dr. Panos Fatouros and his associates at the Medical College of Georgia.