

BSGI/MBI Gains Recognition in Breast Cancer Detection and Diagnosis

November 30, 2010 - Breast-Specific Gamma Imaging/Molecular Breast Imaging (BSGI/MBI) is gaining momentum as a standard of care in the diagnostic work up of patients. Several presentations at the 2010 Radiological Society of North America (RSNA) meeting will also show how the technology is an important diagnostic tool for early breast cancer detection.



Additionally, the Society of Nuclear Medicine (SNM) recently released a nuclear medicine breast imaging protocol that includes specific procedural guidelines and clinical indications for conducting BSGI/MBI.

BSGI/MBI is especially useful in difficult-to-diagnose cases such as ductal carcinoma in situ (DCIS), where mammography may not accurately display the extent of the disease. At RSNA researchers will demonstrate the sensitivity of BSGI for DCIS to be 93 percent to 95 percent for determining the extent of disease and varying pathological parameters.

“BSGI is a valuable tool that improves diagnostic accuracy, and complements other modalities, when included in the breast imaging protocol,” said Jocelyn A. Rapelyea, M.D., associate professor of radiology, George Washington University. “This modality is especially effective in assessing the extent of disease and assisting in surgical planning.”

The investigators of another study will demonstrate that BSGI is a useful tool for improving the detection of malignancies. They will also note that the physiological information of BSGI is complementary to the anatomical depiction of the breast by mammography and ultrasound.

The SNM Guidelines

In June 2010 the Society of Nuclear Medicine (SNM) released a nuclear medicine breast imaging protocol, *The SNM Procedure Guideline for Breast Scintigraphy with Breast-Specific Gamma Cameras*. This protocol includes specific guidelines for conducting BSGI and helps improve the understanding of how and when to use molecular breast imaging in patient care. For a complete review of the new SNM protocol for BSGI/MBI go to http://interactive.snm.org/docs/Breast_v2.0.pdf.

BSGI utilizes the Dilon 6800 Gamma Camera to help physicians differentiate benign from malignant tissue. To perform BSGI, the patient receives a pharmaceutical tracing agent that is absorbed by all the cells in the body. Due to their increased rate of metabolic activity, cancerous cells in the breast absorb a greater amount of the tracing agent than normal, healthy cells and generally appear as dark spots on the BSGI image.

For more information: www.dilon.com.