Advanced imaging solutions for early detection of breast cancer:

Breast-Specific Gamma Imaging (BSGI) is a molecular breast imaging technique that shows the metabolic activity of breast lesions. BSGI can aid in diagnosis when a mammogram is inconclusive; revealing important information that can help your doctor more accurately determine if an area of concern is cancerous or not. An international medical society, the Society of Nuclear Medicine, provides practice guidelines on patient selection criteria, image interpretation, and reporting for BSGI.

BSGI is a strong diagnostic tool especially for patients who have:

- Dense breast tissue
- Indeterminate areas on mammography, ultrasound or MRI
- Lumps that can be felt, but not seen with mammography or ultrasound
- Implants and breast augmentation
- Scarring from previous surgeries
- High risk factors or previous malignancy
- Recently identified disease requiring evaluation of disease extent

Clinical Case:

48 year old with a digital mammogram on the left and a BSGI on the right. The BSGI detected multifocal disease in the patient with a negative clinical examination, mammogram and ultrasound. Pathology revealed Ductal Carcinoma in Situ (DCIS) and axillary nodes that were positive for cancer.

(Legacy Good Samaritan Hospital, Portland, OR)