

BSGI/MBI FACT SHEET

Breast-Specific Gamma Imaging (BSGI)/Molecular Breast Imaging (MBI) with the Dilon 6800 Gamma Camera

- **What is BSGI/MBI?**

Breast-Specific Gamma Imaging/Molecular Breast Imaging (BSGI/MBI) is a molecular breast imaging procedure that shows the metabolic activity of breast lesions independent of breast density. BSGI/MBI is technology that is complementary to mammography and ultrasound and is clinically proven to improve breast cancer detection and treatment planning when used in combination with these modalities.

- **What is the Dilon 6800® Gamma Camera?**

The Dilon 6800 is a high-resolution digital gamma camera that is optimized to conduct breast-specific molecular imaging studies.

- **Can BSGI/MBI be used instead of a mammogram?**

For the foreseeable future, mammograms will remain the gold standard in breast cancer screening and will be the first step in breast cancer detection. However, for patients with additional diagnostic concerns after a mammogram, more advanced tests such as BSGI, MRI and ultrasound are recommended. These types of diagnostic imaging studies serve important roles in breast cancer detection by personalizing each diagnostic work-up and subsequent care to the needs of each patient.

- **How is the test performed?**

A small amount of a radiopharmaceutical, more commonly referred to as a tracer, is delivered via an injection to the arm, and is absorbed by all cells in the body. The tracer emits invisible gamma rays, which are detected by the Dilon 6800 Gamma Camera and translated into a digital image of the breast tissue. Due to the high metabolic activity of tumors, these cells absorb a greater amount of the tracing agent and are revealed as "dark spots" in the image.

- **Is the test safe?**

The tracer, Tc^{99m} (technetium) Sestamibi, also known as Cardiolite® in stress test studies, has been used for nearly 20 years for a variety of medical imaging studies in millions of patients. The radiation exposure received during BSGI is comparable to or lower than other commonly used diagnostic imaging procedures such as CT scans.

- **Is BSGI/MBI approved by the FDA?**

The tracer, Tc^{99m} Sestamibi was approved by the FDA in 1991 and has been used in millions of patients. The Dilon 6800 has a FDA 510(k) authorization.

- **Is this a new test?**

BSGI/MBI, in one form or another, has been around for about 15 years. However, within the last 6 years, the imaging technologies used to perform this test, like the Dilon 6800, have improved the accuracy of this procedure. As a result, it has become a routine procedure for many medical centers across the country; helping more than 250,000 patients worldwide.

- **Could BSGI help me?**

BSGI is a valuable tool, especially for patients with:

- Dense breasts and/or indeterminate mammogram (BIRADS 0 or 3) AND
 - A history of breast cancer
 - A high risk lesion (atypical ductal hyperplasia, lobular carcinoma, etc)
 - A history of multiple benign biopsies
 - Complex or vague densities and/or calcifications on mammography and ultrasound
 - Multiple areas of intermediate to low suspicion for malignancy
- Signs or symptoms not concurrent with other imaging studies such as pain, nipple discharge, skin changes, palpable mass
- Suspected or known malignancy by mammography or ultrasound to determine extent of disease.
- Breast cancer surveillance in patients with a history of breast cancer

- **Where can I find a BSGI/MBI center near me?**

For more information on BSGI/MBI go to www.dilon.com/locator

