

Know the facts about molecular breast imaging

What is Molecular Breast Imaging (MBI)?

Molecular Breast Imaging (MBI) is a new way of providing functional images of the breast. The technique utilizes small semiconductor-based gamma-cameras, and a radioactive tracer.

Is it the same as Mammogram?

The system was designed to replicate the views acquired during Mammography. Unlike Mammography this system does not use X-rays but utilizes principles of nuclear medicine in detecting the tumor. It is used along with Mammography or other modalities when their results are inconclusive or additional information is needed. This gives your physician the ability to compare anatomical and functional images from similar perspectives.

What can I expect & how long will it take?

Imaging can be performed within 5 minutes of a small injection of a radioactive tracer that locates metabolically active structures. CC (Similar to mammography top view) and MLO (similar to mammography side view) images for each breast will be collected. Each image may take up to 10 minutes. Images of each breast may be acquired to facilitate interpretation and comparison with Mammography. Your healthcare provider can provide additional information should you have any questions.

Will the test be comfortable?

In the MBI system the images are collected with the breast slightly immobilized between the two detectors of the camera. The compression is much less than mammography (<30% of the compression felt in a mammography). Moreover, you will be seated comfortably during the entire exam. The system also has arm handles to rest your arms on while seated.

Who should get an MBI exam?

Women who have dense breast tissue and increased breast cancer risk are most likely to benefit from an MBI exam as this modality is not affected by the density of the breast. Ask your doctor whether an MBI exam would benefit you.

Why should I get an MBI exam?

In 2010, nearly 1.5 million people were told “you have breast cancer”. Dramatically, one-third of these cancer deaths could be decreased if detected and treated early.¹ The results of an MBI exam combined

with results from a Mammography exam can overcome some limitations of mammography alone, which is taken with X-rays. The X-ray imagery doesn't differentiate between tumors and dense breast tissue. On a mammogram, they both appear white. The high resolution functional images of the breast together with the anatomical images from mammography may help your physician in evaluating the extent of the disease.

When should I get an MBI exam?

A doctor may recommend an MBI exam when additional functional information about a suspected lesion is required either during diagnosis or treatment of breast cancer.

Is the test safe?

The device looks similar to a Mammography system but does not produce X-ray radiation. A key difference is that it can image the function of tissues or organs as opposed to their physical structure alone. The device itself does not produce any radiation and does not move while images are being acquired. However, there will be radiation exposure from the radioactive tracers that will be injected. You can be seated during the procedure if that is more comfortable for you.

I have breast implants. Can I still get an MBI exam?

Yes, an MBI exam can be conducted on a patient with breast implants or with any cardiac implants such as a pacemaker. You should consult your doctor for further information.

A physician referral is required for Molecular Breast Imaging (MBI). Please contact your physician to determine if MBI is right for you.

To schedule a screening mammogram, please visit EEHealth.org/schedule to make an appointment online or call (630) 527-3200.

