



3D Mammography is now available

The information below will help you understand tomosynthesis and be prepared for questions your patients might ask.

Is tomosynthesis available at the Global Imaging?

Yes! Global Imaging is honored to be among many providing this technology to patients.

What is tomosynthesis?

Digital breast tomosynthesis (tomo), also known as 3D mammography, is a revolutionary new screening and diagnostic breast imaging tool to improve the early detection of breast cancer. During the 3D part of the exam, an x-ray arm sweeps over the breast, taking multiple images in seconds. Images are displayed as a series of thin slices that can be viewed by our radiologists as individual images or in a dynamic interactive animation. Approved as an imaging modality by the FDA in early 2011, tomo is used in combination with 2D digital mammography.

What are the benefits of using tomosynthesis?

Many studies in Europe and the U.S. have substantiated superior breast cancer detection rates when combining 3D mammography with conventional 2D mammography. Studies have demonstrated a 10%-30% increase in overall breast cancer detection (over 2D imaging alone). Tomosynthesis has also been proven to reduce the number of call-backs for further imaging by as much as 30%. Two of the top benefits are improving the early detection of breast cancer and providing peace of mind due to increased accuracy.

How is 3D mammography different than 2D?

Traditional digital mammography takes two-dimensional pictures of the breast and is still one of the most advanced tools available for detecting breast abnormalities. Since there could be a significant amount of overlapping tissue in 2D images, this results in difficulty differentiating a real lesion from normal overlapping tissue. Rather than viewing the breast tissue in 2D images, our radiologists can examine the tissue one thin layer at a time, in a sense traveling through the structure of the breast like flipping pages of a book. Fine details are more visible and are less likely to be hidden by overlapping tissue.

Do patients need a referral for a 3D mammogram?

For a routine annual (screening) mammogram, women 40 and older do not need a written referral. For patients experiencing unusual breast symptoms, a written referral is required for a diagnostic mammogram.

Is there increased radiation with tomo?

Tomosynthesis is safe. Radiation exposure to the breast is very low. The radiation dose for a combined 2D/3D mammography exam is well below the acceptable limits defined by the FDA and is only a fraction of the level of radiation everyone receives annually from the natural background of being outdoors. There is no evidence that this low level of radiation has any significant effect on the breasts. As with any x-ray, patients should inform their technologist before an exam if they are (or may be) pregnant.

Which patients should use tomo?

This technology has become our new standard of care and is available to all patients for screening and diagnostic mammograms — so you don't have to choose.

What can patients expect during a 3D mammogram?

3D mammography complements standard 2D mammography. No additional breast compression is required, and it only takes a few more seconds. The experience will be very similar to mammograms patients have had in the past.

Will I order mammograms differently? Will the reports I receive change?

You may continue to order screening and diagnostic mammograms as usual. Mammography reports from the Global Imaging will look virtually the same. There will be an additional descriptor for the 3D part of the exam.

How effective is tomo for viewing masses, distortions and calcifications?

Tomo allows our radiologist to see masses and distortions associated with cancers much more clearly, while calcifications are more easily interpreted with conventional 2D mammography.

If tomo is not as effective with calcifications, how will you perform diagnostic mammograms for patients exhibiting calcification fields?

We will continue to utilize 2D magnification views for patients with breast calcifications.

Are your radiologists and staff trained to interpret 3D images and use this new technology?

Yes. Our board-certified radiologist specializes in breast imaging and mammography and are fully trained and certified to interpret 3D images. Our mammography technologists have also been trained and certified to use tomosynthesis.

Is tomosynthesis safe for pregnant women?

As with traditional mammography, it is important that patients to inform their technologist *before* an exam about being pregnant or the possibility of pregnancy.

Is tomosynthesis safe for women with breast implants?

Mammography, both 2D and 3D, is safe for women with breast implants. Most breast implants are designed to withstand hundreds of pounds of pressure. A mammogram generates an average of 20 lbs. of pressure.

Will you use tomo on breast cancer patients who have had mastectomies?

No, not unless the patient had a nipple-sparing mastectomy. In that case, the patient will have a diagnostic tomo study using our post-cancer follow-up protocol.

Will 3D mammography eliminate the need for breast MRI?

At this point, there is no evidence to suggest this. MRI is a functional study, whereas 3D mammography is a structural study. Both modalities complement each other. Future studies will need to be done to investigate the relationship between these two modalities.