Cancer Risk and Supplemental Imaging

Women at high risk (greater than 20% lifetime risk) should have a routine breast MRI and a mammogram every year. Women at moderately increased risk (15% to 20% lifetime risk) should speak with their healthcare provider about the benefits of supplementing their annual mammogram with breast MRI.

Supplemental screening options

Ultrasound detects an additional three to five cancers per 1,000 women screened. Due to its lower cost and greater accessibility, ultrasound has been recommended as supplemental screening for women with dense breasts at average risk.

Breast MRI detects an additional 16-23 cancers per 1,000 women screened. Due to its increased sensitivity, conventional breast MRI has been recommended as supplemental screening for women at high risk. Fast Breast MRI has been developed specifically as an affordable form of supplemental screening for average risk women with dense breasts, with a shorter scan time than conventional breast MRI and cost that is comparable to ultrasound.

Fast Breast MRI is available at Advanced Radiology in Fairfield, Stamford, and Wilton.

If you have any additional questions regarding your exam, please contact Caitlin McConachie at 203.567.9016 or Caitlin.McConachie@AdRad.com

Advanced Radiology℠

203.337.XRAY (9729)
AdRad.com

Fairfield	1055 Post Road
Orange	297 Boston Post Road
Shelton	4 Corporate Drive
Stamford	1259 East Main Street
Stratford	2876 Main Street
Trumbull	15 Corporate Drive
Wilton	30 Danbury Road

Advanced Radiology complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.

Advanced Radiology℠

Fast Breast MRI

Fast Breast MRI is a faster and more affordable breast MRI. It is available for women with average lifetime risk for breast cancer and dense breasts who desire an additional screening tool in combination with mammography to diagnose breast cancer. Fast Breast MRI has been shown to be effective in detecting small invasive breast cancers that may not be visible on mammography.

(Image: Invivo/Philips)

Fast Breast MRI is not intended to replace mammography. Based on extensive literature review, the American College of Radiology (ACR) still recommends annual mammography as the gold standard for breast cancer screening, beginning at age 40 for women at average risk for breast cancer.

Due to its lower cost and shorter scan time compared to conventional breast MRI, Fast Breast MRI is an appropriate supplemental screening exam for women with

- **Average lifetime risk for breast cancer (<20%)**
- **Dense breast tissue**

Breast tissue density will be reported on the letter that you receive after undergoing screening mammography. Dense breast tissue is characterized as “heterogeneously dense” or “extremely dense”. Your doctor will also receive your mammography report and can help determine if you are a candidate for Fast Breast MRI. You will need a referral from your healthcare provider prior to scheduling. It is important to note that Fast Breast MRI is not covered by health insurance and is a self-pay exam.

Preparing for your Fast Breast MRI

There is no radiation associated with MRI. No special preparation necessary.

Pre-Exam Screening

You will complete a screening questionnaire prior to each MRI to determine your current health status and identify if there is any material present in your body that is not compatible with MRI. Women should always inform their Radiologist or Technologist if there is any possibility that they may be pregnant.

MRI and Metal

Jewelry and other accessories should be left at home. Because MRI uses a powerful magnetic field, electronics and any items containing metal are NOT ALLOWED in the exam room. In addition to affecting MRI images, these objects may cause you and/or others harm. These items include:

- Jewelry, body piercings, watches, credit cards
- Pins, hairpins, zippers, and similar metallic items
- Glasses, hearing aids, and removable dental work

You should tell your Technologist if you have any medical or electronic devices in your body. These objects may potentially pose a risk, depending on their nature and the strength of the MRI magnet. You must provide the make and model number of any implanted device.

Patients with the following implants CANNOT BE SCANNED and SHOULD NOT ENTER the MRI scanning area:

- Cochlear (ear) implant
- Some types of clips used for brain aneurysms
- Cardiac defibrillators and pacemakers

You should notify your Radiologist or Technologist of any other metal that may be present in your body due to your occupation or prior accidents. Foreign bodies near, and especially lodged in the eyes are particularly important because they may move during the scan, and may cause blindness. Tooth fillings and braces are not usually affected by the magnetic field, but they may distort images of the facial area or brain, so please inform your Radiologist or Technologist of those as well. If there is any question regarding the presence of metal or an implanted device, an x-ray will be taken to detect and identify any metal objects.

What Will I Experience During and After My Fast Breast MRI?

MRI exams are typically painless. However, some patients may find it uncomfortable to remain still during imaging. Others experience claustrophobia while in the MRI scanner. If you are claustrophobic, you should speak with your referring physician about prescribing anxiety medication.

After you have been thoroughly screened for safety, you will change into a gown before being brought to the MRI room. The Technologist will position you on the movable exam table. Bolsters and straps may be used to help you maintain the necessary position during imaging If your physician has asked for images with contrast, an intravenous line will be inserted into a vein in your hand or arm. Coils capable of sending and receiving radio waves may be placed around or adjacent to the area of the body to be studied. Once in position, the exam table will be moved into the magnet. The Technologist will operate the MRI from a separate control room, and will be able to see, hear and speak with you at all times using a two-way intercom.

You may feel slightly warm during your exam. This is normal. If it bothers you, please notify your Technologist. It is important that you remain still while the images are being obtained. When images are being recorded you will hear and feel loud tapping or thumping sounds. You will be given earplugs or headphones to dampen the sounds. You may be able to relax between imaging sequences, but will be asked to maintain the necessary position as much as possible. If contrast material is used, it will be injected into the IV line after an initial series of scans is done without contrast.

When the exam is complete, the Technologist will check the images to determine if additional imaging is necessary. The exam table will move out of the magnet, and any coils or IV lines will be removed.

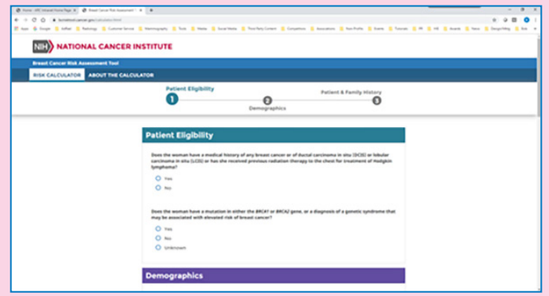
The entire Fast Breast MRI exam takes about 10 minutes (compared to conventional breast MRI that can take up to 30 minutes). You may resume normal activities and diet immediately after your exam.

Benefits and Risks of Fast Breast MRI

- About 50% of women have dense breasts, which may moderately increase their risk of breast cancer.
- Dense breast tissue makes it more difficult to find cancers with mammography. Breast MRI is not limited by breast density and has been proven to increase cancer detection by up to 150%.
- MRI is a noninvasive and does not involve exposure to ionizing radiation.
- The shorter scan times of Fast Breast MRI help alleviate the claustrophobia felt by many MRI patients.
- The contrast material used in MRI exams is less likely to produce an allergic reaction than contrast materials used for conventional X-rays and CT scanning.
- The lower cost of Fast Breast MRI makes it 80-90% less costly than standard breast MRI.

Estimating Your Breast Cancer Risk

The National Cancer Institute offers an online risk assessment tool based on a statistical model. The tool uses a woman's own personal information to estimate risk of developing invasive breast cancer over specific periods



bcrisktool.cancer.gov/calculator.html