

It is important to note that breast MRI, an evolving technology, should not replace appropriate standard screening and diagnostic tools, such as:

- Breast self-examination
- Physical examination of the breast by a qualified professional
- Screening and diagnostic mammography
- Diagnostic Ultrasound

The American Cancer Society expert panel has reviewed new evidence regarding the use of Screening Breast Magnetic Resonance Imaging (MRI) for breast cancer. The expert panel reviewed this evidence and defined three levels of risk. These new recommendations are listed below. Please be aware that Screening Breast MRI does not replace mammography, but is considered an additional test. These recommendations are only for screening asymptomatic women, and do not apply to women who have symptoms or signs of breast cancer, including a lump or an abnormality on mammography or ultrasound.

1. **MRI Breast Cancer Screening is recommended for women with a lifetime risk of 20 to 25 percent or greater for developing breast cancer. These include:**
 - Women with a breast cancer gene, BRCA1 or 2 (Breast Cancer 1 or 2)
 - Women who are a first degree relative (parent, sibling, or child) of someone with a breast cancer gene
 - Women who have a lifetime risk of 20-25 percent based on a breast cancer prediction model determined primarily by family history, such as the BRCAPRO model
 - Radiation to the chest between age 10 and 30 years (such as is given for Hodgkin's Disease).
 - Various rare syndromes that have a high incidence of breast cancer
2. **There is insufficient evidence to determine if MRI Breast Cancer Screening is useful or not for:**
 - Women who have a lifetime risk of 15-20 percent based on a breast cancer prediction model determined primarily by family history, such as the BRCAPRO model
 - Lobular carcinoma in situ (LCIS) or atypical lobular hyperplasia (ALH)
 - Atypical ductal hyperplasia (ADH)
 - Dense breasts on mammography
 - Women with a personal history of breast cancer, including ductal carcinoma in situ (DCIS)
3. **MRI Breast Cancer Screening is not recommended for women who have a less than 15 percent lifetime risk of breast cancer. This includes most women.**

For further information regarding the new recommendations of Breast MRI, please call OhioHealth Cancer Call, 614-566-4321.

SOURCE: ACR, ACS, Mayo Clinic

Benefits of Breast MRI

- Sensitive to small abnormalities
- Effective in dense breasts
- Can image breast implants/ruptures
- Can evaluate inverted nipples
- Can locate primary tumor in women whose cancer spread to armpit lymph nodes
- Can detect residual cancer after lumpectomy
- Can determine what type of surgery is indicated: lumpectomy or mastectomy
- Can detect cancer recurrence after lumpectomy
- May be useful to screen women at high breast cancer risk

Limitations to Breast MRI

- Non-specific; often cannot distinguish cancerous and non-cancerous tumors
- Cannot image calcifications, tiny calcium deposits that can indicate early breast cancers
- Not widely available
- Some patients who are claustrophobic may not tolerate MRI
- Requires use of contrast agent
- More time-consuming than mammography
- Women with renal disease may not be a candidate