

# Breast MRI in Newly Diagnosed Cancer

Breast MRI (magnetic resonance imaging) scan is an imaging test that uses powerful magnets and radio waves to create pictures of the breast and surrounding tissue. It does not use radiation (X-RAY). A breast MRI may be done in combination with mammography or ultrasound. It is not a replacement for mammography.

The MRI machine is a large, cylindrical (tube-shaped) machine that creates a strong magnetic field around the patient.

For a breast MRI, the woman usually lies face down, with her breasts positioned through openings in the table. To check breast positioning, the technologist watches the MRI through a window while monitoring for any potential movement. A breast MRI usually requires the use of contrast. The contrast is injected into a vein in the arm before or during the procedure. The dye can help create clearer images and outline abnormalities.

## Reasons to order MRI

MRI provides detailed pictures of the breast. It can also provide pictures of parts of the breast that are hard to see clearly on an ultrasound or mammogram.

But once breast cancer is discovered, your doctor might order an MRI for several different reasons:

- To find additional cancers in the breast where the cancer is first detected. MRI found evidence of additional disease in about 16 percent of women who underwent imaging before surgery.

- To detect cancer in the opposite breast. MRI will find cancer in the second breast about 3 to 5 percent of the time even when a mammogram or clinical exam fails to find it.
- To look for cancer in the breasts of a woman found to have a cancerous axillary (armpit) lymph node. If a mammogram does not identify any cancer of the breast, MRI can be done.
- To help with the most effective treatment plan possible. Information from the MRI helps the surgeons determine if lumpectomy or mastectomy is the best treatment option and helps the oncologist to determine if the patient needs chemotherapy before the surgery.