Current indications for breast MRI include, but are not limited to:

**Lesion characterization**-breast MRI may be indicated when other imaging examinations, such as ultrasound and mammography, and physical examination are inconclusive for the presence of breast cancer. Breast MRI may be helpful in patients who have had previous surgery for breast cancer, to distinguish between postoperative scarring and recurrent cancer. Other conditions that may impair conventional breast imaging, such as silicone augmentation or radiographically dense breasts, may warrant breast MRI depending on the clinical findings.

**Neoadjuvant chemotherapy**-Breast MRI may be employed before, during, and/or after a course of chemotherapy to evaluate chemotherapeutic response to the extent of residual disease prior to surgical treatment. MRI-compatible localization tissue markers placed prior to neoadjuvant chemotherapy may be helpful in the event of complete response with no detectable residual tumor for resection.

**Infiltrating lobular carcinoma**-Physical examination, mammography, and ultrasound may be limited in the evaluation of infiltrating lobular carcinoma. Breast MRI may be indicated for evaluation of extent, multifocality, and multicentricity.

**Infiltrating ductal carcinoma**-Breast MRI may be indicated in order to determine the extent of disease, particularly in breast conservation candidates. MRI determines the extent of disease more accurately than standard mammography and physical examination in many patients.

**Axillary adenopathy, primary unknown**-MRI may be indicated in patients presenting with axillary adenopathy and no mammographic or physical findings of primary breast carcinoma. In patients with breast cancers, breast MRI can locate the primary tumor and define the disease extent for definitive therapy. A negative breast MRI may exclude the breast as a potential primary site of cancer and avoid a mastectomy that would provide no treatment benefit.

**Post-operative tissue reconstruction**- Breast MRI may be indicated in the evaluation of suspected cancer recurrence in patients with tissue transfer flaps (rectus, latissimus, dorsi, and gluteal) or implants.

**Silicone and non-silicone breast augmentation**- Breast MRI may be indicated in the evaluation of patients with silicone implants and/or injections in whom mammography is difficult, and in patients with non-silicone implants. In these settings, breast MRI may be helpful in the diagnosis of breast cancer and in the evaluation of implant integrity and rupture.

**Invasion deep to fascia**-MRI evaluation of breast carcinoma prior to surgical treatment may be indicated in both mastectomy and breast conservation candidates to define the relationship
to the fascia, extension into pectoralis major, or extension into serratus anterior and intercostals muscles.

Contralateral breast examination in patients with breast malignancy- MRI can detect unsuspected disease in the contralateral breast in at least 4%-5% of breast cancer patients. This is often in the face of negative findings on mammography and physical examination.

Postlumpectomy for residual disease-Breast MRI may be used in the evaluation of residual disease in patients who have not had preoperative MRI and whose pathology specimens demonstrate close or positive margins for residual disease. MRI can evaluate for multifocality and multicentricity to help determine which patients could be effectively treated by re-excision or whether a mastectomy is required due to the presence of more extensive disease.

Surveillance of high-risk patients-Recent clinical trials have demonstrated that breast MRI can significantly improve the detection of cancer that is otherwise clinically and mammographically occult. Breast MRI may be indicated in the surveillance of women with a genetic predisposition to breast cancer. Patients should be referred for surveillance breast MRI only after genetic counseling by experts in hereditary breast cancer.

Recurrence of breast cancer-Breast MRI may be indicated in women with a prior history of breast cancer and suspicion of recurrence when clinical and/or mammographic findings are inconclusive.