

Quality control of MRI systems used for diagnostic breast MR imaging and biopsy guidance is important to ensure the production of high quality images. Breast MR images may be acquired using dedicated breast MRI scanners, whole body MRI scanners with detachable tabletop breast coils or tables designed with integrated breast coils. 1.5T and 3T multi-channel arrays are now available. Many of these coils are designed to enable MR-guided breast biopsy.

In May 2010 the ACR launched the ACR Breast Magnetic Resonance Imaging Accreditation Program. The program requires that a medical physicist/MR scientist perform MRI system testing after installation, annually and following major upgrade or repair. Testing must include annual evaluation of all breast imaging and biopsy coils used clinically.

Educational objectives:

1. Describe different breast coil designs
2. Discuss breast coil quality control procedures
3. Provide an overview of the ACR Breast MRI Accreditation Program including quality control requirements