

MR SIM: Supine Breast

11/29/2016 EP

Patient Preparation:

- Have patient change into gown.
- Confirm GFR > 60 within 45 days.

Coils and Immobilization Devices:

- (2) Large flex (surface) coils
- (2) Coil bridges
- (2) Nylon locking straps
- MR-compatible CQUAL board
- Respiratory bellows and Bluetooth transceiver
- Headphones

Setup and Landmark:

1. Remove everything from MRI table including spine array coil.
2. Position MR-compatible CQUAL board on couch.
3. Lay respiratory bellows on CQUAL board.
4. Setup patient head-first supine. Secure patient's upper extremities arm and wrist supports.
5. Call Radiation Therapists (x53809) to verify patient setup.
6. Place **RF coil bridges** over chest in scanner table slots and adjust to conform to patient surface anatomy.
7. Arrange **both** large flex coils circumferentially over RF coil bridges and secure with two Nylon straps. Position coils as superior as possible without hitting arms. Confirm breasts are not deformed.
8. Place **head phones** on patient, if possible, to hear breathing instructions.
9. Landmark over center of breasts.

Protocol:

- USER → MR SIM → BREAST → SUPINE

Scans:

- LOC – Free Breathing
- AX T1 (2:30):
 - Gated (50% phase). Scan coverage should run from larynx to diaphragm. Use bellows for respiratory triggering if issues encountered with navigator.
- AX STIR HASTE (2:30):
 - Gated (50% phase). Copy AX T1 prescription.
- AX Neurography (2:00):
 - Copy AX T1 prescription.
- Ax T1+(f) BH (0:19):
 - Breath hold at **end expiration**.

Post-Scanning:

- **Distortion-correct all images** (in the Browser window, select a series and then go to Evaluation → 3D Distortion Correction. Note: After correction the corrected images will have a “_DIS3D” suffix).
- Send the distortion-corrected images (i.e., those with a “_DIS3D” suffix) to **MIM Clinical** and **PACS**.
- **If advanced imaging performed**, transfer raw k-space data with Yarra client (Ctrl+Esc → Transfer Raw Data).

