

MR SIM: Pancreas

03/25/2017 EP

Patient Preparation:

- Have patient change into gown
- Confirm GFR > 60 within 45 days
- Place IV line into patient arm. Fill injector.

Equipment (Coils, Immobilization Devices, etc):

- Spine array coil
- (2) Large flex (surface) coils
- (2) Coil bridges
- (2) Nylon straps
- G9 fiberglass flat table overlay
- Respiratory bellows and Bluetooth transceiver
- Headphones
- Patient-specific immobilization device (whole body vac-fix or alpha cradle)



Setup and Landmark:

1. Remove everything from MR table except spine array coil.
2. Secure G9 fiberglass in place over spine array.
3. Secure patient's alpha cradle.
4. Lay respiratory bellows on immobilization device.
5. Setup the patient head-first supine, with arms above head, making sure pelvic crest is above S8 on the spine array coil.
6. Call radiation therapists (x53809) to verify patient setup.
7. Place **RF coil bridges** over abdomen in scanner table slots and adjust to conform to patient surface anatomy.
8. Arrange **both** body flex coils circumferentially over RF coil bridges and secure with two Nylon straps.
9. Administer **1mg Glucagon** IV (1/2 at start of exam, 1/2 midway through exam).
10. Place **head phones** on patient, if possible, to hear breathing instructions.
11. Landmark over diaphragm.

Protocol:

- USER → MR SIM → ABDOMEN → PANCREAS

Scans:

- LOC – Free Breathing
- LOC – Breath Hold at **end expiration**
- AX T2 HASTE (Panc Only) (2:00):
 - Navigator-gated with navigator (switch to bellows if needed). Cover the pancreas with small S-I margin.
- AX T2(f) HASTE (Panc Only) (2:30):
 - Gated. Copy AX T2 HASTE and navigator prescription.
- AX DWI b=150/500/1000 (Full Liver) (5:30):
 - Gated. Use diagnostic prescription (full liver coverage)
- AX T1(f) DIXON CAIPI BH Pre (0:12):
 - Breath hold at **end expiration**. Use diagnostic prescription (full liver coverage)
- Bolus Tracking
- AX T1+(f) DIXON CAIPI BH Art (0:12):
 - Breath hold at **end expiration**. Copy "AX T1(f) DIXON CAIPI BH Pre" prescription.
- AX T1+(f) DIXON CAIPI BH Ven (0:12):
 - Breath hold at **end expiration**. Copy "AX T1(f) DIXON CAIPI BH Pre" prescription.
- AX T1+(f) DIXON CAIPI BH Eq (0:12):
 - Breath hold at **end expiration**. Copy "AX T1(f) DIXON CAIPI BH Pre" prescription.
- AX T1+(f) DIXON CAIPI BH Del (0:12):
 - Breath hold at **end expiration**. Copy "AX T1(f) DIXON CAIPI BH Pre" prescription.

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).