

Patient Name: RT#:

USER --> MR SIM --> ABDOMEN --> LIVER (Cholangiocarcinoma, Bile Duct)

		Technologist
Setup	Review prior images in PACS	
	Confirm patient GFR > 30	
	Setup power injector (see Table 1)	
	Patient changed into gown; confirm whether MR-compatible bra worn during CT sim	
	Flat table overlay positioned on MRI couch and covered with sheet	
	Confirm immobilization device fits through MRI bore and coil plugs have clearance	
	Arm support indexed on flat table overlay	
	External lasers reset (zeroed) prior to setting up patient	
	Respiratory bellows positioned at inferior sternum as navigator backup	
	Straighten patient using external sagittal laser and patient black marks	
	Place IV (left antecubital preferred)	
	Nasal cannula placed on patient with oxygen at 2-3 Liters/min	
	Arm support adjusted to maximize patient comfort or match CT Sim settings (Mosaik)	
	Head phones placed on patient	
	Two flexible, body MATRIX coils supported on bridges and secured with straps	
Confirm coils do not deform anterior surface anatomy		
Legs positioned on bolster		
Inject 0.5 mg Glucagon IV		
External lasers turned off		
Localizers	Expiration breath hold loc	
Acquisition	Prescribe diaphragm through kidneys if possible; must have full liver	
	Confirm auto-coil select off, coil selection appropriate, and coils same for each sequence	
	High order shim volume adjusted over body and copied to each sequence	
	Confirm positioning mode set to ISO for all sequences	
	Use respiratory period from navigator scout to calibrate TR for all triggered sequences	
	Confirm intensity uniformity correction set to Pre-Scan Normalize (Resolution --> Filter)	
	DWI: Adjust phase FOV to avoid aliasing	
	DWI: Optimize readout bandwidth to minimize effective echo spacing	
	Inject remaining 0.5 mg Glucagon IV	
	If "MR SIM with Interpretation", add missing diagnostic sequences	
Multiphase Dynamic Contrast	Confirm acquisition time for all breath hold phases	<15
	Breath holds performed on expiration	sec
	Bolus tracking slice positioned over descending aorta	
	If 4D-MRI: Run between 15 min and 20 min delayed images	
Images screened for artifacts. If necessary, resolve artifact source and re-acquire		
Post-Scanning	3D distortion correction applied to all images	
	Check Dixon images for fat-water swap; only send actual water-only images to MIM	
	3D distortion corrected images (_DIS3D suffix) sent to MIM_Clinical	
	If 4D-MRI acquired: send Header scan to Bloch	
	If 4D-MRI acquired: Run Yarra client (Ctrl+Esc --> Transfer Raw Data)	
Non-distortion corrected images (_ND or _DIS2D) deleted from PACS		
		Initials/Date:

Table 1: Power Injector Settings

Contrast Media	Eovist
Contrast Volume	10 mL (fixed)
Injection Rate	3 mL/sec
Saline Flush	5.5 mL