LIVER 3T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• NPO 4 hours • Cover entire liver
Common Indications	Characterization or follow up liver mass, patients with malignancy, abdominal pain, infection
Position	Head or Feet first; Supine
Coil	Body Array (anterior); Spine Array (posterior) - Be sure ISO, AUTO-COIl SELECT is on
Landmark	Xyphoid. Center in the middle of body array coil. Table can be re-centered following the localizer

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate	Dose Timing Method and Scan Delay
Gadopiclenol (VUEWAY)	0.05 mmol/kg	2 mL/sec	Use CareBolus (CB) to track contrast to diaphragm; stop CB; perform breath hold (BH) command (~6 sec); start Arterial-phase acquisition
Saline Flush	20 mL	2 mL/sec	—
Comments	• Report agent administered and dose • Use minimal dose for patients with a GFR <30 mL/sec		

IMAGING PARAMETERS

Scan Description	LOCALIZER BH	CORONAL T2 HASTE	AXIAL 3D In-Out-of-Phase	AXIAL DWI	AXIAL VIBE Pre CAIPI	Care Bolus	AXIAL VIBE Post CAIPI Double Arterial	AXIAL VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post 180 sec	AXIAL T2 Fat Sat
Sequence Name	fl	h	fl	epse	fl	fl	fl	fl	fl	tse
Dimension	2D	2D	3D	—	3D	2D	3D	3D	3D	2D
Acceleration mode	GRAPPA	GRAPPA	CAIPIRINHA	SMS	CAIPIRINHA	None	CAIPIRINHA	CAIPIRINHA	CAIPIRINHA	GRAPPA
Acceleration Factor PE	2	3	2	2	2	—	2	2	2	2
Acceleration Factor 3D	—	—	2	—	2	—	2	2	2	—

SCAN PARAMETERS

Scan Description	LOCALIZER BH	CORONAL T2 HASTE	AXIAL 3D In-Out-of-Phase	AXIAL DWI	AXIAL VIBE Pre CAIPI	Care Bolus	AXIAL VIBE Post CAIPI Double Arterial	AXIAL VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post 180 sec	AXIAL T2 Fat Sat
TR	7.8 ms	1400 ms	4.6 ms	3000 ms	2.8 ms	68.77 ms	2.8 ms	2.8 ms	4.6 ms	2630 ms
TE	3.69 ms	87 ms	1: 1.23 ms 2: 2.46 ms	60 ms	1.12 ms	1.52 ms	1.12 ms	1.12 ms	2.20 ms	82 ms
Flip Angle	20 deg	160 deg	9 deg	—	10 deg	30 deg	10 deg	10 deg	10 deg	120 deg
Turbo Factor	—	256	—	—	—	—	—	—	—	19
Bandwidth	320 Hz/Px	698 Hz/Px	1200 Hz/Px	2084 Hz/Px	690 Hz/Px	400 Hz/Px	690 Hz/Px	690 Hz/Px	350 Hz/Px	195 Hz/Px
Fat-Water Contrast	Standard	Standard	Dixon	SPAIR	Fast Fat Saturation	Standard	Fast Fat Saturation	Fast Fat Saturation	Fast Fat Saturation	SPAIR
Fat Saturation	—	—	—	Strong	—	—	—	—	—	Strong
Gradient Mode	Normal	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Fast	Normal
RF Pulse Type	Normal	Fast	Fast	Low SAR	Fast	Low SAR	Fast	Fast	Fast	Normal
Asymmetric Echo	Allowed	—	Off	—	Weak	Allowed	Weak	Weak	Off	—

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Supported by an educational grant from Bracco Diagnostics Inc.

MR Gadopiclenol (VUEWAY®) Protocol for Siemens MRI Scanners
Body MR Imaging

IMAGING FORUMS, INC.

ACQUISITION PARAMETERS

Scan Description	LOCALIZER BH	CORONAL T2 HASTE	AXIAL 3D In-Out-of-Phase	AXIAL DWI	AXIAL VIBE Pre CAIPI	Care Bolus	AXIAL VIBE Post CAIPI Double Arterial	AXIAL VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post 180 sec	AXIAL T2 Fat Sat
Base Resolution	256	256	320	160	288	192	288	288	320	256
Phase Resolution	60%	100%	75%	100%	80%	77%	80%	80%	75%	69%
Slice Resolution	—	—	57%	—	50%	—	50%	50%	50%	—
Averages	1	1	1	3	1	—	1	1	---	1
Concatenations	26	2	1	1	1	—	1	1	1	4
b-value >=	—	—	—	0 s/mm2 50 s/mm2 800 s/mm2	—	—	—	—	—	—
FoV Read	430 mm	400 mm	400 mm	380 mm	340 mm	350 mm	340 mm	340 mm	400 mm	350 mm
FoV Phase	100%	100%	75%	80%	81%	100%	81%	81%	81%	75%
Phase Encoding Dir.	A >> P	R >> L	A >> P	A >> P	A >> P	A >> P	A >> P	A >> P	R >> L	A >> P
Slice Oversampling	—	—	36%	—	30%	—	30%	30%	—	—
Phase Partial Fourier	6/8	5/8	Off	Off	Off	7/8	Off	Off	Off	Allowed
Slice Partial Fourier	—	—	7/8		7/8	—	7/8	7/8	6/8	—
Flow Compensation	None	None	—	—	—	—	—	—	—	None

SCANNING RANGE

Scan Description	LOCALIZER BH	CORONAL T2 HASTE	AXIAL 3D In-Out-of-Phase	AXIAL DWI	AXIAL VIBE Pre CAIPI	Care Bolus	AXIAL VIBE Post CAIPI Double Arterial	AXIAL VIBE Post CAIPI 60 sec 180 sec	CORONAL T1 VIBE Post 180 sec	AXIAL T2 Fat Sat
Elliptical Filter	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
Normalize	Prescan	Prescan	Prescan	Prescan	Prescan	Off	Prescan	Prescan	Prescan	Prescan
Distortion Correction	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D
Slice Thickness	7.0 mm	6.0 mm	3.0 mm	7.0 mm	3.0 mm	20.0 mm	3.0 mm	3.0 mm	3.0 mm	6.0 mm
Distance Factor	150%	20%	20%	0%	20%	20%	20%	20%	20%	20%
Slices	10 Slices	34 Slices	88 Slices	36 Slices	80 Slices per Slab	1 Slice	80 Slices per Slab	80 Slices per Slab	72 Slices per Slab	38 Slices
Time of Acquisition	19 sec	54 sec	18 sec	1:51 min	13 sec	1:16 min	22 sec	13 sec	17 sec	1:26 min

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