PEDIATRIC ABDOMEN / PELVIS 3T

INSTRUCTIONS AND PATIENT PREPARATION

Anatomical Region	Abdomen / Pelvis
Field Strength	3.0T
Coil	See the Coil Configuration row in the first parameters table below (varies by sequence).
Position & Landmark	Feet first, supine. Landmark: center of the coil in use (typically central to the ROI).
Contrast	Weight-based gadolinium contrast per your institution's protocol, supervising radiologist, and the agent's FDA prescribing information. Postcontrast sequences are marked **+C**.

PATIENT POSITION

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Coil Configuration	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE16chTDIAA, GE40chGEMPA	GE16chTDIAA, GE40chGEMPA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, Inv16chCardiacAA	GE40chGEMPA, Inv16chCardiacAA	GE40chGEMPA, Inv16chCardiacAA	GE40chGEMPA, Inv16chCardiacAA	GE40chGEMPA, Inv16chCardiacAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA	GE40chGEMPA, GE16chTDIAA
Plane	3-PLANE	CORONAL	AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	CORONAL	AXIAL	AXIAL	AXIAL	AXIAL	AXIAL	CORONAL	AXIAL	AXIAL

IMAGING PARAMETERS

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Imaging Mode	2D	2D	2D	2D	3D	3D	2D	2D	3D	3D	3D	3D	3D	3D	3D	3D	3D
Imaging Options	Seq, EDR, Fast, SS, ARC	EDR, Fast, SS, ARC	EDR, TRF, Fast, RT, ARC	EDR, TRF, Fast, RT, ARC	EDR, Fast, ZIP512, ARC	EDR, Fast, ZIP512, ARC	RT, Asset	RT, Asset	EDR, Fast, ARC, Flex	EDR, Fast, ARC	EDR, Fast, ARC	EDR, Fast, SmartPrep, ARC	EDR, Fast, ARC	EDR, Fast, ARC	EDR, Fast, ARC, Flex	EDR, Fast, ARC, Flex	EDR, Fast, ARC, Flex
Pulse Sequence	Spin Echo	Spin Echo	FSE-XL	FSE-XL	SPGR	SPGR	DW EPI	DW EPI	LAVA	LAVA	LAVA	LAVA	LAVA	LAVA	LAVA	LAVA	LAVA
ARC Phase	2	3	2	2	2	2	—	—	2	1.5	1.5	1.5	1.5	1.5	2	2	2
ARC Slice	—	—	—	—	2	2	—	—	2	1.5	1.5	1.5	1.5	1.5	2	2	2
Phase	—	—	—	—	—	—	2	2	—	—	—	—	—	—	—	—	—
PSD Name	—	—	—	—	—	—	—	—	—	efgre3d_aspir	efgre3d_aspir	efgre3d_aspir	efgre3d_aspir	efgre3d_aspir	—	—	—

IMAGE RECON

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Recon DL Strength	Off	Medium	Medium	Medium	Off	Off	Medium	Medium	Off	Off	Off	Off	Off	Off	Off	Off	Off
Intensity Correction	NONE	PURE	SCENIC	SCENIC	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE
Intensity Filter	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Save Original	Off	On	Off	Off	Off	Off	Off	Off	Off	On	On	On	On	On	Off	Off	Off

SCAN RANGE

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
FOV	40	26	26	26	26	26	28	28	26	26	26	26	26	26	26	26	26
Slice Thickness	6	4	4	4	1.5	1.5	4	4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.2	1.2
Slice Spacing	0	0	0.5	0.5	—	—	0.5	0.5	—	—	—	—	—	—	—	—	—
Overlap Locations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No Phase Wrap	1	1	1	1	1	1	—	—	1	1	1	1	1	1	1	1	1
Slices per Slab	—	—	—	—	128	128	—	—	100	96	96	96	96	96	100	152	152
Number of Slices	—	—	—	—	1	1	39	39	—	1	1	1	1	1	—	1	1
No Slab Wrap	—	—	—	—	1.06	1.06	—	—	1.06	1.08	1.08	1.08	1.08	1.08	1.06	1.05	1.05
Slice Resolution(%)	—	—	—	—	50	50	—	—	50	50	50	50	50	50	50	50	50

ACQUISITION TIMING

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Acq Voxel Size	1.0 X 2.5 X 6.0	0.8 X 1.2 X 4.0	0.8 X 1.2 X 4.0	0.8 X 1.2 X 4.0	1.0 X 1.4 X 3.0	1.0 X 1.4 X 3.0	2.9 X 2.9 X 4.0	2.9 X 2.9 X 4.0	0.9 X 1.2 X 2.9	1.0 X 1.3 X 3.0	1.0 X 1.3 X 3.0	1.0 X 1.3 X 3.0	1.0 X 1.3 X 3.0	1.0 X 1.3 X 3.0	0.9 X 1.2 X 2.9	1.2 X 1.2 X 2.4	1.2 X 1.2 X 2.4
Freq	384	320	320	320	256	256	96	96	288	260	260	260	260	260	288	224	224
Phase	160	224	224	224	192	192	96	96	224	200	200	200	200	200	224	224	224
Freq DIR	Unswap	S/I	R/L	R/L	R/L	R/L	R/L	R/L	S/I	R/L	R/L	R/L	R/L	R/L	S/I	R/L	R/L
# of Acq. Before Pause	0	0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phase FOV	1	1	0.8	0.8	0.8	0.8	1	1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
Auto Shim	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Phase Correct	Off	Off	Off	Off	Off	Off	On	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
RF Drive Mode	Quadrature (CP)	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset	Preset
Excitation Mode	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective	Selective
NEX	—	1	2	2	—	—	—	—	1	1	1	1	1	1	1	1	1
Fat Shift DIR	—	—	Normal (L)	Normal (L)	—	—	—	—	—	—	—	—	—	—	—	—	—

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MR Gadopiclenol (VUEWAY®) Protocol for GE MRI Scanners
Pediatric

IMAGING FORUMS, INC

SCAN TIMING

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
TE	80	80	90	85	Minimum	Minimum	Minimum	Minimum	Minimum	—	—	—	—	—	Minimum	Minimum	Minimum
Number of Echoes	1	1	1	1	2	2	1	1	2	1	1	1	1	1	2	2	2
TR	Minimum	Minimum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Receiver Bandwidth	83.33	83.33	41.67	41.67	142.86	142.86	—	—	142.86	83.33	83.33	83.33	83.33	83.33	142.86	142.86	142.86
Flip Angle	—	130	111	111	12	12	—	—	15	15	15	15	15	15	15	15	15
Echo Train Length	—	—	19	19	—	—	—	—	—	—	—	—	—	—	—	—	—
Number of Shots	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—
TI	—	—	—	—	—	—	—	—	—	24	24	24	24	24	—	—	—

CONTRAST

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Contrast Yes/No	No	No	No	No	No	No	No	No	No	No	+C	+C	+C	+C	+C	+C	+C

OTHERS

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Anatomical Region	Abdomen and Pelvis	Liver	Abdomen	Pelvis	Abdomen	Pelvis	Abdomen	Abdomen	Abdomen and Pelvis	Abdomen	Abdomen	Abdomen	Abdomen	Abdomen	Abdomen and Pelvis	Abdomen	Pelvis
3D Geometry Correction	—	Off	—	—	On	On	Off	Off	On	On	On	On	On	On	On	Off	Off

SATURATION

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Fat/Water Saturation	—	—	Fat	Fat	—	—	Fat	Fat	—	Fat Special	Fat Special	Fat Special	Fat Special	Fat Special	—	—	—

GATING / TRIGGER

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Resp. Trigger Point	—	—	30	30	—	—	30	30	—	—	—	—	—	—	—	—	—
Resp. Trigger Window	—	—	30	30	—	—	30	30	—	—	—	—	—	—	—	—	—
Resp. Inter-Seq Delay	—	—	Minimum	Minimum	—	—	Minimum	Minimum	—	—	—	—	—	—	—	—	—

DIFFUSION

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Multi b-values	—	—	—	—	—	—	50.0;400.0;700.0;	50.0;400.0;700.0;	—	—	—	—	—	—	—	—	—
Optimized TE	—	—	—	—	—	—	On	On	—	—	—	—	—	—	—	—	—
Multi NEX Values	—	—	—	—	—	—	2.0;4.0;6.0;	2.0;4.0;6.0;	—	—	—	—	—	—	—	—	—
Diffusion Directions	—	—	—	—	—	—	3in1	3in1	—	—	—	—	—	—	—	—	—
Number of Diffusion Directions	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—
Number of T2 Images	—	—	—	—	—	—	0	0	—	—	—	—	—	—	—	—	—
Dual Spin Echo	—	—	—	—	—	—	Off	Off	—	—	—	—	—	—	—	—	—
# Synthetic b-values	—	—	—	—	—	—	0	0	—	—	—	—	—	—	—	—	—
Recon All Images	—	—	—	—	—	—	On	On	—	—	—	—	—	—	—	—	—
Real Time Field Adjustment	—	—	—	—	—	—	On	On	—	—	—	—	—	—	—	—	—

TRACKER

Scan Description	3Plane Loc	Cor T2 SSFSE	Ax T2 fat Abd	Ax T2 fat Pelvis	Ax IP/OP Abd	Ax IP/OP Pelvis	Ax DWI Abd b50, 400, 700	Ax DWI Pel b50, 400, 700	Cor T1 Pre	Ax T1 Pre Pel	Ax T1 Pre Abd	Ax T1 Arterial	Ax T1 Portal Venous	Ax T1 Post Pelvis	Cor T1 LAVA-Flex Post Abd/Pel	Ax T1 LAVA-Flex Post Abd	Ax T1 LAVA-Flex Post Pelvis
Tracker Length	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—
Tracker Thickness	—	—	—	—	—	—	—	—	—	—	—	20	—	—	—	—	—

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