NW
IMAGING FORUMS, INC.

ROUTINE TOTAL SPINE 1.5T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• Sagittal - cover through foramina • Axials should cover the entire spine
Common Indications	Tumor, infection, post surgery
Position	Supine head first
Coil	C/T/L, HNU + GEMS Spine
Landmark	Mid sternum

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate
Gadopiclenol (VUEWAY)	0.05 mmol/kg up to a calculated volume of 10 mL	Hand Bolus
Saline Flush	10-20 mL	Hand Bolus

IMAGING PARAMETERS

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FSE	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL T2 MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1	L-spine SAGITTAL T2	L-spine SAGITTAL STIR	L-spine AXIAL T2	Post C-spine AXIAL T1	Post C-spine SAGITTAL T1 FS	Post T-spine AXIAL T1	Post T-spine SAGITTAL T1 FS	Post L-spine AXIAL T1	Post L-spine SAGITTAL T1 FS
Primary Sequence	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes Post contrast	Yes Post contrast	Yes Post contrast	Yes Post contrast	Yes Post contrast	Yes Post contrast
Mode	2D Std Loc	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D	2D
Pulse Sequence	SSFSE	FSE	FRFSE-XL	FSE-IR	MERGE	FSE-XL	FSE-XL	FSE-IR	FSE-XL	FSE-XL	FRFSE-XL	FSE-IR	FSE-XL	FSE-XL	FSE-XL	FSE-XL	FSE-XL	FSE-XL	FSE-XL
Parallel Imaging	2	No	No	2	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Options	SEQ, TRF, EDR, FAST, SS, ARC	TRF, EDR, SEQ, FAST	FC, TRF, FAST, FR	EDR, TRF, FAST, FR, ARC, IRP, PROPELLER	FC, TRF, FAST, FR	NPW, FC, TRF, FAST	NPW, SEQ, TRF, FAST	NPW, SEQ, TRF, FAST	NPW, FC, TRF, FAST	TRF, FAST	TRF, FAST, FR, FC	TRF, FAST, FR, FC	TRF, FAST, FR, FC	TRF, FAST	TRF, FAST	NPW, ZIP512	NPW, TRF, FAST	NPW, ZIP512	NPW, TRF, FAST

SCAN PARAMETERS

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FSE	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL T2 MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1	L-spine SAGITTAL T2	L-spine SAGITTAL STIR	L-spine AXIAL T2	Post C-spine AXIAL T1	Post C-spine SAGITTAL T1 FS	Post T-spine AXIAL T1	Post T-spine SAGITTAL T1 FS	Post L-spine AXIAL T1	Post L-spine SAGITTAL T1 FS
TE	80	Min-Full	102	42	5.5	102	Min-Full	42	85	Min-Full	85	60	87	Min-Full	Min-Full	Min-Full	Min-Full	Min-Full	Min-Full
TR	Min	500	3000	4000	850	4000	750	4000	4000	800	4000	3500	4000	500-700	500-700	650	500-700	650	500-700
TI	—	—	—	160	—	—	—	160	—	—	—	160	—	—	—	—	—	—	—
Flip Angle	—	—	Auto	Auto	20	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	—	—	Auto	Auto	Auto	Auto
ETL	—	3	21	18	4 Echo	21	3	10	27	3	27	11	12	3	33	4	3	4	3
Bandwidth	83	20	41	83	150-230	41	20	20	31	31	41	20	31	20	20	31	20	31	20
SAT	—	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior/ Optional Fat	Anterior/ Fat Sat	Anterior/ Optional Fat	Anterior/Fat	Anterior	Anterior/Fat

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Supported by an educational grant from Bracco Diagnostics Inc.

MR Gadopiclenol (VUEWAY®) Protocol for GE HealthCare Systems
Central Nervous System

IMAGING FORUMS, INC.

ACQUISITION PARAMETERS

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FSE	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL T2 MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1	L-spine SAGITTAL T2	L-spine SAGITTAL STIR	L-spine AXIAL T2	Post C-spine AXIAL T1	Post C-spine SAGITTAL T1 FS	Post T-spine AXIAL T1	Post T-spine SAGITTAL T1 FS	Post L-spine AXIAL T1	Post L-spine SAGITTAL T1 FS
MATRIX freq	256	320	320	260	288	320	384	288	320	320	320	256	320	256	320	256	384	256	384
MATRIX phase	128	224	256	260	224	256	256	192	224	224	224	224	224	192	224	192	256	192	256
NEX	1	3	4	3	2	4	2	3	2	3	4	1	2	3	3	2	3	2	3
Freq DIR	—	S/I	S/I	S/I	R/L	S/I	S/I	S/I	A/P	S/I	S/I	S/I	A/P	R/L	S/I	A/P	S/I	A/P	S/I
FC Direction	—	No	Freq	No	Yes	Freq	No	Freq	Slice	—	Freq	Slice	Slice	Slice	No	Slice	No	Slice	No

SCANNING RANGE

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FSE	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL T2 MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1	L-spine SAGITTAL T2	L-spine SAGITTAL STIR	L-spine AXIAL T2	Post C-spine AXIAL T1	Post C-spine SAGITTAL T1 FS	Post T-spine AXIAL T1	Post T-spine SAGITTAL T1 FS	Post L-spine AXIAL T1	Post L-spine SAGITTAL T1 FS
FOV	40	22	22	22	20	32	32	32	22	26	26	26	22	20	22	20	32	20	26
Phase FOV	—	0.8	0.8	1	0.8	1	1	1	1	.9	.9	.9	.9	0.8	0.8	1	1	1	1
Filter	—	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE
Slice Thickness	5	4	4	4	5	4	4	4	5	4	4	4	5	4	4	5	4	5	4
Spacing %	10	.4	.4	.4	1	.4	.4	.4	1	.4	.4	.4	1	Interleaved	.4	1	.4	1	.4
Number of Slices	10-15 each plane	15	15	15	28-35	12-17	12-17	12-17	30-40	14-20	14-20	14-20	25-35	28-35	15	28-35	12-17	28-35	12-17
Scan Time	0:25 sec	~3-4 min	~3 min	~4 min	~5 min	~4 min	~2-3 min	~4 min	~4.5 min	~3.5-4 min	~3 min	~4.5 min	~4-6 min	~3-4 min	4 min	~3-4 min	~2-3 min	~3-4 min	~2-3 min

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