ROUTINE TOTAL SPINE 3.0T

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 coil
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 FLAIR	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1 FLAIR	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1 FLAIR	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	Yes Post contrast	Yes	Yes	Yes Contrast	No
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	T1 FLAIR	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	2	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Options	SEQ, TRF, EDR, FAST, SS, ARC	NPW, TRF, EDR, SEQ, FAST	NPW, FC, TRF, FAST, FR	SEQ, FC, FAST, PROPELLER, TRF	FC, NPW, TRF, FAST, FR	NPW, FC, TRF, FAST	FC, NPW, SEQ, TRF, FAST	NPW, SEQ, TRF, FAST	NPW, FC, TRF, FAST	NPW, FC, EDR, SEQ, TRF, FAST	FC, NPW, TRF, FAST, FR	NPW, EDR, TRF, FAST, FC	NPW, TRF, FAST, FR, FC	TRF, FAST, NPW	TRF, FAST	NPW, ZIP512	TRF, FAST	NPW, EDR, TRF, FAST, FC	NPW, EDR, TRF, FAST, FC

SCAN PARAMETERS

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FLAIR	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1 FLAIR	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1 FLAIR	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	24	102	42	5.5	102	24	42	85	24	85	60	87	15	15	15	15	15	15
TR	Min	2100	3000	4000	850	4000	3500	4000	4000	3500	4000	3500	4000	500-700	500-700	650	500-700	500	500
TI	—	Auto	—	180	—	—	Auto	180	—	Auto	—	160	—	—	—	—	—	—	—
Flip Angle	—	Auto	Auto	Auto	20	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto	—	—	Auto	Auto	Auto	Auto
ETL	—	8	21	18	4 echo	21	8	10	27	8	27	11	12	3	33	4	3	3	3
Bandwidth	83	35	41	83	150-230	41	41	20	31	41	41	20	31	20	20	31	20	25	25
SAT	—	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior	Anterior/ Optional Fat	Anterior/Fat	Anterior/ Optional Fat	Anterior/Fat	Anterior/ Optional Fat	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 FLAIR	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1 FLAIR	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1 FLAIR	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	384	288	288	384	384	288	320	384	320	256	320	320	320	320	320	320	320
MATRIX phase	128	256	256	256	256	224	256	192	224	224	224	256	224	192	224	192	192	224	224
NEX	1	2	4	3	2	3	2	3	2	3	4	1	2	3	3	2	3	2	4
Freq DIR	—	A/P	A/P	A/P	R/L	S/I	S/I	S/I	A/P	A/P	A/P	A/P	A/P	R/L	A/P	A/P	S/I	A/P	A/P
FC Direction	—	No	Freq	Freq	Slice	Freq	Freq	Freq	Slice	—	Freq	Slice	Slice	Slice	No	Slice	No	Slice	Freq

SCANNING RANGE

Scan Description	3PL LOCALIZER Upper and Lower	C-spine SAGITTAL T1 FLAIR	C-spine SAGITTAL T2	C-spine SAGITTAL STIR	C-spine AXIAL MERGE	T-spine SAGITTAL T2	T-spine SAGITTAL T1 FLAIR	T-spine SAGITTAL STIR	T-spine AXIAL T2	L-spine SAGITTAL T1 FLAIR	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	18	32	32	32	20	26	26	26	20	18	22	20	32	20	26
Phase FOV	—	1	1	1	.8	1	1	1	1	1	1	1	1	.8	1	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	3	4	3	4	4
Spacing	10	.4	.4	.4	1	.4	.4	.4	.5	.4	.4	.4	1	Interleaved	1	1	0.3	1	1
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	25-35	14-20
Scan Time	0:25 sec	~3-4 min	~3 min	~4 min	~5 min	~4 min	~2-3 min	~4 min	~4 min	~3.5-4 min	~3 min	~4.5 min	~4-6 min	~3-4 min	4 min	~3-4 min	~2-3 min	~4-6 min	~3.5-4 min

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