NW
IMAGING FORUMS, INC.

ROUTINE STROKE BRAIN 1.5T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• The Neck TOF sequences are typically done only if the contrasted neck sequences are limited • If perfusion-weighted imaging (PWI) or MRA Coronal is performed, a Power Injector should be used to administer contrast agent (split dose 1/3 MRA, 2/3 PWI) • Contrast sequences provide superior resolution and image quality for MRA in the neck
Position	Supine, head first
Coil	Head. If Neck is being imaged use NVPA or HNU
Landmark	Glabella/Nasion

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate	Dose Timing Method and Scan Delay
Gadopiclenol (VUEWAY)	0.15 mmol/kg up to a calculated volume of 20 mL	TRICKS - inject 0.1 mmol/kg (max 15 mL) @ 1.5 mL/sec Perfusion (DSC PWI) - 0.05 mmol/kg (max 5 mL) @ 4 mL/sec	TRICKS - Scan Mask, Scanner Pauses, Inject contrast, wait 5 sec, then start scan Perfusion (DSC PWI) - Start scan and inject contrast after 12 sec of scanning
Saline Flush	20-30 mL	TRICKS - 1.5 mL/sec Perfusion (DSC PWI) - 4 mL/sec	
Comments	Report agent administered and dose		

IMAGING PARAMETERS

Scan Description	3PL LOCALIZER	SAGITTAL T1	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL T2* GRE	AXIAL DWI	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Carotid Hires	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL T1 CUBE	Optional for dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for motion: AXIAL T1
Primary Sequence	Yes	Yes	Yes	Yes	Yes	Yes	Optional	Yes	Yes	No	Yes	No	Yes	Yes	No	No	No
Mode	2D	2D	2D	3D BRAVO	2D	2D	2D VASC	3D VAC	3D VASC	2D	3D	3D	3D BRAVO	3D	2D	2D	2D
Pulse Sequence	SSFSE	FSE-XL	FSE-PROP	BRAVO	GRE	SE-EPI	TOF	3D TOF SPGR	3D TOF SPGR	GRE EPI	TRICKS	CUBE	BRAVO	CUBE	FSE-XL	FSEIR-PROP	SE-MEMP
Imaging Options	SEQ, EDR, FAST, SS, ARC, TRF	TRF, FAST, ZIP512	PROP	FAST, IRP, ZIP2, ASSET	FC, ZIP512	EPI, DIFF, ASSET	FC, SEQ, FAST	FC, EDR, ZIP2, ASSET	FC, EDR, MT, ZIP2, ARC	ASSET, EPI, MPH	FAST, ZIP2, ASSET	ARC, T2-IRP, ZIP2, EDR	FAST, IRP, ZIP2, ASSET	EDR, ZIP2, ZIP512, FR, ARC	TRF, FAST	PROP, TRF	EDR

SCAN PARAMETERS

Scan Description	3PL LOCALIZER	SAGITTAL T1	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL T2* GRE	AXIAL DWI	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Carotid Hires	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL T1 CUBE	Optional for dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for motion: AXIAL T1
TE	80	Min-Full	68	—	25	Min	Min	6.9	23	45	Min	Fixed with TR	—	24	2000	116	Min
TR	Min	550	3650	—	800	8000	Min	31	Out-of-Phase	1500	Default	6000	—	550	28	9500	500
TI	—	—	—	450	—	—	—	—	—	—	—	1954 (Fixed with TR)	450	—	—	2375	—
Flip Angle	—	—	—	13	20	—	60	30	30	30	30	Auto	13	13	—	—	68 (Auto with TR)
ETL	—	4	25	—	—	—	—	—	—	—	—	160	—	24	8	36	—
Bandwidth	83.33	20	31	25	20	125	32	15	31	Default	62	32	25	62	32	32	27
Sat	—	—	Fat	—	—	—	S	S, Fat	S, Fat	—	—	Fat	—	Fat	Fat	—	I

Disclaimer: The MR Protocols information is provided by independent physicians and technologists and is not intended to provide definitive or complete medical instructional or treatment information. Products referenced herein should be used consistently with their package inserts, and any devices referenced herein should be used consistently with the operation instructions provided by their respective manufactures. Northwest Imaging Forums, Inc. and Bracco Diagnostics Inc. do not offer medical advice and shall not be responsible for any person's reliance on this protocol.

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	SAGITTAL T1	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL T2* GRE	AXIAL DWI	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Carotid Hires	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL T1 CUBE	Optional for dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for motion: AXIAL T1
MATRIX freq	256	256	320	256	256	128	256	320	320	128	320	256	256	256	256	256	320
MATRIX phase	192	224	256	256	192	128	192	192	192	64	160	256	256	256	224	256	224
NEX	1	2	1.5	1	1	1	1	1	1	1	0.75	1	1	1	2	1	1
Phase FOV	1	1	1	—	0.75	1	0.75	1	1	1	0.6	—	—	0.7	0.75	1	0.9
Freq Direction	Unswap	S/I	A/P	A/P	A/P	R/L	—	A/P	A/P	R/L	S/I	S/I	A/P	S/I	A/P	S/I	A/P
Image Enhance	—	PURE	PURE	PURE	PURE	PURE	PURE	PURE	PURE	—	—	PURE	PURE	PURE	PURE	PURE	PURE
FC Direction	—	—	—	—	Slice	—	Slice	Slice	Slice	—	—	—	—	—	—	—	—
User CV	—	—	ACC=2	ACC=2	—	DIFF Dir-All #T2 images 1 Nex 1 for T2 B1000/1 Nex OPT TE On Dual SE On ACC=2 Ramp Samp 1 Recon 1 Grad OPT 1	Proj-19 Collapse On Ramp Pulse IPL ACC=2	Proj-19 Collapse On Ramp Pulse IPL	Proj-19 Collapse On Ramp Pulse IPL ACC=2	1 Shot 48 ph/loc Inter Delay Min ACC=2 Ramp Samp On Phase Correct On	TRICKS--18ph Pause On Delay Min Subtraction ACC=2 Advanced Tab Turbo Mode	ACC=2 SL=2	ACC=2	Fat Sat Eff 1 CUBE Enh 3 ACC=2	—	—	—

SCANNING RANGE

Scan Description	3PL LOCALIZER	SAGITTAL T1	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL T2* GRE	AXIAL DWI	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Carotid Hires	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL T1 CUBE	Optional for dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for motion: AXIAL T1
FOV	30	24	24	25	22	24	24	22	22	24	31	25	25	24	24	22	24
Slice Thickness	7	5	5	2.4	4	5	6	1.2	1.4	6	3	1.6	1.2	1.8	5	5	4
Spacing	5	Interleaved	1	0	1	0.5	0	8 Overlap	8 Overlap	1	0	0	0	—	1	1	1
Number of Slices	7-Ax/Sag/Cor	30	24-26	70	24-26	32	—	3 Slabs of 40	2 Slabs of 40	18	24	126	140	112	18	24-26	24-26
Scan Time	0:18 sec	2-3 min	~1:30 min	2:30 min	1-2 min	0:40 sec	2 min	~5 min	~3-4 min	1:12 min	~1 min	3-5 min	3:30 min	2:30 min	~2:30 min	~2:30 min	~3 min

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