NW
IMAGING FORUMS, INC.

ROUTINE STROKE BRAIN 3.0T

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 - 0.05 mmol/kg (max 5 mL) @ 4 mL/sec	TRICKS - Scan Mask, Scanner Pauses, inject contrast, wait 5 sec, then start scan Perfusion - Start scan and inject contrast after 12 sec of scanning
Saline Flush	20-30 mL per injection	TRICKS - 1.5 mL/sec Perfusion - 4 mL/sec	
Comments	Report agent administered and dose		

IMAGING PARAMETERS

Scan Description	3PL LOCALIZER	SAGITTAL T1 FLAIR	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL DWI	AXIAL T2* GRE	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Neck	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL 3D 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 T2	Yes	Yes	Yes	Optional	Yes	Optional	Optional	Yes	Yes	Yes	Yes T1	Optional	Alternative FLAIR	No
Mode	2D	2D	2D	3D BRAVO	2D	2D	2D VASC	3D	3D VASC	2D	3D	3D	3D BRAVO	3D	2D	2D	2D
Pulse Sequence	SSFSE	IR	FSE-PROP	BRAVO	SE-EPI	GRE	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	FC, TRF, SEQ, FAST	PROP	FAST, IRP, ZIP2, ASSET	EPI, DIFF, ASSET	FC	FC, SEQ, FAST	FC, EDR, ZIP2, ASSET	FC, EDR, ZIP2, ZIP512	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 FLAIR	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL DWI	AXIAL T2* GRE	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Neck	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL 3D T1 CUBE	Optional for Dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for Motion: AXIAL T1
TE	80	Min-Full	—	—	Min	25	Min	32	23	30	Min	Fixed with TR	—	24	2000	116	Min
TR	1000	2700	3650	—	9000	800	6.9	Min	Out-of-Phase	1500	Default	6000	—	550	28	9500	500
TI	—	828	—	450	—	—	—	—	—	—	—	1954 (Fixed with TR)	450	—	—	2375	—
Flip Angle	—	—	—	13	—	20	60	30	30	30	30	Auto	13	13	—	—	68 (Auto with TR)
ETL	—	8	26	—	—	—	—	—	—	—	—	160	—	24	8	36	—
Bandwidth	83	41	50	25	125	31	32	31	31	Default	83	32	25	62	32	32	27
Sat	—	—	—	—	—	—	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 FLAIR	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL DWI	AXIAL T2* GRE	MRA AXIAL 2D TOF Neck	MRA AXIAL 3D TOF Brain	MRA AXIAL 3D TOF Neck	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL 3D T1 CUBE	Optional for Dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for Motion: AXIAL T1
MATRIX freq	256	352	384	256	128	320	256	448	320	96	256	256	256	256	256	256	320
MATRIX phase	192	256	—	256	128	256	192	224	224	96	160	256	256	256	224	256	224
NEX	1	1	1	1	1	1	1	1	1	1	0.75	1	1	1	2	1	1
Phase FOV	1	1	1	—	1	0.75	0.75	—	0.75	1	0.6	—	—	0.7	0.75	1	1
Freq Direction	Unswap	S/I	A/P	A/P	R/L	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	PU	SCIC
FC Direction	—	—	—	—	—	Slice	—	Slice	—	—	—	—	—	—	—	—	—
User CV	—	CV12-1 CV22-1	—	—	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 Collapes On Ramp Pulse IS ACC=2	Proj-19 Collapse On Ramp Pulse IPL ACC=2	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	CUBE Enh 3 ACC=2	—	—	—

SCANNING RANGE

Scan Description	3PL LOCALIZER	SAGITTAL T1 FLAIR	AXIAL T2 PROPELLER	AXIAL T1 3D BRAVO	AXIAL DWI	AXIAL T2* GRE	MRA AXIAL 2D TOF Neck	Ramp Pulse IS	MRA AXIAL 3D TOF Neck	AXIAL DSC PWI	MRA CORONAL TRICKS Neck	Post SAGITTAL T2 FLAIR CUBE	Post AXIAL T1 3D BRAVO	Post CORONAL 3D T1 CUBE	Optional for Dissection: AXIAL 2D PDFSat	Optional for motion: AXIAL T2 FLAIR PROPELLER	Optional for Motion: AXIAL T1
FOV	30	24	22	25	24	22	22	ACC=2	22	22	31	25	25	24	22	22	22
Slice Thickness	7	5	5	2.4	5	5	6	1.4	1.4	6	3	1.6	1.2	1.8	5	5	4
Spacing	5	0.5	1	0	1	.5	0	12 Overlap	0	1	0	—	—	—	1	1	1
Number of Slices	7-Ax/SagCor	—	24-26	70	24-26	24-26	—	3 Slabs of 40	32	16	24	126	140	112	18	24-26	24-26
Scan Time	0:18 sec	2-3 min	~1:30 min	2 min	0:50 sec	2 min	2 min	~5 min	~4 min	1:12 min	~1 min	3-5 min	4 min	3-5 min	~2:30 min	~2:30 min	~3 min

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