NW
IMAGING FORUMS, INC.

MRA HEAD 3T

INSTRUCTIONS AND PATIENT PREPARATION

Instructions	• Sequences are in addition to Routine Adult Brain protocol • For hyperacute patient, assess for penumbra
Position	Supine, head first
Coil	20 channel Head/Neck coil or better
Landmark	Glabella

CONTRAST AGENT PARAMETERS

Contrast Agent	Dose	Injection Rate
Gadopiclenol (VUEWAY)	0.05 mmol/kg	CORONAL TWIST Inject 1-2 mL contrast Inject remaining contrast CE MRV Post - 2 measurements
Saline Flush	20 mL	1-1.5 mL/sec
Comments	• For bifurcations. 3D TOF if unable to do Carotid CEMRA or CEMRA is inadequate • Report agent administered and dose • Use minimal dose for patients with a GFR <60 mL/sec	

IMAGING PARAMETERS

Scan Description	3D TOF MRA	Pre CE MRA	CORONAL TWIST Inject 1-2 mL Contrast	Post CE MRA Inject Remaining Contrast 2 Measurements
Sequence Name	fl_r	fl	fldyn	fl
Sequence Type	Gre	—	—	—
Dimension	3D	3D	3D	3D
Acceleration Mode	CS	GRAPPA	GRAPPA	GRAPPA
Acceleration Factor PE	—	2	2	2
Acceleration Factor 3D	—	2	24	2
AutoAlign	Head > Brain	Head > Basis	Head > Basis	Head > Basis

SCAN PARAMETERS

Scan Description	3D TOF MRA	Pre CE MRA	CORONAL TWIST	Post CE MRA
TR	21.0 ms	3.72 ms	2.20 ms	3.72 ms
TE	3.69 ms	1.33 ms	0.91 ms	1.33 ms
Flip Angle	20 deg	25 deg	15 deg	25 deg
Bandwidth	187 Hz/Px	450 Hz/Px	720 Hz/Px	450 Hz/Px
Fat-Water Contrast	Standard	Standard	Standard	Standard
Gradient Mode	Fast	Fast	Fast	Fast
RF Pulse Type	Normal	Normal	Fast	Normal
Asymmetric Echo	Weak	Allowed	Strong	Allowed

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 Siemens MRI Scanners
Central Nervous System

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ACQUISITION PARAMETERS

Scan Description	3D TOF MRA	Pre CE MRA	CORONAL TWIST	Post CE MRA
Base Resolution	352	288	256	288
Phase Resolution	95%	82%	75%	82%
Slice Resolution	67%	70%	75%	70%
Averages	1	1	—	1
Concatenations	6	—	—	—
FoV Read	220 mm	240 mm	300 mm	240 mm
FoV Phase	91%	75%	56%	75%
Phase Encoding Dir.	R >> L	R >> L	R >> L	R >> L
Phase Oversampling	0%	0%	0%	0%
Slice Oversampling	25%	20%	17%	20%
Phase Partial Fourier	Off	7/8	7/8	7/8
Slice Partial Fourier	Off	Off	Off	Off
Flow compensation	Slice/Read	—	—	—

SCANNING RANGE

Scan Description	3D TOF MRA	Pre CE MRA	CORONAL TWIST	Post CE MRA
Elliptical Filter	Off	Off	On	Off
Raw Filter	Off	Off	Off	Off
Distortion Correction	2D	2D	2D	2D
Distance Factor	-21%	20%	—	20%
Slice Thickness	0.4 mm	1.0 mm	1.7 mm	1.0 mm
Slices per Slab	48	160	96	160
Acquisition Time	4:31 min	25 sec	1:05 min	25 sec

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