

Protocol: adult\_head\_Brain wo-w T1W cube 11-19-19

3-Plane Localizer	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		3-Plane Localizer
	Patient Entry	Head First	Imaging Mode	2D	
	Patient Position	Supine	Pulse Sequence	Spin Echo	
	Coil Configuration	GEM Head	Imaging Options	Seq, EDR, TRF, Fast, SS, ARC	
	Plane	3-PLANE	<b>SCAN RANGE</b>		
	Series Description	3-Plane Localizer	FOV	24.0	
	<b>SCAN TIMING</b>		Slice Thickness	10.0	
	TE	Minimum	Slice Spacing	5.0	
	Number of Echoes	1	<b>ACQ TIMING</b>		
	TR	Minimum	Freq	288	
	Receiver Bandwidth	83.33	Phase	128	
	<b>IMAGE ENHANCE</b>		Freq DIR	Unswap	
	Filter Choice	None	# of Acq. Before Pause	0	
	<b>GATING/TRIGGER</b>		Phase FOV	1.00	
	Auto Trigger Type	Off	Auto Shim	Auto	
	<b>FMRI</b>		Phase Correction	No	
	PSD Trigger	Internal	<b>USER CVS</b>		
	View Order	Bottom/Up	User CV1	1.00	
	# of Repetitions REST	0	<b>MULTI-PHASE</b>		
	# of Repetitions ACTIVE	0	Seperate Series	0	
	<b>SAT</b>		Mask Phase	0	
	Tag Type	None	Mask Pause	0	
	<b>TRICKS</b>		<b>DIFFUSION</b>		
	Pause On/Off	On	Recon All Images	On	
	Auto Subtract	0	<b>CONTRAST</b>		
Auto SCIC	Off	Contrast Yes/No	No		

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Cube
Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, FR, ARC
Plane	OBLIQUE		
Series Description	3D Sag T1 Cube		
SCAN TIMING		SCAN RANGE	
TE	10.0	FOV	24.0
Number of Echoes	1	Slice Thickness	1.4
TR	550.0	Location per Slab	120
Echo Train Length	22	Overlap Locations	0
Receiver Bandwidth	62.50		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	G	Freq	240
		Phase	240
GATING/TRIGGER		Freq DIR	S/I
Auto Trigger Type	Off	NEX	1.00
		Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up		
# of Repetitions REST	0	USER CVS	
# of Repetitions ACTIVE	0	User CV22	3.00
SAT		MULTI-PHASE	
Tag Type	None	Seperate Series	0
		Mask Phase	0
TRICKS		Mask Pause	0
Pause On/Off	On	DIFFUSION	
Auto Subtract	0	Recon All Images	On
Auto SCIC	2	CONTRAST	
OTHERS		Contrast Yes/No	No
Protocol Notes	Axial reformats 1mm x 1mm		

3D Sag T1 Cube

3D Sag T1 Cube

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	GEM Head	Imaging Options	FC, EDR, TRF, Fast, ARC, T2flair
Plane	OBLIQUE		
Series Description	AXIAL T2W FLAIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	22.0
TE	140.0	Slice Thickness	5.0
Number of Echoes	1	Slice Spacing	1.0
TR	8800.0		
TI	2546	ACQ TIMING	
Echo Train Length	20	Freq	320
Receiver Bandwidth	31.25	Phase	192
IMAGE ENHANCE		Freq DIR	A/P
Filter Choice	None	Fat Shift DIR	Normal (A)
GATING/TRIGGER		NEX	1.00
Auto Trigger Type	Off	Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	Flow Direction	Slice
# of Repetitions REST	0	Compensation	
# of Repetitions ACTIVE	0	USER CVS	
SAT		User CV18	1.00
Tag Type	None	MULTI-PHASE	
TRICKS		Seperate Series	0
Pause On/Off	On	Mask Phase	0
Auto Subtract	0	Mask Pause	0
Auto SCIC	2	DIFFUSION	
		Recon All Images	On
		CONTRAST	
		Contrast Yes/No	No

AXIAL T2W FLAIR

AXIAL T2W FLAIR

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AXIAL T2W	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	FSE-XL
	Coil Configuration	GEM Head	Imaging Options	FC, EDR, TRF, Fast, FR
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	AXIAL T2W	FOV	22.0
	<b>SCAN TIMING</b>		Slice Thickness	5.0
	Flip Angle	160	Slice Spacing	1.0
	TE	105.0	<b>ACQ TIMING</b>	
	Number of Echoes	1	Freq	352
	TR	5092.0	Phase	256
	Echo Train Length	19	Freq DIR	A/P
	Receiver Bandwidth	41.67	Fat Shift DIR	Normal (A)
	<b>IMAGE ENHANCE</b>		NEX	2.00
	Filter Choice	None	Phase FOV	1.00
	<b>GATING/TRIGGER</b>		Auto Shim	Auto
	Auto Trigger Type	Off	Phase Correction	No
	<b>FMRI</b>		Flow Direction Compensation	Slice
	PSD Trigger	Internal	<b>USER CVS</b>	
	View Order	Bottom/Up	User CV18	1.00
	# of Repetitions REST	0	User CV22	1.00
	# of Repetitions ACTIVE	0	TR Min	2500.0
	<b>SAT</b>		TR Max	11000.0
	SAT Location	I	<b>MULTI-PHASE</b>	
	Tag Type	None	Seperate Series	0
	<b>TRICKS</b>		Mask Phase	0
	Pause On/Off	On	Mask Pause	0
	Auto Subtract	0	<b>DIFFUSION</b>	
Auto SCIC	2	Recon All Images	On	
		<b>CONTRAST</b>		
		Contrast Yes/No	No	

AXIAL T2W

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	SWAN
Coil Configuration	GEM Head	Imaging Options	FC, Fast, ZIP512, ZIP2, Asset
Plane	OBLIQUE		
Series Description	3D AX SWAN		
SCAN TIMING		SCAN RANGE	
Flip Angle	25	FOV	24.0
TE	50.0	Slice Thickness	2.6
Number of Echoes	9	Location per Slab	56
TR	Minimum	Overlap Locations	0
Receiver Bandwidth	41.67		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	None	Freq	320
		Phase	192
GATING/TRIGGER		Freq DIR	A/P
Auto Trigger Type	Off	Phase FOV	0.75
		Auto Shim	Auto
FMRI		Phase Correction	No
PSD Trigger	Internal	USER CVS	
View Order	Bottom/Up	User CV22	1.00
# of Repetitions REST	0	MULTI-PHASE	
# of Repetitions ACTIVE	0	Seperate Series	0
SAT		Mask Phase	0
Tag Type	None	Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0	CONTRAST	
Auto SCIC	Off	Contrast Yes/No	No
OTHERS			
Protocol Notes	Do Axial reformats 1mm x 1mm		

3D AX SWAN

3D AX SWAN

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<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	GEM Head	Imaging Options	EPI, DIFF, Asset
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	Ax DWI ALL B-1000	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	5.0
TE	Minimum	Slice Spacing	0.0
Number of Echoes	1	<b>ACQ TIMING</b>	
TR	9968.0	Freq	160
Number of Shots	1	Phase	192
<b>IMAGE ENHANCE</b>		Freq DIR	R/L
Filter Choice	None	Phase FOV	1.00
<b>GATING/TRIGGER</b>		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	Yes
<b>FMRI</b>		<b>USER CVS</b>	
PSD Trigger	Internal	User CV0	1.00
View Order	Bottom/Up	User CV5	1.00
# of Repetitions REST	0	User CV7	1.00
# of Repetitions ACTIVE	0	User CV17	1.00
<b>SAT</b>		TR Min	2000.0
Tag Type	None	TR Max	17000.0
<b>TRICKS</b>		<b>MULTI-PHASE</b>	
Pause On/Off	On	Seperate Series	0
Auto Subtract	0	Mask Phase	0
Auto SCIC	2	Mask Pause	0
		<b>DIFFUSION</b>	
		Optimized TE	Yes
		Diffusion Directions	All
		Number of Diffusion Directions	3
		Number of T2 Images	1
		Dual Spin Echo	Off
		Recon All Images	On
		<b>CONTRAST</b>	
		Contrast Yes/No	No

Ax DWI ALL B-1000

Ax DWI ALL B-1000

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Patient Entry	Head First	Imaging Mode	3D
Patient Position	Supine	Pulse Sequence	Cube
Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, FR, ARC
Plane	OBLIQUE		
Series Description	3D Sag T1 FS Cube Post		
SCAN TIMING		SCAN RANGE	
TE	10.0	FOV	24.0
Number of Echoes	1	Slice Thickness	1.4
TR	550.0	Location per Slab	120
Echo Train Length	22	Overlap Locations	0
Receiver Bandwidth	62.50		
IMAGE ENHANCE		ACQ TIMING	
Filter Choice	G	Freq	240
		Phase	240
GATING/TRIGGER		Freq DIR	S/I
Auto Trigger Type	Off	NEX	1.00
		Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV5	0.75
# of Repetitions ACTIVE	0	User CV22	3.00
SAT		MULTI-PHASE	
Tag Type	None	Seperate Series	0
Fat/Water Saturation	Fat	Mask Phase	0
		Mask Pause	0
TRICKS		DIFFUSION	
Pause On/Off	On	Recon All Images	On
Auto Subtract	0		
Auto SCIC	2	CONTRAST	
OTHERS		Contrast Yes/No	Yes
Protocol Notes	Axial reforms 1 mm x 1mm		

3D Sag T1 FS Cube Post

3D Sag T1 FS Cube Post

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CORONAL BRAVO POST GAD	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	Head First	Imaging Mode	3D
	Patient Position	Supine	Pulse Sequence	BRAVO
	Coil Configuration	GEM Head	Imaging Options	EDR, Fast, ZIP512, ZIP2, ARC, IrP
	Plane	OBLIQUE	<b>SCAN RANGE</b>	
	Series Description	CORONAL BRAVO POST GAD	FOV	22.0
	<b>SCAN TIMING</b>		Slice Thickness	2.0
	Flip Angle	12	Location per Slab	104
	Number of Echoes	1	Overlap Locations	0
	TI	450	<b>ACQ TIMING</b>	
	Receiver Bandwidth	31.25	Freq	240
	<b>IMAGE ENHANCE</b>		Phase	240
	Filter Choice	None	Freq DIR	S/I
	<b>GATING/TRIGGER</b>		NEX	1.00
	Auto Trigger Type	Off	Phase FOV	1.00
	<b>MULTI-PHASE</b>		Auto Shim	Auto
	Seperate Series	0	Phase Correction	No
	Trigger Delay without AV	0	<b>FMRI</b>	
	Mask Phase	0	PSD Trigger	Internal
	Mask Pause	0	View Order	Bottom/Up
	<b>DIFFUSION</b>		# of Repetitions REST	0
	Recon All Images	On	# of Repetitions ACTIVE	0
	<b>CONTRAST</b>		<b>SAT</b>	
	Contrast Yes/No	Yes	Tag Type	None
			<b>TRICKS</b>	
		Pause On/Off	On	
		Auto Subtract	0	
		Auto SCIC	2	

CORONAL BRAVO POST GAD