

Protocol: adult_abdomen_RENAL MRA

3-Plane Localizer	PATIENT POSITION		IMAGING PARAMETERS	
	Patient Entry	Feet First	Imaging Mode	2D
	Patient Position	Supine	Pulse Sequence	Spin Echo
	Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	Seq, EDR, Fast, SS, ARC
	Plane	3-PLANE	SCAN RANGE	
	Series Description	3-Plane Localizer	FOV	48.0
	SCAN TIMING		Slice Thickness	8.0
	TE	80.0	Slice Spacing	0.0
	Number of Echoes	1	ACQ TIMING	
	TR	Minimum	Freq	384
	Receiver Bandwidth	83.33	Phase	160
	IMAGE ENHANCE		Freq DIR	Unswap
	Filter Choice	None	# of Acq. Before Pause	0
	GATING/TRIGGER		Phase FOV	1.00
	Auto Trigger Type	Off	Auto Shim	Auto
	FMRI		Phase Correction	No
	PSD Trigger	Internal	USER CVS	
	Slice Order	Interleaved	User CV2	240.00
	View Order	Bottom/Up	MULTI-PHASE	
	# of Repetitions REST	0	Seperate Series	0
	# of Repetitions ACTIVE	0	Mask Phase	0
	SAT		Mask Pause	0
	Tag Type	None	DIFFUSION	
	TRICKS		Recon All Images	On
	Pause On/Off	On	CONTRAST	
Auto Subtract	0	Contrast Yes/No	No	
Auto SCIC	Off			
OTHERS				
Protocol Notes	<p><i>This protocol is built based on Express coil suite. Please select the appropriate coil which is available in your site and optimizing the parameters accordingly.</i></p>			

3-Plane Localizer

Protocol: adult_abdomen_RENAL MRA

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>
Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>Fast, SS</i>
Plane	<i>OBLIQUE</i>	SCAN RANGE	
Series Description	<i>---NON CONTRAST---</i>	FOV	<i>22.0</i>
SCAN TIMING		Slice Thickness	<i>5.0</i>
TE	<i>Minimum</i>	Slice Spacing	<i>1.0</i>
Number of Echoes	<i>1</i>	ACQ TIMING	
TR	<i>Minimum</i>	Freq	<i>128</i>
Receiver Bandwidth	<i>83.33</i>	Phase	<i>128</i>
IMAGE ENHANCE		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
GATING/TRIGGER		# of Acq. Before Pause	<i>0</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>
FMRI		Auto Shim	<i>Auto</i>
PSD Trigger	<i>Internal</i>	Phase Correction	<i>No</i>
Slice Order	<i>Interleaved</i>	USER CVS	
View Order	<i>Bottom/Up</i>	User CV2	<i>240.00</i>
# of Repetitions REST	<i>0</i>	MULTI-PHASE	
# of Repetitions ACTIVE	<i>0</i>	Seperate Series	<i>0</i>
SAT		Mask Phase	<i>0</i>
Tag Type	<i>None</i>	Mask Pause	<i>0</i>
TRICKS		DIFFUSION	
Pause On/Off	<i>On</i>	Recon All Images	<i>On</i>
Auto Subtract	<i>0</i>	CONTRAST	
Auto SCIC	<i>Off</i>	Contrast Yes/No	<i>No</i>

Protocol: adult_abdomen_RENAL MRA

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	EDR, Fast, SS, ARC, MRF
Plane	OBLIQUE	SCAN RANGE	
Series Description	Ax T2 SSFSE BH	FOV	40.0
SCAN TIMING		Slice Thickness	7.0
TE	85.0	Slice Spacing	1.5
Number of Echoes	1	ACQ TIMING	
TR	1000.0	Freq	288
Receiver Bandwidth	83.33	Phase	256
IMAGE ENHANCE		Freq DIR	Unswap
Filter Choice	None	NEX	1.00
GATING/TRIGGER		# of Acq. Before Pause	0
Auto Trigger Type	Off	Phase FOV	1.00
FMRI		Auto Shim	Auto
PSD Trigger	Internal	Phase Correction	No
Slice Order	Interleaved	USER CVS	
View Order	Bottom/Up	User CV2	240.00
# 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	2	Contrast Yes/No	No

Ax T2 SSFSE BH

Ax T2 SSFSE BH

Protocol: adult_abdomen_RENAL MRA

3D Ax IFIR	PATIENT POSITION		IMAGING PARAMETERS		3D Ax IFIR
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Inhance IFIR</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, RT, ZIP512, ZIP2, Asset, IrP</i>	
	Plane	<i>AXIAL</i>	SCAN RANGE		
	Series Description	<i>3D Ax IFIR</i>	FOV	<i>36.0</i>	
	SCAN TIMING		Slice Thickness	<i>2.2</i>	
	Flip Angle	<i>55</i>	ACQ TIMING		
	Number of Echoes	<i>1</i>	Freq	<i>224</i>	
	TI	<i>200</i>	Phase	<i>288</i>	
	Blood Suppression TI	<i>1200</i>	Freq DIR	<i>R/L</i>	
	Receiver Bandwidth	<i>125.00</i>	Phase FOV	<i>0.90</i>	
	IMAGE ENHANCE		Auto Shim	<i>Auto</i>	
	Filter Choice	<i>None</i>	Phase Correction	<i>No</i>	
	GATING/TRIGGER		FMRI		
	Auto Trigger Type	<i>Off</i>	PSD Trigger	<i>Internal</i>	
	Resp. Trigger Point	<i>30</i>	Slice Order	<i>Interleaved</i>	
	MULTI-PHASE		View Order	<i>Bottom/Up</i>	
	Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>	
	Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>	
	Mask Pause	<i>0</i>	SAT		
	DIFFUSION		Tag Type	<i>None</i>	
	Recon All Images	<i>On</i>	Fat/Water Saturation	<i>Fat Special</i>	
	CONTRAST		TRICKS		
	Contrast Yes/No	<i>No</i>	Pause On/Off	<i>On</i>	
		Auto Subtract	<i>0</i>		
		Auto SCIC	<i>2</i>		

Protocol: adult_abdomen_RENAL MRA

3D Cor IFIR	PATIENT POSITION		IMAGING PARAMETERS		3D Cor IFIR
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Inhance IFIR</i>	
	Coil Configuration	<i>HD 8Ch Body Array by GE</i>	Imaging Options	<i>EDR, Fast, RT, ZIP512, ZIP2, Asset, IrP</i>	
	Plane	<i>CORONAL</i>	SCAN RANGE		
	Series Description	<i>3D Cor IFIR</i>	FOV	<i>38.0</i>	
	SCAN TIMING		Slice Thickness	<i>2.0</i>	
	Flip Angle	<i>55</i>	ACQ TIMING		
	Number of Echoes	<i>1</i>	Freq	<i>224</i>	
	TI	<i>200</i>	Phase	<i>256</i>	
	Blood Suppression TI	<i>1200</i>	Freq DIR	<i>S/I</i>	
	Receiver Bandwidth	<i>125.00</i>	Phase FOV	<i>0.90</i>	
	IMAGE ENHANCE		Auto Shim	<i>Auto</i>	
	Filter Choice	<i>None</i>	Phase Correction	<i>No</i>	
	GATING/TRIGGER		FMRI		
	Auto Trigger Type	<i>Off</i>	PSD Trigger	<i>Internal</i>	
	Resp. Trigger Point	<i>30</i>	Slice Order	<i>Interleaved</i>	
	MULTI-PHASE		View Order	<i>Bottom/Up</i>	
	Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>	
	Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>	
	Mask Pause	<i>0</i>	SAT		
	DIFFUSION		Tag Type	<i>None</i>	
	Recon All Images	<i>On</i>	Fat/Water Saturation	<i>Fat Special</i>	
	CONTRAST		TRICKS		
	Contrast Yes/No	<i>No</i>	Pause On/Off	<i>On</i>	
		Auto Subtract	<i>0</i>		
		Auto SCIC	<i>2</i>		

Protocol: adult_abdomen_RENAL MRA

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Spin Echo
Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	Fast, SS
Plane	OBLIQUE	SCAN RANGE	
Series Description	---CONTRAST---	FOV	22.0
SCAN TIMING		Slice Thickness	5.0
TE	Minimum	Slice Spacing	1.0
TR	Minimum	ACQ TIMING	
Receiver Bandwidth	83.33	Freq	128
IMAGE ENHANCE		Phase	128
Filter Choice	None	Freq DIR	R/L
GATING/TRIGGER		NEX	1.0
Auto Trigger Type	Off	# of Acq. Before Pause	0
FMRI		Phase FOV	1.00
PSD Trigger	Internal	Auto Shim	Auto
Slice Order	Interleaved	Phase Correction	No
View Order	Bottom/Up	USER CVS	
# of Repetitions REST	0	User CV2	240.00
# of Repetitions ACTIVE	0	User CV13	1.00
SAT		TR Min	0.0
Tag Type	None	TR Max	0.0
TRICKS		MULTI-PHASE	
Pause On/Off	On	Seperate Series	0
Auto Subtract	0	Mask Phase	0
Auto SCIC	Off	Mask Pause	0
		DIFFUSION	
		Recon All Images	On
		CONTRAST	
		Contrast Yes/No	No

Protocol: adult_abdomen_RENAL MRA

COR CEMRA FT ASSET	PATIENT POSITION		IMAGING PARAMETERS	
	Patient Entry	Feet First	Imaging Mode	3D
	Patient Position	Supine	Pulse Sequence	Vasc TOF SPGR
	Coil Configuration	HD 8Ch Body Array by GE	Imaging Options	Fast, ZIP2, Fluoro, Asset, MPhVar
	Plane	OBLIQUE	SCAN RANGE	
	Series Description	COR CEMRA FT ASSET	FOV	40.0
	SCAN TIMING		Slice Thickness	2.8
	Flip Angle	25	Location per Slab	40
	TE	Minimum	Overlap Locations	0
	Number of Echoes	1	ACQ TIMING	
	Receiver Bandwidth	62.50	Freq	260
	IMAGE ENHANCE		Phase	256
	Filter Choice	None	Freq DIR	Unswap
	GATING/TRIGGER		NEX	0.75
	Auto Trigger Type	Off	Phase FOV	0.90
	FMRI		Auto Shim	Auto
	PSD Trigger	Internal	Phase Correction	No
	Slice Order	Interleaved	USER CVS	
	View Order	Bottom/Up	User CV4	5.00
	# of Repetitions REST	0	User CV6	2.00
	# of Repetitions ACTIVE	0	User CV13	1.00
	SAT		MULTI-PHASE	
	Tag Type	None	# of Phases	2
	DIFFUSION		Seperate Series	0
	Recon All Images	On	Delay after Acquisition without AV	1
CONTRAST		Trigger Delay without AV	5	
Contrast Yes/No	Yes	Mask Phase	1	
		Mask Pause	1	
		VASCULAR		
		# of Collapse Images	Off	
		# of Projection Images	0	
		TRICKS		
		Pause On/Off	On	
		Auto Subtract	4097	
		Auto SCIC	Off	

COR CEMRA FT ASSET