

Protocol: adult\_upperExtremities\_WRIST

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Fiesta
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	Seq, Fast
Plane	3-PLANE	<b>SCAN RANGE</b>	
Series Description	3-Plane Localizer	FOV	24.0
<b>SCAN TIMING</b>		Slice Thickness	5.0
Flip Angle	50	Slice Spacing	5.0
TE	Minimum	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	256
Receiver Bandwidth	62.50	Phase	128
<b>IMAGE ENHANCE</b>		Freq DIR	Unswap
Filter Choice	None	NEX	1.00
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	0
Auto Trigger Type	Off	Phase FOV	1.00
<b>MULTI-PHASE</b>		Auto Shim	Auto
Seperate Series	0	Phase Correction	No
Mask Phase	0	<b>FMRI</b>	
Mask Pause	0	PSD Trigger	Internal
<b>DIFFUSION</b>		Slice Order	Interleaved
Recon All Images	On	View Order	Bottom/Up
<b>CONTRAST</b>		# of Repetitions REST	0
Contrast Yes/No	No	# of Repetitions ACTIVE	0
		<b>SAT</b>	
		Tag Type	None
		<b>TRICKS</b>	
		Pause On/Off	On
		Auto Subtract	0
		Auto SCIC	Off

3-Plane Localizer

3-Plane Localizer

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	NPW, Fast, MRF
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	AX T1	FOV	12.0
<b>SCAN TIMING</b>		Slice Thickness	3.0
Flip Angle	180	Slice Spacing	0.3
TE	Min Full	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	320
TR	402.0	Phase	224
Echo Train Length	3	Freq DIR	Unswap
Receiver Bandwidth	31.25	Fat Shift DIR	Normal
<b>IMAGE ENHANCE</b>		NEX	2.00
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	Yes
PSD Trigger	Internal	<b>USER CVS</b>	
Slice Order	Interleaved	User CV8	1.00
View Order	Bottom/Up	User CV22	1.00
# of Repetitions REST	0	TR Min	350.0
# of Repetitions ACTIVE	0	TR Max	750.0
<b>SAT</b>		<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	Off	Recon All Images	On
		<b>CONTRAST</b>	
		Contrast Yes/No	No

AX T1

AX T1

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	FC, Seq, TRF, Fast, MRF, IrP
Plane	OBLIQUE	PSD Name	fse-xl
Series Description	AX STIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	12.0
TE	42.0	Slice Thickness	2.6
Number of Echoes	1	Slice Spacing	0.2
TR	3800.0		
TI	110	ACQ TIMING	
Echo Train Length	6	Freq	288
Receiver Bandwidth	20.83	Phase	160
		Freq DIR	Unswap
		Fat Shift DIR	Normal
		NEX	2.00
		Phase FOV	1.00
		Auto Shim	Auto
		Phase Correction	No
		Flow Direction Compensation	Slice
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV22	1.00
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	Off	Seperate Series	0
		Mask Phase	0
		Mask Pause	0
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
Slice Order	Interleaved		
View Order	Bottom/Up	CONTRAST	
# of Repetitions REST	0	Contrast Yes/No	No
# of Repetitions ACTIVE	0		
SAT			
SAT Location	S		
SAT Location	I		
Tag Type	None		
TRICKS			
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	Off		

AX STIR

AX STIR

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	TRF, Fast, MRF
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	COR T1	FOV	12.0
<b>SCAN TIMING</b>		Slice Thickness	3.0
Flip Angle	160	Slice Spacing	0.3
TE	Min Full	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	320
TR	484.0	Phase	224
Echo Train Length	3	Freq DIR	Unswap
Receiver Bandwidth	31.25	Fat Shift DIR	Normal
<b>IMAGE ENHANCE</b>		NEX	2.00
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	Yes
PSD Trigger	Internal	<b>USER CVS</b>	
Slice Order	Interleaved	User CV8	1.00
View Order	Bottom/Up	User CV22	1.00
# of Repetitions REST	0	TR Min	350.0
# of Repetitions ACTIVE	0	TR Max	750.0
<b>SAT</b>		<b>MULTI-PHASE</b>	
SAT Location	S	Seperate Series	0
SAT Location	I	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

COR T1

COR T1

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	NPW, TRF, Fast, MRF
Plane	OBLIQUE	<b>SCAN RANGE</b>	
Series Description	COR PD FS	FOV	12.0
<b>SCAN TIMING</b>		Slice Thickness	3.0
Flip Angle	160	Slice Spacing	0.3
TE	Min Full	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	288
TR	2451.0	Phase	192
Echo Train Length	8	Freq DIR	Unswap
Receiver Bandwidth	25.00	Fat Shift DIR	Normal
<b>IMAGE ENHANCE</b>		NEX	4.00
Filter Choice	None	Phase FOV	1.00
<b>GATING/TRIGGER</b>		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	No
<b>FMRI</b>		<b>USER CVS</b>	
PSD Trigger	Internal	User CV19	1.00
Slice Order	Interleaved	TR Min	2000.0
View Order	Bottom/Up	TR Max	4000.0
# of Repetitions REST	0	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	0	Seperate Series	0
<b>SAT</b>		Mask Phase	0
SAT Location	S	Mask Pause	0
SAT Location	I	<b>DIFFUSION</b>	
Tag Type	None	Recon All Images	On
Fat/Water Saturation	Fat Classic	<b>CONTRAST</b>	
<b>TRICKS</b>		Contrast Yes/No	No
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	2		

COR PD FS

COR PD FS

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COR 3D MERGE	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		COR 3D MERGE
	Patient Entry	Head First	Imaging Mode	3D	
	Patient Position	Supine	Pulse Sequence	MERGE	
	Coil Configuration	HD Wrist Array by Invivo	Imaging Options	EDR, Fast, ZIP2	
	Plane	OBLIQUE	<b>SCAN RANGE</b>		
	Series Description	COR 3D MERGE	FOV	12.0	
	<b>SCAN TIMING</b>		Slice Thickness	2.4	
	Flip Angle	5	Location per Slab	26	
	TE	Min Full	Overlap Locations	0	
	Number of Echoes	3	<b>ACQ TIMING</b>		
	TR	Minimum	Freq	288	
	Receiver Bandwidth	31.25	Phase	192	
	<b>IMAGE ENHANCE</b>		Freq DIR	Unswap	
	Filter Choice	None	Phase FOV	1.00	
	<b>GATING/TRIGGER</b>		Auto Shim	Auto	
	Auto Trigger Type	Off	Phase Correction	No	
	<b>MULTI-PHASE</b>		<b>FMRI</b>		
	Seperate Series	0	PSD Trigger	Internal	
	Mask Phase	0	Slice Order	Interleaved	
	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	No	Tag Type	None	
			<b>TRICKS</b>		
		Pause On/Off	On		
		Auto Subtract	0		
		Auto SCIC	2		

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Head First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD Wrist Array by Invivo	Imaging Options	FC, Seq, TRF, Fast, MRF, IrP
Plane	OBLIQUE	PSD Name	fse-xl
Series Description	SAG STIR		
SCAN TIMING		SCAN RANGE	
Flip Angle	160	FOV	12.0
TE	42.0	Slice Thickness	2.6
Number of Echoes	1	Slice Spacing	0.2
TR	3800.0		
TI	110	ACQ TIMING	
Echo Train Length	6	Freq	288
Receiver Bandwidth	20.83	Phase	160
		Freq DIR	Unswap
IMAGE ENHANCE		Fat Shift DIR	Normal
Filter Choice	None	NEX	2.00
		Phase FOV	1.00
GATING/TRIGGER		Auto Shim	Auto
Auto Trigger Type	Off	Phase Correction	No
		Flow Direction Compensation	Slice
FMRI		USER CVS	
PSD Trigger	Internal	User CV22	1.00
Slice Order	Interleaved		
View Order	Bottom/Up	MULTI-PHASE	
# of Repetitions REST	0	Seperate Series	0
# of Repetitions ACTIVE	0	Mask Phase	0
		Mask Pause	0
SAT		DIFFUSION	
SAT Location	S	Recon All Images	On
SAT Location	I		
Tag Type	None	CONTRAST	
TRICKS		Contrast Yes/No	No
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	Off		

SAG STIR

SAG STIR