

Protocol: adult\_lowerExtremities\_Knee 11-7-17

3-Plane Loc. offset r/l	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		3-Plane Loc. offset r/l
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Gradient Echo</i>	
	Coil Configuration	<i>HD T/R Knee Array by Invivo</i>	Imaging Options	<i>Seq, Fast</i>	
	Plane	<i>3-PLANE</i>	<b>SCAN RANGE</b>		
	Series Description	<i>3-Plane Loc. offset r/l</i>	FOV	<i>28.0</i>	
	<b>SCAN TIMING</b>		Slice Thickness	<i>5.0</i>	
	Number of Echoes	<i>1</i>	Slice Spacing	<i>5.0</i>	
	<b>IMAGE ENHANCE</b>		<b>ACQ TIMING</b>		
	Filter Choice	<i>None</i>	Freq	<i>256</i>	
	<b>GATING/TRIGGER</b>		Phase	<i>128</i>	
	Auto Trigger Type	<i>Off</i>	Freq DIR	<i>Unswap</i>	
	<b>MULTI-PHASE</b>		NEX	<i>1.00</i>	
	Seperate Series	<i>0</i>	Phase FOV	<i>1.00</i>	
	Mask Phase	<i>0</i>	Auto Shim	<i>Auto</i>	
	Mask Pause	<i>0</i>	Phase Correction	<i>No</i>	
	<b>DIFFUSION</b>		<b>FMRI</b>		
	Recon All Images	<i>On</i>	PSD Trigger	<i>Internal</i>	
	<b>CONTRAST</b>		View Order	<i>Bottom/Up</i>	
	Contrast Yes/No	<i>No</i>	# of Repetitions REST	<i>0</i>	
		# of Repetitions ACTIVE	<i>0</i>		
		<b>SAT</b>			
		Tag Type	<i>None</i>		
		<b>TRICKS</b>			
		Pause On/Off	<i>On</i>		
		Auto Subtract	<i>0</i>		
		Auto SCIC	<i>Off</i>		

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
Coil Configuration	<i>HD T/R Knee Array by Invivo</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ZIP512</i>
Plane	<i>OBLIQUE</i>		
Series Description	<i>CORONAL T1W</i>		
SCAN TIMING		SCAN RANGE	
Flip Angle	<i>160</i>	FOV	<i>14.0</i>
TE	<i>Min Full</i>	Slice Thickness	<i>3.0</i>
Number of Echoes	<i>1</i>	Slice Spacing	<i>0.0</i>
TR	<i>587.0</i>		
Echo Train Length	<i>3</i>	ACQ TIMING	
Receiver Bandwidth	<i>41.67</i>	Freq	<i>352</i>
		Phase	<i>224</i>
		Freq DIR	<i>S/I</i>
		Fat Shift DIR	<i>Normal (I)</i>
		NEX	<i>2.00</i>
		# of Acq. Before Pause	<i>0</i>
		Auto Shim	<i>Auto</i>
		Phase Correction	<i>Yes</i>
IMAGE ENHANCE		USER CVS	
Filter Choice	<i>None</i>	TR Min	<i>400.0</i>
		TR Max	<i>650.0</i>
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	<i>Off</i>	Seperate Series	<i>0</i>
		Mask Phase	<i>0</i>
		Mask Pause	<i>0</i>
FMRI		DIFFUSION	
PSD Trigger	<i>Internal</i>	Recon All Images	<i>On</i>
View Order	<i>Bottom/Up</i>		
# of Repetitions REST	<i>0</i>	CONTRAST	
# of Repetitions ACTIVE	<i>0</i>	Contrast Yes/No	<i>No</i>
SAT			
Tag Type	<i>None</i>		
TRICKS			
Pause On/Off	<i>On</i>		
Auto Subtract	<i>0</i>		
Auto SCIC	<i>Off</i>		

CORONAL T1W

CORONAL T1W

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CORONAL T2W FAT SAT	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
	Coil Configuration	<i>HD T/R Knee Array by Invivo</i>	Imaging Options	<i>FC, NPW, TRF, Fast, ZIP512</i>
	Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
	Series Description	<i>CORONAL T2W FAT SAT</i>	FOV	<i>14.0</i>
	<b>SCAN TIMING</b>		Slice Thickness	<i>3.0</i>
	Flip Angle	<i>160</i>	Slice Spacing	<i>0.0</i>
	TE	<i>55.0</i>	<b>ACQ TIMING</b>	
	Number of Echoes	<i>1</i>	Freq	<i>320</i>
	TR	<i>7264.0</i>	Phase	<i>224</i>
	Echo Train Length	<i>12</i>	Freq DIR	<i>S/I</i>
	Receiver Bandwidth	<i>31.25</i>	Fat Shift DIR	<i>Normal (I)</i>
	<b>IMAGE ENHANCE</b>		NEX	<i>2.00</i>
	Filter Choice	<i>None</i>	Auto Shim	<i>Auto</i>
	<b>GATING/TRIGGER</b>		Phase Correction	<i>Yes</i>
	Auto Trigger Type	<i>Off</i>	Flow Direction Compensation	<i>Freq</i>
	<b>FMRI</b>		<b>USER CVS</b>	
	PSD Trigger	<i>Internal</i>	User CV19	<i>1.00</i>
	View Order	<i>Bottom/Up</i>	User CV21	<i>1.00</i>
	# of Repetitions REST	<i>0</i>	TR Min	<i>4000.0</i>
	# of Repetitions ACTIVE	<i>0</i>	TR Max	<i>10000.0</i>
	<b>SAT</b>		<b>MULTI-PHASE</b>	
	Tag Type	<i>None</i>	Seperate Series	<i>0</i>
	Fat/Water Saturation	<i>Fat Classic</i>	Mask Phase	<i>0</i>
	<b>TRICKS</b>		Mask Pause	<i>0</i>
	Pause On/Off	<i>On</i>	<b>DIFFUSION</b>	
	Auto Subtract	<i>0</i>	Recon All Images	<i>On</i>
Auto SCIC	<i>Off</i>	<b>TRACKER</b>		
<b>CONTRAST</b>		Tracker Length	<i>200.0</i>	
Contrast Yes/No	<i>No</i>	Tracker Thickness	<i>20.0</i>	

CORONAL T2W FAT SAT

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
Coil Configuration	<i>HD T/R Knee Array by Invivo</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ZIP512</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SAGITTAL PDW</i>	FOV	<i>14.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>1.7</i>
Flip Angle	<i>160</i>	Slice Spacing	<i>0.0</i>
TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>288</i>
TR	<i>5692.0</i>	Phase	<i>192</i>
Echo Train Length	<i>8</i>	Freq DIR	<i>S/I</i>
Receiver Bandwidth	<i>41.67</i>	Fat Shift DIR	<i>Normal (S)</i>
<b>IMAGE ENHANCE</b>		NEX	<i>2.00</i>
Filter Choice	<i>None</i>	Auto Shim	<i>Auto</i>
<b>GATING/TRIGGER</b>		Phase Correction	<i>Yes</i>
Auto Trigger Type	<i>Off</i>	<b>USER CVS</b>	
<b>FMRI</b>		User CV8	<i>1.00</i>
PSD Trigger	<i>Internal</i>	TR Min	<i>2000.0</i>
View Order	<i>Bottom/Up</i>	TR Max	<i>10000.0</i>
# of Repetitions REST	<i>0</i>	<b>MULTI-PHASE</b>	
# of Repetitions ACTIVE	<i>0</i>	Seperate Series	<i>0</i>
<b>SAT</b>		Mask Phase	<i>0</i>
Tag Type	<i>None</i>	Mask Pause	<i>0</i>
<b>TRICKS</b>		<b>DIFFUSION</b>	
Pause On/Off	<i>On</i>	Recon All Images	<i>On</i>
Auto Subtract	<i>0</i>	<b>TRACKER</b>	
Auto SCIC	<i>Off</i>	Tracker Length	<i>200.0</i>
<b>CONTRAST</b>		Tracker Thickness	<i>20.0</i>
Contrast Yes/No	<i>No</i>		

SAGITTAL PDW

SAGITTAL PDW

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
Coil Configuration	<i>HD T/R Knee Array by Invivo</i>	Imaging Options	<i>NPW, EDR, TRF, Fast, ZIP512</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SAGITTAL T2W FAT SAT</i>	FOV	<i>14.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>1.7</i>
Flip Angle	<i>160</i>	Slice Spacing	<i>0.0</i>
TE	<i>54.0</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>256</i>
TR	<i>13872.0</i>	Phase	<i>192</i>
Echo Train Length	<i>16</i>	Freq DIR	<i>S/I</i>
Receiver Bandwidth	<i>41.67</i>	Fat Shift DIR	<i>Normal (S)</i>
<b>IMAGE ENHANCE</b>		NEX	<i>2.00</i>
Filter Choice	<i>None</i>	Auto Shim	<i>Auto</i>
<b>GATING/TRIGGER</b>		Phase Correction	<i>Yes</i>
Auto Trigger Type	<i>Off</i>	<b>USER CVS</b>	
<b>FMRI</b>		User CV8	<i>1.00</i>
PSD Trigger	<i>Internal</i>	User CV19	<i>1.00</i>
View Order	<i>Bottom/Up</i>	User CV21	<i>1.00</i>
# of Repetitions REST	<i>0</i>	TR Min	<i>4000.0</i>
# of Repetitions ACTIVE	<i>0</i>	TR Max	<i>15000.0</i>
<b>SAT</b>		<b>MULTI-PHASE</b>	
Tag Type	<i>None</i>	Seperate Series	<i>0</i>
Fat/Water Saturation	<i>Fat Classic</i>	Mask Phase	<i>0</i>
<b>TRICKS</b>		Mask Pause	<i>0</i>
Pause On/Off	<i>On</i>	<b>DIFFUSION</b>	
Auto Subtract	<i>0</i>	Recon All Images	<i>On</i>
Auto SCIC	<i>Off</i>	<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

SAGITTAL T2W FAT SAT

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PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	FSE-XL
Coil Configuration	HD T/R Knee Array by Invivo	Imaging Options	NPW, TRF, Fast, ZIP512
Plane	AXIAL	<b>SCAN RANGE</b>	
Series Description	AXIAL T2W FAT SAT	FOV	14.0
<b>SCAN TIMING</b>		Slice Thickness	4.0
Flip Angle	160	Slice Spacing	1.0
TE	60.0	<b>ACQ TIMING</b>	
Number of Echoes	1	Freq	352
TR	3838.0	Phase	224
Echo Train Length	15	Freq DIR	A/P
Receiver Bandwidth	31.25	Fat Shift DIR	Normal (A)
<b>IMAGE ENHANCE</b>		NEX	4.00
Filter Choice	None	Auto Shim	Auto
<b>GATING/TRIGGER</b>		Phase Correction	Yes
Auto Trigger Type	Off	<b>USER CVS</b>	
<b>FMRI</b>		User CV8	1.00
PSD Trigger	Internal	User CV19	1.00
View Order	Bottom/Up	User CV21	1.00
# of Repetitions REST	0	TR Min	3000.0
# of Repetitions ACTIVE	0	TR Max	10000.0
<b>SAT</b>		<b>MULTI-PHASE</b>	
Tag Type	None	Seperate Series	0
Fat/Water Saturation	Fat Classic	Mask Phase	0
<b>TRICKS</b>		Mask Pause	0
Pause On/Off	On	<b>DIFFUSION</b>	
Auto Subtract	0	Recon All Images	On
Auto SCIC	Off	<b>TRACKER</b>	
<b>CONTRAST</b>		Tracker Length	200.0
Contrast Yes/No	No	Tracker Thickness	20.0

AXIAL T2W FAT SAT

AXIAL T2W FAT SAT