	IMAGING PARAMETERS	2D
	Imaging Mode Pulse Sequence	2D Gradient Echo
	Imaging Options	Seq, Fast
		00q, r asi
	SCAN RANGE	00.0
	FOV Slice Thickness	36.0 7.00
	Slice Spacing	0.0
	Overlap Locations	0.0
	ACQ TIMING	050
	Freq Phase	256 128
	Freq DIR	Unswap
ĺ	NEX	1.00
Ž	Phase FOV	1.00
Ъ.	Auto Shim	Auto
t 3-	Phase Correction	No
<u></u>	RF Drive Mode	Single
٠ ح	Excitation Mode	Selective
၁၀	USER CVS	
Ш Ш	User CV20	1.00
Right 3-PLANE LOC - Right 3-PLANE LOC	User CV Mask2	0
ᅻ	MULTI-PHASE	
nt 3.	Seperate Series	0
≷igh	Mask Phase	0
<u>"</u>	Mask Pause	0
	Preserve	0
	DIFFUSION	
	Recon All Images	On
	# Synthetic b-values	1
	Synthetic b-value	1000.0;
	CONTRAST	
	Contrast Yes/No	No

Protocol: adult_upperExtremities_MSK ARDL 2022 SHOULDER Quicker ARDL

	IMAGING PARAMETERS		SCAN TIMING	
	Imaging Mode	2D	Number of Echoes	1
	Pulse Sequence	Gradient Echo	IMAGE ENHANCE	
	Imaging Options	Seq, Fast	Filter Choice	None
	SCAN RANGE		GATING/TRIGGER	
	FOV	36.0	Pause After Navigator	0
	Slice Thickness	7.00	Prescan	U
	Slice Spacing	0.0	FMRI	
	Overlap Locations	0	PSD Trigger	Internal
	Number of Slices	25	View Order	Bottom/Up
	ACQ TIMING		# of Repetitions REST	0
	Freq	256	# of Repetitions ACTIVE	0
	Phase	128	SAT	
Right 3-PLANE LOC - Right 3-PLANE LOC	Freq DIR	Unswap	Tag Type	None
Е	NEX	1.00	TRICKS	
AN	Phase FOV	1.00	Pause On/Off	On
ЪГ	Auto Shim	Auto	Auto Subtract	0
t 3-	Phase Correction	No	Auto SCIC	Off
igh	RF Drive Mode Excitation Mode	Single		
- R				
၁င	USER CVS			
Ξ Γ(User CV20	1.00		
Y NE	User CV Mask2	0		
PL/	MULTI-PHASE			
t 3-	Seperate Series	0		
igh	Mask Phase	0		
R	Mask Pause	0		
	Preserve	0		
	DIFFUSION			
	Recon All Images	On		
	Multi b-values	1000.0;		
	Multi NEX Values	1.0;		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	CONTRAST			
	Contrast Yes/No	No		
			•	

Right 3-PLANE LOC - Right 3-PLANE LOC

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	160	
	Pulse Sequence	FSE-XL	TE	45.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	1.60	TR	1894.0	
	SCAN RANGE		Echo Train Length	9	
	FOV	15.0	Receiver Bandwidth	27.78	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.3	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	26	User CV12	1.00	
	ACQ TIMING		User CV19	1.00	
	Freq	320	TR Min	1500.0	
	Phase	288	TR Max	3500.0	
	Freq DIR	R/L	User CV30	1.00	
	Fat Shift DIR	Normal (L)	User CV39	1.00	(0
FS	NEX	1.00	User CV Mask2	256	FS
PD	Phase FOV	1.00	MULTI-PHASE		8
FS - AX	Auto Shim	Auto	Seperate Series	0	¥
· O	Phase Correction	Yes	Mask Phase	0	,
F.	RF Drive Mode	Single	Mask Pause	0	Щ
PD	Excitation Mode	Selective	Preserve	0	AX PD FS - AX PD
AX	FMRI		DIFFUSION		¥
	PSD Trigger	Internal	Recon All Images	On	
	View Order	Bottom/Up	# Synthetic b-values	1	
	# of Repetitions REST	0	Synthetic b-value	1000.0;	
	# of Repetitions ACTIVE	0	CONTRAST		
	SAT		Contrast Yes/No	No	
	SAT Location	R	001111051 103/110	710	
	SAT Location	L			
	SAT Location	1			
	Tag Type	None			
	Fat/Water Saturation	Fat Classic			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	2			
					

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	160	
	Pulse Sequence	FSE-XL	TE	41.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	1.40	TR	1500.0	
	SCAN RANGE		Echo Train Length	9	
	FOV	15.0	Receiver Bandwidth	27.78	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.3	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	20	User CV12	1.00	
	ACQ TIMING	User CV19	1.00		
	Freq	320	TR Min	1500.0	
	Phase	288	TR Max	3500.0	
	Freq DIR	S/I	User CV30	1.00	
FS	Fat Shift DIR	Normal (S)	User CV39	1.00	FS
D F	NEX	1.00	User CV Mask2	256	D
δ - Δ	Phase FOV	1.00	MULTI-PHASE		۸ ح
Ö	Auto Shim	Auto	Seperate Series	0	Ö
	Phase Correction	Yes	Mask Phase	0	
ST.	RF Drive Mode	Single	Mask Pause	0	COR PD FS - COR PD
PD FS - COR PD	Excitation Mode	Selective	Preserve	0	
COR	FMRI		DIFFUSION		A C
ö	PSD Trigger	Internal	Recon All Images	On	ŏ
	View Order	Bottom/Up	# Synthetic b-values	1	
	# of Repetitions REST	0	Synthetic b-value	1000.0;	
	# of Repetitions ACTIVE	0	CONTRAST	,	
	SAT		Contrast Yes/No	No	
	SAT Location	R	Contrast res/No	740	
	SAT Location	L			
	SAT Location	1			
	Tag Type	None			
	Fat/Water Saturation	Fat Classic			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	2			

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	160	
	Pulse Sequence	FSE-XL	TE	68.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	1.00	TR	4318.0	
	SCAN RANGE		Echo Train Length	15	
	FOV	15.0	Receiver Bandwidth	27.78	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.3	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	20	User CV12	1.00	_
	ACQ TIMING		User CV19	1.00	
	Freq	320	TR Min	3000.0	
	Phase	288	TR Max	6000.0	
	Freq DIR	S/I	User CV30	1.00	
S S	Fat Shift DIR	Normal (S)	User CV39	1.00	Ø
	NEX	1.00	User CV Mask2	256	ĬĬ.
COR T2	Phase FOV	1.00	MULTI-PHASE		F
ğ	Auto Shim	Auto	Seperate Series	0	Ö
٠-	Phase Correction	Yes	Mask Phase	0	٠
FS	RF Drive Mode	Single	Mask Pause	0	R
T2	Excitation Mode	Selective	Preserve	0	T2
COR T2 FS -	FMRI		DIFFUSION		COR T2 FS - COR T2 FS
Ö	PSD Trigger	Internal	Recon All Images	On	Ŏ
	View Order	Bottom/Up	# Synthetic b-values	1	
	# of Repetitions REST	0	Synthetic b-value	1000.0;	
	# of Repetitions ACTIVE	0		,	
	SAT		CONTRAST Contrast Yes/No	No	
	SAT Location	R	Contrast res/No	NO	
	SAT Location	L			
	SAT Location	1			
	Tag Type	None			
	Fat/Water Saturation	Fat Classic			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	2			
					

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	160	
	Pulse Sequence	FSE-XL	TE	Min Full	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	2.00	TR	511.0	
	SCAN RANGE		Echo Train Length	4	
	FOV	15.0	Receiver Bandwidth	35.71	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.3	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	21	User CV12	1.00	
	ACQ TIMING		TR Min	400.0	
	Freq	320	TR Max	600.0	
	Phase	320	User CV30	1.00	
	Freq DIR	S/I	User CV39	1.00	SAG T1-SAG T1
T1	Fat Shift DIR	Normal (I)	User CV Mask2	256	
	NEX	1.00	MULTI-PHASE		
SAG	Phase FOV	1.00	Seperate Series	0	
S	Auto Shim	Auto	Mask Phase	0	
T1 -	Phase Correction	Yes	Mask Pause	0	
(J	RF Drive Mode	Single	Preserve	0	
SAG	Excitation Mode	Selective	DIFFUSION		
	FMRI		Recon All Images	On	
	PSD Trigger	Internal	# Synthetic b-values	1	
	View Order	Bottom/Up	Synthetic b-value	1000.0;	
	# of Repetitions REST	0	CONTRAST	,	
	# of Repetitions ACTIVE	0	Contrast Yes/No	No	
	SAT		Contrast 165/NO	NO	
	SAT Location	R			
	SAT Location	L			
	SAT Location	1			
	Tag Type	None			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	2			
		•			

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	2D	Flip Angle	160	
	Pulse Sequence	FSE-XL	TE	68.0	
	Imaging Options	EDR, TRF, Fast, ARC	Number of Echoes	1	
	Phase	1.50	TR	3687.0	
	SCAN RANGE		Echo Train Length	12	
	FOV	15.0	Receiver Bandwidth	27.78	
	Slice Thickness	3.00	IMAGE ENHANCE		
	Slice Spacing	0.3	Filter Choice	None	
	Overlap Locations	0	USER CVS		
	Number of Slices	21	User CV12	1.00	
	ACQ TIMING		User CV19	1.00	
	Freq	320	TR Min	1500.0	
	Phase	288	TR Max	6000.0	
	Freq DIR	S/I	User CV30	1.00	
(0	Fat Shift DIR	Normal (I)	User CV39	1.00	(0
FS	NEX	1.00	User CV Mask2	256	FS
T2	Phase FOV	1.00	MULTI-PHASE		- Sag T2
Sag	Auto Shim	Auto	Seperate Series	0	Sag
	Phase Correction	Yes	Mask Phase	0	- 0
FS	RF Drive Mode	Single	Mask Pause	0	FS
T2	Excitation Mode	Selective	Preserve	0	T2
Sag T2	FMRI		DIFFUSION		Sag T2
	PSD Trigger	Internal	Recon All Images	On	
	View Order	Bottom/Up	# Synthetic b-values	1	
	# of Repetitions REST	0	Synthetic b-value	1000.0;	
	# of Repetitions ACTIVE	0	CONTRAST		
	SAT		Contrast Yes/No	No	_
	SAT Location	R	Contrast res/No	NO	
	SAT Location	L			
	SAT Location	1			
	Tag Type	None			
	Fat/Water Saturation	Fat Classic			
	TRICKS				
	Pause On/Off	On			
	Auto Subtract	0			
	Auto SCIC	2			

	IMAGING PARAMETERS		SCAN TIMING		
	Imaging Mode	3D	Flip Angle	2	
	Pulse Sequence	SPGR	Number of Echoes	1	
	Imaging Options	Fast, SqP	Receiver Bandwidth	50.00	
	PSD Name	ozteo	IMAGE ENHANCE		
	SCAN RANGE		Filter Choice	None	
	FOV	21.0	GATING/TRIGGER		
	Slice Thickness	1.10	Pause After Navigator 0	0	
	Overlap Locations	0	Prescan		
	Number of Slices	1	FMRI		
e e	ACQ TIMING		PSD Trigger	Internal	Bone
Bor	Freq	200	View Order	Bottom/Up	
8	Freq DIR	R/L	# of Repetitions REST	0	IR.
≥ >	NEX	8.00	# of Repetitions ACTIVE	0	>
9	Auto Shim	Auto	SAT		all FO
a	Phase Correction	No	Tag Type	None	
Sm	RF Drive Mode	Single	TRICKS		Sm
ä	Excitation Mode	Selective	Pause On/Off	On	ах
T (D)	Spokes Per Segment	384	Auto Subtract	0	ax Small FOV MR Bone - ax Small FOV MR Bone
ones	USER CVS		Auto SCIC	3	
Small FOV MR Bone - ax Small FOV MR Bone	User CV Mask2	0	7.4.0 00.0		
>	MULTI-PHASE				N N
Ó	Seperate Series	0			0
<u>=</u>	Mask Phase	0			<u>=</u>
ü	Mask Pause	0			Smi
ax S	Preserve	0			ax (
	DIFFUSION				
	Recon All Images	On			
	# Synthetic b-values	1			
	Synthetic b-value	1000.0;			
	CONTRAST				
	Contrast Yes/No	No			