

MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Wrist (L&B)/Infection

3-Plane Loc Right - 3-Plane Loc Right	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Number of Echoes	1
	Pulse Sequence	Gradient Echo	<b>IMAGE ENHANCE</b>	
	Imaging Options	Seq, Fast	Filter Choice	None
	<b>SCAN RANGE</b>		<b>GATING/TRIGGER</b>	
	FOV	28.0	Pause After Navigator Prescan	0
	Slice Thickness	5.00	<b>FMRI</b>	
	Slice Spacing	5.0	PSD Trigger	Internal
	Overlap Locations	0	View Order	Bottom/Up
	<b>ACQ TIMING</b>		# of Repetitions REST	0
	Freq	256	# of Repetitions ACTIVE	0
	Phase	128	<b>SAT</b>	
	Freq DIR	Unswap	Tag Type	None
	NEX	1.00	<b>TRICKS</b>	
	Phase FOV	1.00	Pause On/Off	On
	Auto Shim	Auto	Auto Subtract	0
	Phase Correction	No	Auto SCIC	Off
	RF Drive Mode	Single		
	Excitation Mode	Selective		
	<b>USER CVS</b>			
	User CV20	1.00		
	User CV Mask2	0		
	<b>MULTI-PHASE</b>			
	Seperate Series	0		
	Mask Phase	0		
	Mask Pause	0		
	Preserve	0		
	<b>DIFFUSION</b>			
	Recon All Images	On		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

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3-Plane Loc Left - 3-Plane Loc Left

**IMAGING PARAMETERS**

Imaging Mode *2D*  
Pulse Sequence *Gradient Echo*  
Imaging Options *Seq, Fast*

**IMAGE ENHANCE**

Filter Choice *None*

**GATING/TRIGGER**

Auto Trigger Type *Off*  
Pause After Navigator Prescan *0*

**FMRI**

PSD Trigger *Internal*  
Slice Order *Interleaved*  
View Order *Bottom/Up*  
# of Repetitions REST *0*  
# of Repetitions ACTIVE *0*

**SAT**

Tag Type *None*

**TRICKS**

Pause On/Off *On*  
Auto Subtract *0*  
Auto SCIC *Off*

**SCAN RANGE**

FOV *28.0*  
Slice Thickness *5.0*  
Slice Spacing *5.0*

**ACQ TIMING**

Freq *256*  
Phase *128*  
Freq DIR *Unswap*  
NEX *1.00*  
Phase FOV *1.00*  
Auto Shim *Auto*  
Phase Correction *No*  
RF Drive Mode *Single*  
Excitation Mode *Selective*

**USER CVS**

User CV Mask2 *0*

**MULTI-PHASE**

Seperate Series *0*  
Mask Phase *0*  
Mask Pause *0*

**DIFFUSION**

Recon All Images *On*

**CONTRAST**

Contrast Yes/No *No*

3-Plane Loc Left - 3-Plane Loc Left

MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Wrist (L&B)/Infection

3PL LOC SMALL fov - 3PL LOC SMALL fov	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Number of Echoes	1
	Pulse Sequence	Gradient Echo	<b>IMAGE ENHANCE</b>	
	Imaging Options	Seq, Fast	Filter Choice	None
	<b>SCAN RANGE</b>		<b>GATING/TRIGGER</b>	
	FOV	27.0	Auto Trigger Type	Off
	Slice Thickness	5.0	Pause After Navigator	0
	Slice Spacing	5.0	Prescan	
	Number of Slices	21	<b>FMRI</b>	
	<b>ACQ TIMING</b>		PSD Trigger	Internal
	Freq	256	View Order	Bottom/Up
	Phase	128	# of Repetitions REST	0
	Freq DIR	Unswap	# of Repetitions ACTIVE	0
	NEX	1.00	<b>SAT</b>	
	Phase FOV	1.00	Tag Type	None
	Auto Shim	Auto	<b>TRICKS</b>	
	Phase Correction	No	Pause On/Off	On
	RF Drive Mode	Single	Auto Subtract	0
	Excitation Mode	Selective	Auto SCIC	Off
	<b>USER CVS</b>			
	User CV Mask2	0		
	<b>MULTI-PHASE</b>			
	Seperate Series	0		
	Mask Phase	0		
	Mask Pause	0		
	Preserve	0		
	<b>DIFFUSION</b>			
	Recon All Images	On		
	Multi b-values	1000.0;		
	Multi NEX Values	1;		
	# Synthetic b-values	1		
	Synthetic b-value	1000.0;		
	<b>CONTRAST</b>			
	Contrast Yes/No	No		

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Protocol: adult\_upperExtremities\_MSK ARDL 2022-Wrist (L&amp;B)/Infection

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ARC
Phase	2.00

**SCAN RANGE**

FOV	12.0
Slice Thickness	3.00
Slice Spacing	0.5
Overlap Locations	0
Number of Slices	32

**ACQ TIMING**

Freq	288
Phase	288
Freq DIR	A/P
Fat Shift DIR	Normal (A)
NEX	1.00
Phase FOV	1.00
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Single
Excitation Mode	Selective

**FMRI**

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

**SAT**

SAT Location	S
SAT Location	I
Tag Type	None

**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	2

**SCAN TIMING**

Flip Angle	160
TE	Min Full
Number of Echoes	1
TR	501.0
Echo Train Length	4
Receiver Bandwidth	31.25

**IMAGE ENHANCE**

Filter Choice	None
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**USER CVS**

User CV9	1.00
User CV12	1.00
TR Min	300.0
TR Max	750.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

**MULTI-PHASE**

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

**DIFFUSION**

Recon All Images	On
# Synthetic b-values	1
Synthetic b-value	1000.0;

**CONTRAST**

Contrast Yes/No	No
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AX T1 - AX T1

AX T1 - AX T1

MSK-THR HIP NEW

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AX T2 FS - AX T2 FS

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 14.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 58

**ACQ TIMING**

Freq 256  
Phase 224  
Freq DIR R/L  
Fat Shift DIR Normal (L)  
NEX 2.00  
# of Acq. Before Pause 0  
Phase FOV 0.70  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC 2

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Flip Angle 160  
TE 68.0  
Number of Echoes 1  
TR 6044.0  
Echo Train Length 20  
Receiver Bandwidth 27.78

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV12 1.00  
User CV19 1.00  
User CV21 1.00  
TR Min 3000.0  
TR Max 10000.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**TRACKER**

Tracker Length 200.0  
Tracker Thickness 20.0

AX T2 FS - AX T2 FS

MSK-THR HIP NEW

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**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 16.0  
Slice Thickness 3.0  
Slice Spacing 0.5  
Number of Slices 58

**ACQ TIMING**

Freq 256  
Phase 192  
Freq DIR R/L  
Fat Shift DIR Normal (L)  
NEX 3.00  
# of Acq. Before Pause 0  
Phase FOV 0.70  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**USER CVS**

User CV19 1.00  
User CV21 1.00  
TR Min 3000.0  
TR Max 10000.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
Multi b-values 1000.0;  
Multi NEX Values 1;  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**TRACKER**

Tracker Length 200.0  
Tracker Thickness 20.0

**SCAN TIMING**

Flip Angle 160  
TE 68.0  
Number of Echoes 1  
TR 6707.0  
Echo Train Length 20  
Receiver Bandwidth 22.73

**IMAGE ENHANCE**

Filter Choice None

**GATING/TRIGGER**

Auto Trigger Type Off

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

**CONTRAST**

Contrast Yes/No No

--depending where it is-- --depending where it is--

--depending where it is-- --depending where it is--

MSK-THR HIP NEW

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Sag/COR T1 - Sag/COR T1	<b>IMAGING PARAMETERS</b>		<b>SCAN TIMING</b>	
	Imaging Mode	2D	Flip Angle	160
	Pulse Sequence	FSE-XL	TE	Min Full
	Imaging Options	EDR, TRF, Fast	Number of Echoes	1
	<b>SCAN RANGE</b>		TR	450.0
	FOV	14.0	Echo Train Length	4
	Slice Thickness	2.50	Receiver Bandwidth	31.25
	Slice Spacing	0.5	<b>IMAGE ENHANCE</b>	
	Overlap Locations	0	Filter Choice	None
	Number of Slices	17	<b>USER CVS</b>	
	<b>ACQ TIMING</b>		User CV9	1.00
	Freq	352	User CV12	1.00
	Phase	288	User CV30	1.00
	Freq DIR	S/I	User CV39	1.00
	Fat Shift DIR	Normal (I)	User CV Mask2	256
	NEX	1.00	<b>MULTI-PHASE</b>	
	Phase FOV	1.00	Seperate Series	0
	Auto Shim	Auto	Mask Phase	0
	Phase Correction	Yes	Mask Pause	0
	RF Drive Mode	Single	Preserve	0
	Excitation Mode	Selective	<b>DIFFUSION</b>	
	<b>FMRI</b>		Recon All Images	On
	PSD Trigger	Internal	# Synthetic b-values	1
	View Order	Bottom/Up	Synthetic b-value	1000.0;
	# of Repetitions REST	0	<b>CONTRAST</b>	
	# of Repetitions ACTIVE	0	Contrast Yes/No	No
	<b>SAT</b>			
	SAT Location	S		
	SAT Location	I		
	Tag Type	None		
	<b>TRICKS</b>			
	Pause On/Off	On		
	Auto Subtract	0		
	Auto SCIC	2		

Sag/COR T1 - Sag/COR T1

MSK-THR HIP NEW

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Sag/COR T2 FS - Sag/COR T2 FS

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 14.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0

**ACQ TIMING**

Freq 256  
Phase 224  
Freq DIR S/I  
Fat Shift DIR Normal (I)  
NEX 2.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC 2

**CONTRAST**

Contrast Yes/No No

**SCAN TIMING**

Flip Angle 160  
TE 68.0  
Number of Echoes 1  
TR 6707.0  
Echo Train Length 20  
Receiver Bandwidth 25.00

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV12 1.00  
User CV19 1.00  
User CV21 1.00  
TR Min 3000.0  
TR Max 10000.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**TRACKER**

Tracker Length 200.0  
Tracker Thickness 20.0

Sag/COR T2 FS - Sag/COR T2 FS



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**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 16.0  
Slice Thickness 3.0  
Slice Spacing 0.5

**ACQ TIMING**

Freq 256  
Phase 192  
Freq DIR S/I  
Fat Shift DIR Normal (I)  
NEX 3.00  
Phase FOV 0.70  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**USER CVS**

User CV19 1.00  
User CV21 1.00  
TR Min 3000.0  
TR Max 10000.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
Multi b-values 1000.0;  
Multi NEX Values 1;  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**TRACKER**

Tracker Length 200.0  
Tracker Thickness 20.0

**SCAN TIMING**

Flip Angle 160  
TE 68.0  
Number of Echoes 1  
TR 6707.0  
Echo Train Length 20  
Receiver Bandwidth 22.73

**IMAGE ENHANCE**

Filter Choice None

**GATING/TRIGGER**

Auto Trigger Type Off

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

**CONTRAST**

Contrast Yes/No No

--if gad needed--

--if gad needed--

MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Wrist (L&B)/Infection

AX T1 FS + C - AX T1 FS + C

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast, ARC  
Phase 2.00

**SCAN RANGE**

FOV 12.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 32

**ACQ TIMING**

Freq 320  
Phase 256  
Freq DIR A/P  
Fat Shift DIR Normal (A)  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

SAT Location S  
SAT Location I  
Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

**SCAN TIMING**

Flip Angle 160  
TE Min Full  
Number of Echoes 1  
TR 652.0  
Echo Train Length 4  
Receiver Bandwidth 31.25

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV9 1.00  
User CV12 1.00  
User CV19 1.00  
TR Min 300.0  
TR Max 750.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No Yes

AX T1 FS + C - AX T1 FS + C

## MSK-THR HIP NEW

Protocol: adult\_upperExtremities\_MSK ARDL 2022-Wrist (L&amp;B)/Infection

**IMAGING PARAMETERS**

Imaging Mode	2D
Pulse Sequence	FSE-XL
Imaging Options	EDR, TRF, Fast, ARC
Phase	2.00

**SCAN RANGE**

FOV	12.0
Slice Thickness	3.0
Slice Spacing	0.5
Number of Slices	32

**ACQ TIMING**

Freq	320
Phase	256
Freq DIR	A/P
Fat Shift DIR	Normal (A)
NEX	1.00
# of Acq. Before Pause	0
Auto Shim	Auto
Phase Correction	Yes
RF Drive Mode	Single
Excitation Mode	Selective

**USER CVS**

User CV7	1.00
User CV9	1.00
User CV17	1.00
User CV19	1.00
TR Min	300.0
TR Max	750.0
User CV30	1.00
User CV39	1.00
User CV Mask2	256

**MULTI-PHASE**

Seperate Series	0
Mask Phase	0
Mask Pause	0
Preserve	0

**DIFFUSION**

Recon All Images	On
Multi b-values	1000.0;
Multi NEX Values	1;
# Synthetic b-values	1
Synthetic b-value	1000.0;

**CONTRAST**

Contrast Yes/No	Yes
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**SCAN TIMING**

Flip Angle	160
TE	Min Full
Number of Echoes	1
TR	653.0
Echo Train Length	4
Receiver Bandwidth	31.25

**IMAGE ENHANCE**

Filter Choice	A
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**GATING/TRIGGER**

Auto Trigger Type	Off
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**FMRI**

PSD Trigger	Internal
View Order	Bottom/Up
# of Repetitions REST	0
# of Repetitions ACTIVE	0

**SAT**

SAT Location	S
SAT Location	I
Tag Type	None
Fat/Water Saturation	Fat Classic

**TRICKS**

Pause On/Off	On
Auto Subtract	0
Auto SCIC	Off

--if infection-- - --if infection--

--if infection-- - --if infection--

MSK-THR HIP NEW

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AX T1 FS + C - AX T1 FS + C

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast, ARC  
Phase 2.00

**SCAN RANGE**

FOV 12.0  
Slice Thickness 3.00  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 32

**ACQ TIMING**

Freq 320  
Phase 256  
Freq DIR A/P  
Fat Shift DIR Normal (A)  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

SAT Location S  
SAT Location I  
Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

**SCAN TIMING**

Flip Angle 160  
TE Min Full  
Number of Echoes 1  
TR 652.0  
Echo Train Length 4  
Receiver Bandwidth 31.25

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV9 1.00  
User CV12 1.00  
User CV19 1.00  
TR Min 300.0  
TR Max 750.0  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No Yes

AX T1 FS + C - AX T1 FS + C

MSK-THR HIP NEW

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COR/SAG T1 FS + C - COR/SAG T1 FS + C

**IMAGING PARAMETERS**

Imaging Mode 2D  
Pulse Sequence FSE-XL  
Imaging Options EDR, TRF, Fast

**SCAN RANGE**

FOV 12.0  
Slice Thickness 2.50  
Slice Spacing 0.5  
Overlap Locations 0  
Number of Slices 17

**ACQ TIMING**

Freq 352  
Phase 224  
Freq DIR S/I  
Fat Shift DIR Normal (I)  
NEX 1.00  
Phase FOV 1.00  
Auto Shim Auto  
Phase Correction Yes  
RF Drive Mode Single  
Excitation Mode Selective

**FMRI**

PSD Trigger Internal  
View Order Bottom/Up  
# of Repetitions REST 0  
# of Repetitions ACTIVE 0

**SAT**

SAT Location S  
SAT Location I  
Tag Type None  
Fat/Water Saturation Fat Classic

**TRICKS**

Pause On/Off On  
Auto Subtract 0  
Auto SCIC Off

**SCAN TIMING**

Flip Angle 160  
TE Min Full  
Number of Echoes 1  
TR 450.0  
Echo Train Length 2  
Receiver Bandwidth 31.25

**IMAGE ENHANCE**

Filter Choice None

**USER CVS**

User CV9 1.00  
User CV12 1.00  
User CV19 1.00  
User CV30 1.00  
User CV39 1.00  
User CV Mask2 256

**MULTI-PHASE**

Seperate Series 0  
Mask Phase 0  
Mask Pause 0  
Preserve 0

**DIFFUSION**

Recon All Images On  
# Synthetic b-values 1  
Synthetic b-value 1000.0;

**CONTRAST**

Contrast Yes/No Yes

COR/SAG T1 FS + C - COR/SAG T1 FS + C