

# FOREARM Tumor ARM OVER HEAD PRONE SIGNA Artist

## Technical Instructions

--power inj/subtractions

Lt 3pl loc

Rt 3pl loc

Cor STIR DL

Sag STIR DL

AX T2 Fat DL

AX T1 DL

COR T1 DL

Ax T1 Lava-Flex Pre

Ax T1 Lava-Flex 2min

Cor T1 Lava-Flex

Sag T1 Lava-Flex

+C AX T1 Fat DL



# --power inj/subtractions

Detailstab

Protocolnotes

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## --power inj/subtractions

### PATIENTPOSITION

Coil Configuration:	Inv16chCardiacAA
Plane:	3-PLANE

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### IMAGINGPARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, EDR, TRF, Fast, SS, ARC
Pulse Sequence:	Spin Echo
ARC Phase:	2.00

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### ImageRecon

Recon DL Strength:	Off
Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

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### SCANRANGE

FOV:	48.0
Slice Thickness:	8.00
Slice Spacing:	3.0
Overlap Locations:	0
No Phase Wrap:	2.00

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## **ACQTIMING**

Acq Voxel Size:	1.9 X 2.1 X 8.0
Freq:	256
Phase:	224
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

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## **SCANTIMING**

TE:	Minimum
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	83.33

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Humerus
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## **USERCVS**

User CV1:	1.00
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# Lt 3pl loc

Detailstab

Protocolnotes

## Lt 3pl loc

### PATIENTPOSITION

Coil Configuration:	Inv16chCardiacAA, GE40chGEMPA
Plane:	3-PLANE

### IMAGINGPARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, EDR, TRF, Fast, SS, ARC
Pulse Sequence:	Spin Echo
ARC Phase:	2.00

### ImageRecon

Recon DL Strength:	Off
Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

### SCANRANGE

FOV:	48.0
Slice Thickness:	8.00
Slice Spacing:	3.0
Overlap Locations:	0
No Phase Wrap:	2.00

## **ACQTIMING**

Acq Voxel Size:	1.9 X 2.1 X 8.0
Freq:	256
Phase:	224
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

## **SCANTIMING**

TE:	Minimum
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	83.33

---

## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Humerus
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## **USERCVS**

User CV1:	1.00
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# Rt 3pl loc

Detailstab

Protocolnotes

## Rt 3pl loc

### PATIENTPOSITION

Coil Configuration:	Inv16chCardiacAA, GE40chGEMPA
Plane:	3-PLANE

### IMAGINGPARAMETERS

Imaging Mode:	2D
Imaging Options:	Seq, EDR, TRF, Fast, SS, ARC
Pulse Sequence:	Spin Echo
ARC Phase:	2.00

### ImageRecon

Intensity Correction:	NONE
Intensity Filter:	None
Save Original:	Off

### SCANRANGE

FOV:	48.0
Slice Thickness:	8.0
Slice Spacing:	3.0
No Phase Wrap:	2.00

### ACQTIMING

<b>Acq Voxel Size:</b>	<b>1.9 X 2.1 X 8.0</b>
Freq:	256
Phase:	224
Freq DIR:	Unswap
# of Acq. Before Pause:	0
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCANTIMING**

TE:	Minimum
Number of Echoes:	1
TR:	Minimum
Receiver Bandwidth:	83.33

---

### **CONTRAST**

Contrast Yes/No:	No
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### **OTHERS**

Anatomical Region:	Humerus
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### **USERCVS**

User CV1:	1.00
User CV16:	None
User CV39:	1.00

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# Cor STIR DL

Detailstab

Protocolnotes

## Cor STIR DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: OBLIQUE

### IMAGINGPARAMETERS

Imaging Mode: 2D  
Imaging Options: FC, Seq, EDR, TRF, Fast, ARC, IrP  
Pulse Sequence: FSE-XL  
PSD Name: fse-xl  
ARC Phase: 2.00

### ImageRecon

Recon DL Strength: Medium  
Intensity Correction: SCENIC  
Intensity Filter: None  
Save Original: Off

### SCANRANGE

FOV: 20.0  
Slice Thickness: 3.00  
Slice Spacing: 1.5  
Overlap Locations: 0  
Number of Slices: 30

**No Phase Wrap:** 2.00

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### **ACQTIMING**

Acq Voxel Size: 0.6 X 0.9 X 3.0  
Freq: 320  
Phase: 224  
Freq DIR: S/I  
NEX: 1.00  
# of Acq. Before Pause: 0  
Phase FOV: 1.00  
Auto Shim: Auto  
Phase Correct: On  
Flow Comp Direction: Freq  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

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### **SCANTIMING**

Flip Angle: 160.0  
TE: 42.0  
Number of Echoes: 1  
TR: 4100.0  
TI: 150  
Echo Train Length: 13  
Receiver Bandwidth: 41.67

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### **CONTRAST**

Contrast Yes/No: No

## **OTHERS**

Anatomical Region: Hip joint

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## **SAT**

SAT Location S: Default

SAT Location I: Default

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## **USERCVS**

User CV15: None

User CV18: 1.00

User CV21: 1.00

User CV26: 1.00

TR Min: 2000.0

TR Max: 15000.0

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**Non-Viewable Parameters**

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# Sag STIR DL

Detailstab

Protocolnotes

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## Sag STIR DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: OBLIQUE

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### IMAGINGPARAMETERS

Imaging Mode: 2D  
Imaging Options: FC, Seq, EDR, TRF, Fast, ARC, IrP  
Pulse Sequence: FSE-XL  
PSD Name: fse-xl  
ARC Phase: 2.00

---

### ImageRecon

Recon DL Strength: Medium  
Intensity Correction: SCENIC  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 20.0  
Slice Thickness: 3.00  
Slice Spacing: 1.5  
Overlap Locations: 0  
Number of Slices: 30

**No Phase Wrap:** 1.00

---

### **ACQTIMING**

Acq Voxel Size: 0.6 X 0.9 X 3.0  
Freq: 320  
Phase: 224  
Freq DIR: S/I  
NEX: 1.00  
# of Acq. Before Pause: 0  
Phase FOV: 0.70  
Auto Shim: Auto  
Phase Correct: On  
Flow Comp Direction: Freq  
RF Drive Mode: Quadrature  
Excitation Mode: Selective  
Fat Shift DIR: Normal (I)

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### **SCANTIMING**

Flip Angle: 160.0  
TE: 42.0  
Number of Echoes: 1  
TR: 4100.0  
TI: 150  
Echo Train Length: 13  
Receiver Bandwidth: 41.67

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### **CONTRAST**

Contrast Yes/No: No

## **OTHERS**

Anatomical Region: Hip joint

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## **SAT**

SAT Location S: Default

SAT Location I: Default

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## **USERCVS**

User CV15: None

User CV18: 1.00

User CV21: 1.00

User CV26: 1.00

TR Min: 2000.0

TR Max: 15000.0

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**Non-Viewable Parameters**

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# AX T2 Fat DL

Detailstab

Protocolnotes

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## AX T2 Fat DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA

Plane: OBLIQUE

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### IMAGINGPARAMETERS

Imaging Mode: 2D

Imaging Options: FC, TRF, Fast, ZIP512

Pulse Sequence: FSE-XL

---

### ImageRecon

Recon DL Strength: Medium

Intensity Correction: SCENIC

Intensity Filter: None

Save Original: Off

---

### SCANRANGE

FOV: 12.0

Slice Thickness: 5.00

Slice Spacing: 1.0

Overlap Locations: 0

Number of Slices: 21

No Phase Wrap: 1.00

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## **ACQTIMING**

Acq Voxel Size:	0.4 X 0.5 X 5.0
Freq:	288
Phase:	256
Freq DIR:	R/L
NEX:	1.00
Phase FOV:	0.80
Auto Shim:	Auto
Phase Correct:	On
Flow Comp Direction:	Slice
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal (L)

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## **SCANTIMING**

Flip Angle:	160.0
TE:	68.0
Number of Echoes:	1
TR:	3000.0
Echo Train Length:	8
Receiver Bandwidth:	41.67

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Forearm bone
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## **SAT**

Fat/Water Saturation: Fat

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## **USERCVS**

User CV6:	None
User CV13:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
TR Min:	3000.0
TR Max:	10000.0

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## **Non-Viewable Parameters**

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# AX T1 DL

Detailstab

Protocolnotes

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## AX T1 DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: OBLIQUE

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### IMAGINGPARAMETERS

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

---

### ImageRecon

Recon DL Strength: Medium  
Intensity Correction: SCENIC  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 12.0  
Slice Thickness: 5.00  
Slice Spacing: 1.0  
Overlap Locations: 0  
Number of Slices: 21  
No Phase Wrap: 1.00

---

## **ACQTIMING**

Acq Voxel Size:	0.4 X 0.5 X 5.0
Freq:	288
Phase:	256
Freq DIR:	R/L
NEX:	1.00
# of Acq. Before Pause:	0
Phase FOV:	0.80
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal (L)

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## **SCANTIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	538.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Forearm bone
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**USERCVS**

User CV6:	None
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV26:	1.00
TR Min:	500.0
TR Max:	750.0

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**Non-Viewable Parameters**

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# COR T1 DL

Detailstab

Protocolnotes

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## COR T1 DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: OBLIQUE

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### IMAGINGPARAMETERS

Imaging Mode: 2D  
Imaging Options: EDR, TRF, Fast, ARC  
Pulse Sequence: FSE-XL  
ARC Phase: 1.50

---

### ImageRecon

Recon DL Strength: Medium  
Intensity Correction: SCENIC  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 20.0  
Slice Thickness: 3.00  
Slice Spacing: 1.5  
Overlap Locations: 0  
No Phase Wrap: 2.00

---

## **ACQTIMING**

Acq Voxel Size:	0.7 X 0.8 X 3.0
Freq:	288
Phase:	256
Freq DIR:	Unswap
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal

---

## **SCANTIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	617.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

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## **CONTRAST**

Contrast Yes/No:	No
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## **OTHERS**

Anatomical Region:	Forearm bone
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<b>User CV6:</b>	<b>None</b>
User CV9:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV21:	None
User CV26:	1.00

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## Non-Viewable Parameters

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# Ax T1 Lava-Flex Pre

Detailstab

Protocolnotes

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## Ax T1 Lava-Flex Pre

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: AXIAL

---

### IMAGINGPARAMETERS

Imaging Mode: 3D  
Imaging Options: EDR, Fast, ARC, Flex  
Pulse Sequence: LAVA  
IDEAL: 15  
ARC Phase: 2.00  
ARC Slice: 1.00

---

### ImageRecon

Recon DL Strength: Off  
Intensity Correction: PURE  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 26.0  
Slice Thickness: 1.50  
Slices per Slab: 172  
Overlap Locations: 0



<b>No Slab Wrap:</b>	<b>1.04</b>
No Phase Wrap:	1.00
Slice Resolution(%):	50.00

---

### **ACQTIMING**

Acq Voxel Size:	1.0 X 1.2 X 1.5
Freq:	260
Phase:	220
Freq DIR:	R/L
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCANTIMING**

Flip Angle:	15.0
TE:	Min Full
Number of Echoes:	2
Receiver Bandwidth:	90.91

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### **CONTRAST**

Contrast Yes/No:	Yes
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### **OTHERS**

3D Geometry Correction:	On
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**Anatomical Region:**

**Rectum**

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**USERCVS**

User CV4:	None
User CV6:	1.00
User CV13:	None
User CV16:	None
User CV30:	1.00
User CV34:	70.00

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**Non-Viewable Parameters**

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# Ax T1 Lava-Flex 2min

Detailstab

Protocolnotes

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## Ax T1 Lava-Flex 2min

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: AXIAL

---

### IMAGINGPARAMETERS

Imaging Mode: 3D  
Imaging Options: EDR, Fast, ARC, Flex  
Pulse Sequence: LAVA  
IDEAL: 3  
ARC Phase: 2.00  
ARC Slice: 1.00

---

### ImageRecon

Recon DL Strength: Off  
Intensity Correction: PURE  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 26.0  
Slice Thickness: 1.50  
Slices per Slab: 172  
Overlap Locations: 0

<b>No Slab Wrap:</b>	<b>1.04</b>
No Phase Wrap:	1.00
Slice Resolution(%):	50.00

---

### **ACQTIMING**

Acq Voxel Size:	1.0 X 1.2 X 1.5
Freq:	260
Phase:	220
Freq DIR:	R/L
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCANTIMING**

Flip Angle:	15.0
TE:	Min Full
Number of Echoes:	2
Receiver Bandwidth:	90.91

---

### **CONTRAST**

Contrast Yes/No:	Yes
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### **OTHERS**

3D Geometry Correction:	On
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**Anatomical Region:**

**Rectum**

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**USERCVS**

User CV4:	None
User CV6:	1.00
User CV13:	None
User CV16:	None
User CV30:	1.00
User CV34:	70.00

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**Non-Viewable Parameters**

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# Cor T1 Lava-Flex

Detailstab

Protocolnotes

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## Cor T1 Lava-Flex

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA

Plane: CORONAL

---

### IMAGINGPARAMETERS

Imaging Mode: 3D

Imaging Options: EDR, Fast, ARC, Flex

Pulse Sequence: LAVA

IDEAL: 3

ARC Phase: 2.00

ARC Slice: 1.00

---

### ImageRecon

Recon DL Strength: Off

Intensity Correction: PURE

Intensity Filter: None

Save Original: Off

---

### SCANRANGE

FOV: 26.0

Slice Thickness: 1.50

Slices per Slab: 172

Overlap Locations: 0

<b>No Slab Wrap:</b>	<b>1.04</b>
No Phase Wrap:	1.00
Slice Resolution(%):	50.00

---

### **ACQTIMING**

Acq Voxel Size:	1.0 X 1.2 X 1.5
Freq:	260
Phase:	220
Freq DIR:	S/I
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCANTIMING**

Flip Angle:	15.0
TE:	Min Full
Number of Echoes:	2
Receiver Bandwidth:	90.91

---

### **CONTRAST**

Contrast Yes/No:	Yes
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### **OTHERS**

3D Geometry Correction:	On
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***Anatomical Region:***

***Rectum***

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**USERCVS**

User CV4:	None
User CV6:	1.00
User CV13:	None
User CV16:	None
User CV30:	1.00
User CV34:	70.00

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**Non-Viewable Parameters**

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# Sag T1 Lava-Flex

Detailstab

Protocolnotes

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## Sag T1 Lava-Flex

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA  
Plane: SAGITTAL

---

### IMAGINGPARAMETERS

Imaging Mode: 3D  
Imaging Options: EDR, Fast, ARC, Flex  
Pulse Sequence: LAVA  
IDEAL: 3  
ARC Phase: 2.00  
ARC Slice: 1.00

---

### ImageRecon

Recon DL Strength: Off  
Intensity Correction: PURE  
Intensity Filter: None  
Save Original: Off

---

### SCANRANGE

FOV: 26.0  
Slice Thickness: 1.50  
Slices per Slab: 172  
Overlap Locations: 0

<b>No Slab Wrap:</b>	<b>1.04</b>
No Phase Wrap:	1.00
Slice Resolution(%):	50.00

---

### **ACQTIMING**

Acq Voxel Size:	1.0 X 1.2 X 1.5
Freq:	260
Phase:	220
Freq DIR:	S/I
NEX:	1.00
Phase FOV:	1.00
Auto Shim:	Auto
Phase Correct:	Off
RF Drive Mode:	Quadrature
Excitation Mode:	Selective

---

### **SCANTIMING**

Flip Angle:	15.0
TE:	Min Full
Number of Echoes:	2
Receiver Bandwidth:	90.91

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### **CONTRAST**

Contrast Yes/No:	Yes
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### **OTHERS**

3D Geometry Correction:	On
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**Anatomical Region:**

**Rectum**

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**USERCVS**

User CV4:	None
User CV6:	1.00
User CV13:	None
User CV16:	None
User CV30:	1.00
User CV34:	70.00

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**Non-Viewable Parameters**

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# +C AX T1 Fat DL

Detailstab

Protocolnotes

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## +C AX T1 Fat DL

### PATIENTPOSITION

Coil Configuration: Inv16chCardiacAA, GE40chGEMPA

Plane: OBLIQUE

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### IMAGINGPARAMETERS

Imaging Mode: 2D

Imaging Options: EDR, TRF, Fast

Pulse Sequence: FSE-XL

---

### ImageRecon

Recon DL Strength: Medium

Intensity Correction: SCENIC

Intensity Filter: None

Save Original: Off

---

### SCANRANGE

FOV: 12.0

Slice Thickness: 5.00

Slice Spacing: 1.0

Overlap Locations: 0

Number of Slices: 21

No Phase Wrap: 1.00

---

## **ACQTIMING**

Acq Voxel Size:	0.4 X 0.5 X 5.0
Freq:	288
Phase:	256
Freq DIR:	R/L
NEX:	1.00
# of Acq. Before Pause:	0
Phase FOV:	0.80
Auto Shim:	Auto
Phase Correct:	On
RF Drive Mode:	Quadrature
Excitation Mode:	Selective
Fat Shift DIR:	Normal (L)

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## **SCANTIMING**

Flip Angle:	160.0
TE:	20.0
Number of Echoes:	1
TR:	742.0
Echo Train Length:	4
Receiver Bandwidth:	41.67

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## **CONTRAST**

Contrast Yes/No:	Yes
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## **OTHERS**

Anatomical Region:	Forearm bone
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## **SAT**

Fat/Water Saturation: Fat

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## **USERCVS**

User CV6:	None
User CV9:	None
User CV13:	None
User CV15:	None
User CV16:	None
User CV18:	None
User CV19:	1.00
User CV21:	None
User CV26:	1.00
TR Min:	500.0
TR Max:	750.0

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**Non-Viewable Parameters**

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