

# Shoulder Osteo/Abscess (Adult) SIGNA Architect

## Technical Instructions

**RT-3-PLANE LOC**

**LT-3-PLANE LOC**

**Ax T2 Fat DL**

**Sag T2 dk fat DL**

**Cor T2 dk fat DL**

**Ax T1 DL**

**Sag T1 DL**

**Cor T1 DL**

**--Tumor ONLY--**

**Pre AxT1 fat DL**

**--contrast--**

**+C Ax T1 fat DL**

**+C Cor T1 fat DL**

**+C Sag T1 fat DL**

**--optional--**

**Sag T2 PROPELLER**

# RT-3-PLANE LOC

Details tab

Protocol notes

## RT-3-PLANE LOC

### PATIENT POSITION

Coil Configuration:GE20chFlexM

Plane:3-PLANE

### IMAGING PARAMETERS

Imaging Mode:2D

Imaging Options:Seq, EDR, TRF, Fast, SS, ARC

Pulse Sequence:Spin Echo

ARC Phase:2.00

### Image Recon

Recon DL Strength:Off

Intensity Correction:NONE

Intensity Filter:None

Save Original:Off

### SCAN RANGE

FOV:32.0

Slice Thickness:7.00

Slice Spacing:5.0

Overlap Locations:0

No Phase Wrap:1.00

## **ACQ TIMING**

|                         |                 |
|-------------------------|-----------------|
| Acq Voxel Size:         | 0.8 X 1.3 X 7.0 |
| Freq:                   | 384             |
| Phase:                  | 256             |
| Freq DIR:               | Unswap          |
| # of Acq. Before Pause: | 0               |
| Phase FOV:              | 1.00            |
| Auto Shim:              | Auto            |
| Phase Correct:          | Off             |
| RF Drive Mode:          | Preset          |
| Excitation Mode:        | Selective       |

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## **SCAN TIMING**

|                     |         |
|---------------------|---------|
| TE:                 | 85.0    |
| Number of Echoes:   | 1       |
| TR:                 | Minimum |
| Receiver Bandwidth: | 83.33   |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                         |          |
|-------------------------|----------|
| 3D Geometry Correction: | Off      |
| Anatomical Region:      | Shoulder |

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## **USER CVS**

|           |      |
|-----------|------|
| User CV1: | 1.00 |
|-----------|------|

Details tab

Protocol notes

LT-3-PLANE LOC

PATIENT POSITION

Coil Configuration:

GE20chFlexM

Plane:

3-PLANE

IMAGING PARAMETERS

Imaging Mode:

2D

Imaging Options:

Seq, EDR, TRF, Fast, SS, ARC

Pulse Sequence:

Spin Echo

ARC Phase:

2.00

Image Recon

Recon DL Strength:

Off

Intensity Correction:

NONE

Intensity Filter:

None

Save Original:

Off

SCAN RANGE

FOV:

32.0

Slice Thickness:

7.00

Slice Spacing:

5.0

Overlap Locations:

0

No Phase Wrap:

1.00

## **ACQ TIMING**

|                         |                 |
|-------------------------|-----------------|
| Acq Voxel Size:         | 0.8 X 1.3 X 7.0 |
| Freq:                   | 384             |
| Phase:                  | 256             |
| Freq DIR:               | Unswap          |
| # of Acq. Before Pause: | 0               |
| Phase FOV:              | 1.00            |
| Auto Shim:              | Auto            |
| Phase Correct:          | Off             |
| RF Drive Mode:          | Preset          |
| Excitation Mode:        | Selective       |

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## **SCAN TIMING**

|                     |         |
|---------------------|---------|
| TE:                 | 85.0    |
| Number of Echoes:   | 1       |
| TR:                 | Minimum |
| Receiver Bandwidth: | 83.33   |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                         |          |
|-------------------------|----------|
| 3D Geometry Correction: | Off      |
| Anatomical Region:      | Shoulder |

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## **USER CVS**

|           |      |
|-----------|------|
| User CV1: | 1.00 |
|-----------|------|

Details tab

Protocol notes

## Ax T2 Fat DL

### PATIENT POSITION

Coil Configuration: GE20chFlexM

Plane: OBLIQUE

### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: EDR, TRF, Fast, FR

Pulse Sequence: FSE-XL

### Image Recon

Recon DL Strength: Medium

Intensity Correction: NONE

Intensity Filter: None

Save Original: Off

### SCAN RANGE

FOV: 16.0

Slice Thickness: 5.00

Slice Spacing: 1.5

Overlap Locations: 0

Number of Slices: 15

No Phase Wrap: 1.50

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.6 X 5.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

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## **SCAN TIMING**

|                     |        |
|---------------------|--------|
| Flip Angle:         | 111    |
| TE:                 | 80.0   |
| Number of Echoes:   | 1      |
| TR:                 | 3500.0 |
| Echo Train Length:  | 19     |
| Receiver Bandwidth: | 41.67  |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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# Sag T2 dk fat DL

Details tab

Protocol notes

## Sag T2 dk fat DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 18.0 |
| Slice Thickness:   | 4.00 |
| Slice Spacing:     | 1.0  |
| Overlap Locations: | 0    |
| Number of Slices:  | 15   |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

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## **SCAN TIMING**

|                     |        |
|---------------------|--------|
| Flip Angle:         | 111    |
| TE:                 | 80.0   |
| Number of Echoes:   | 1      |
| TR:                 | 3500.0 |
| Echo Train Length:  | 19     |
| Receiver Bandwidth: | 41.67  |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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## **SAT**

***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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# Cor T2 dk fat DL

Details tab

Protocol notes

## Cor T2 dk fat DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 18.0 |
| Slice Thickness:   | 4.00 |
| Slice Spacing:     | 1.0  |
| Overlap Locations: | 0    |
| Number of Slices:  | 15   |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

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## **SCAN TIMING**

|                     |        |
|---------------------|--------|
| Flip Angle:         | 111    |
| TE:                 | 80.0   |
| Number of Echoes:   | 1      |
| TR:                 | 3500.0 |
| Echo Train Length:  | 19     |
| Receiver Bandwidth: | 41.67  |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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## **SAT**

***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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# Ax T1 DL

Details tab

Protocol notes

## Ax T1 DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | AXIAL       |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 16.0 |
| Slice Thickness:   | 5.00 |
| Slice Spacing:     | 1.5  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.6 X 5.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | A/P             |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal (A)      |

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## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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## **USER CVS**



|                  |             |
|------------------|-------------|
| <b>User CV6:</b> | <b>None</b> |
| User CV9:        | None        |
| User CV15:       | None        |
| User CV16:       | None        |
| User CV18:       | None        |
| User CV21:       | None        |
| User CV30:       | 1.00        |
| User CV40:       | None        |

Non-Viewable Parameters

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# Sag T1 DL

Details tab

Protocol notes

## Sag T1 DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 18.0 |
| Slice Thickness:   | 4.00 |
| Slice Spacing:     | 1.0  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

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## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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## **USER CVS**

|                  |             |
|------------------|-------------|
| <b>User CV6:</b> | <b>None</b> |
| User CV9:        | None        |
| User CV15:       | None        |
| User CV16:       | None        |
| User CV18:       | None        |
| User CV21:       | None        |
| User CV30:       | 1.00        |
| User CV40:       | None        |

Non-Viewable Parameters

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# Cor T1 DL

Details tab

Protocol notes

## Cor T1 DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | CORONAL     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 18.0 |
| Slice Thickness:   | 4.00 |
| Slice Spacing:     | 1.0  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | S/I             |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal (I)      |

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## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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## **USER CVS**

|                  |             |
|------------------|-------------|
| <b>User CV6:</b> | <b>None</b> |
| User CV9:        | None        |
| User CV15:       | None        |
| User CV16:       | None        |
| User CV18:       | None        |
| User CV21:       | None        |
| User CV30:       | 1.00        |
| User CV40:       | None        |

Non-Viewable Parameters

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# --Tumor ONLY--

Details tab

Protocol notes



## --Tumor ONLY--

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | 3-PLANE     |



### IMAGING PARAMETERS

|                  |                    |
|------------------|--------------------|
| Imaging Mode:    | 2D                 |
| Imaging Options: | Seq, EDR, Fast, SS |
| Pulse Sequence:  | Spin Echo          |



### Image Recon

|                       |      |
|-----------------------|------|
| Intensity Correction: | NONE |
| Intensity Filter:     | None |



### SCAN RANGE

|                  |      |
|------------------|------|
| FOV:             | 30.0 |
| Slice Thickness: | 5.0  |
| Slice Spacing:   | 5.0  |
| No Phase Wrap:   | 1.00 |



### ACQ TIMING

|                 |                 |
|-----------------|-----------------|
| Acq Voxel Size: | 0.8 X 1.2 X 5.0 |
| Freq:           | 384             |



|                         |            |
|-------------------------|------------|
| <b>Phase:</b>           | <b>256</b> |
| Freq DIR:               | Unswap     |
| # of Acq. Before Pause: | 0          |
| Phase FOV:              | 1.00       |
| Auto Shim:              | Auto       |
| Phase Correct:          | Off        |
| RF Drive Mode:          | Preset     |

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### SCAN TIMING

|                     |         |
|---------------------|---------|
| TE:                 | 85.0    |
| TR:                 | Minimum |
| Receiver Bandwidth: | 62.50   |

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### CONTRAST

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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### OTHERS

|                         |          |
|-------------------------|----------|
| 3D Geometry Correction: | Off      |
| Anatomical Region:      | Shoulder |

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### GATING/TRIGGER

|                    |     |
|--------------------|-----|
| Auto Trigger Type: | Off |
|--------------------|-----|

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### USER CVS

|            |        |
|------------|--------|
| User CV1:  | 1.0    |
| User CV2:  | 240.00 |
| User CV13: | 1.00   |

**TR Min:** -  
TR Max: -

Non-Viewable Parameters

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# Pre AxT1 fat DL

Details tab

Protocol notes

## Pre AxT1 fat DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 16.0 |
| Slice Thickness:   | 5.00 |
| Slice Spacing:     | 1.5  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.6 X 5.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

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## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

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## **CONTRAST**

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV16: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

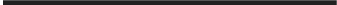
**Non-Viewable Parameters**

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--contrast--

Details tab

Protocol notes



--contrast--

PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | 3-PLANE     |



IMAGING PARAMETERS

|                  |                    |
|------------------|--------------------|
| Imaging Mode:    | 2D                 |
| Imaging Options: | Seq, EDR, Fast, SS |
| Pulse Sequence:  | Spin Echo          |



Image Recon

|                       |      |
|-----------------------|------|
| Intensity Correction: | NONE |
| Intensity Filter:     | None |



SCAN RANGE

|                  |      |
|------------------|------|
| FOV:             | 30.0 |
| Slice Thickness: | 5.0  |
| Slice Spacing:   | 5.0  |
| No Phase Wrap:   | 1.00 |



ACQ TIMING

|                 |                 |
|-----------------|-----------------|
| Acq Voxel Size: | 0.8 X 1.2 X 5.0 |
| Freq:           | 384             |

|                         |            |
|-------------------------|------------|
| <b>Phase:</b>           | <b>256</b> |
| Freq DIR:               | Unswap     |
| # of Acq. Before Pause: | 0          |
| Phase FOV:              | 1.00       |
| Auto Shim:              | Auto       |
| Phase Correct:          | Off        |
| RF Drive Mode:          | Preset     |

---

## SCAN TIMING

|                     |         |
|---------------------|---------|
| TE:                 | 85.0    |
| TR:                 | Minimum |
| Receiver Bandwidth: | 62.50   |

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## CONTRAST

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

---

## OTHERS

|                         |          |
|-------------------------|----------|
| 3D Geometry Correction: | Off      |
| Anatomical Region:      | Shoulder |

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## GATING/TRIGGER

|                    |     |
|--------------------|-----|
| Auto Trigger Type: | Off |
|--------------------|-----|

---

## USER CVS

|            |        |
|------------|--------|
| User CV1:  | 1.0    |
| User CV2:  | 240.00 |
| User CV13: | 1.00   |

**TR Min:** -  
TR Max: -

Non-Viewable Parameters

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# +C Ax T1 fat DL

Details tab

Protocol notes

## +C Ax T1 fat DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 16.0 |
| Slice Thickness:   | 5.00 |
| Slice Spacing:     | 1.5  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.6 X 5.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

---

## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

---

## **CONTRAST**

|                  |     |
|------------------|-----|
| Contrast Yes/No: | Yes |
|------------------|-----|

---

## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV16: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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# +C Cor T1 fat DL

Details tab

Protocol notes

## +C Cor T1 fat DL

### PATIENT POSITION

Coil Configuration: GE20chFlexM

Plane: OBLIQUE

### IMAGING PARAMETERS

Imaging Mode: 2D

Imaging Options: EDR, TRF, Fast, ARC

Pulse Sequence: FSE-XL

ARC Phase: 1.50

### Image Recon

Recon DL Strength: Medium

Intensity Correction: NONE

Intensity Filter: None

Save Original: Off

### SCAN RANGE

FOV: 18.0

Slice Thickness: 4.00

Slice Spacing: 1.0

Overlap Locations: 0

No Phase Wrap: 1.50

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

---

## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

---

## **CONTRAST**

|                  |     |
|------------------|-----|
| Contrast Yes/No: | Yes |
|------------------|-----|

---

## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

---

## **SAT**

***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV16: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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# +C Sag T1 fat DL

Details tab

Protocol notes

## +C Sag T1 fat DL

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

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

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 18.0 |
| Slice Thickness:   | 4.00 |
| Slice Spacing:     | 1.0  |
| Overlap Locations: | 0    |
| No Phase Wrap:     | 1.50 |

## **ACQ TIMING**

|                  |                 |
|------------------|-----------------|
| Acq Voxel Size:  | 0.6 X 0.7 X 4.0 |
| Freq:            | 288             |
| Phase:           | 256             |
| Freq DIR:        | Unswap          |
| NEX:             | 1.00            |
| Phase FOV:       | 1.00            |
| Auto Shim:       | Auto            |
| Phase Correct:   | On              |
| RF Drive Mode:   | Quadrature (CP) |
| Excitation Mode: | Selective       |
| Fat Shift DIR:   | Normal          |

---

## **SCAN TIMING**

|                     |       |
|---------------------|-------|
| Flip Angle:         | 111   |
| TE:                 | 16.0  |
| Number of Echoes:   | 1     |
| TR:                 | 800.0 |
| Echo Train Length:  | 4     |
| Receiver Bandwidth: | 41.67 |

---

## **CONTRAST**

|                  |     |
|------------------|-----|
| Contrast Yes/No: | Yes |
|------------------|-----|

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## **OTHERS**

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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***Fat/Water Saturation:******Fat*****USER CVS**

|            |      |
|------------|------|
| User CV6:  | None |
| User CV9:  | None |
| User CV15: | None |
| User CV16: | None |
| User CV18: | None |
| User CV19: | 1.00 |
| User CV21: | None |
| User CV30: | 1.00 |

**Non-Viewable Parameters**

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--optional--

Details tab

Protocol notes

--optional--

PATIENT POSITION

Coil Configuration:

GE20chFlexM

Plane:

3-PLANE

IMAGING PARAMETERS

Imaging Mode:

2D

Imaging Options:

Seq, EDR, Fast, SS

Pulse Sequence:

Spin Echo

Image Recon

Intensity Correction:

NONE

Intensity Filter:

None

SCAN RANGE

FOV:

30.0

Slice Thickness:

5.0

Slice Spacing:

5.0

No Phase Wrap:

1.00

ACQ TIMING

Acq Voxel Size:

0.8 X 1.2 X 5.0

Freq:

384

|                         |            |
|-------------------------|------------|
| <b>Phase:</b>           | <b>256</b> |
| Freq DIR:               | Unswap     |
| # of Acq. Before Pause: | 0          |
| Phase FOV:              | 1.00       |
| Auto Shim:              | Auto       |
| Phase Correct:          | Off        |
| RF Drive Mode:          | Preset     |

---

## SCAN TIMING

|                     |         |
|---------------------|---------|
| TE:                 | 85.0    |
| TR:                 | Minimum |
| Receiver Bandwidth: | 62.50   |

---

## CONTRAST

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

---

## OTHERS

|                         |          |
|-------------------------|----------|
| 3D Geometry Correction: | Off      |
| Anatomical Region:      | Shoulder |

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## GATING/TRIGGER

|                    |     |
|--------------------|-----|
| Auto Trigger Type: | Off |
|--------------------|-----|

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## USER CVS

|            |        |
|------------|--------|
| User CV1:  | 1.0    |
| User CV2:  | 240.00 |
| User CV13: | 1.00   |

**TR Min:** -  
TR Max: -

Non-Viewable Parameters

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# Sag T2 PROPELLER

Details tab

Protocol notes

## Sag T2 PROPELLER

### PATIENT POSITION

|                     |             |
|---------------------|-------------|
| Coil Configuration: | GE20chFlexM |
| Plane:              | OBLIQUE     |

### IMAGING PARAMETERS

|                  |                         |
|------------------|-------------------------|
| Imaging Mode:    | 2D                      |
| Imaging Options: | EDR, TRF, Fast, FR, ARC |
| Pulse Sequence:  | PROPELLER               |
| ARC Phase:       | 2.00                    |

### Image Recon

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

### SCAN RANGE

|                    |      |
|--------------------|------|
| FOV:               | 10.0 |
| Slice Thickness:   | 3.00 |
| Slice Spacing:     | 0.5  |
| Overlap Locations: | 0    |
| Number of Slices:  | 12   |

**No Phase Wrap:**

**2.00**

---

### ACQ TIMING

|                         |                 |
|-------------------------|-----------------|
| Acq Voxel Size:         | 0.3 X 0.3 X 3.0 |
| Freq:                   | 320             |
| Freq DIR:               | R/L             |
| NEX:                    | 4.00            |
| # of Acq. Before Pause: | 0               |
| Auto Shim:              | On              |
| Phase Correct:          | Off             |
| RF Drive Mode:          | Preset          |
| Excitation Mode:        | Selective       |
| Fat Shift DIR:          | Normal (L)      |

---

### SCAN TIMING

|                     |       |
|---------------------|-------|
| Flip Angle:         | 80    |
| TE:                 | 80.0  |
| Number of Echoes:   | 1     |
| TR:                 | 969.0 |
| Echo Train Length:  | 19    |
| Receiver Bandwidth: | 41.67 |

---

### CONTRAST

|                  |    |
|------------------|----|
| Contrast Yes/No: | No |
|------------------|----|

---

### OTHERS

|                    |          |
|--------------------|----------|
| Anatomical Region: | Shoulder |
|--------------------|----------|

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**GATING/TRIGGER**

|                       |    |
|-----------------------|----|
| Resp. Trigger Point:  | 30 |
| Resp. Trigger Window: | 10 |

**USER CVS**

|            |         |
|------------|---------|
| User CV6:  | None    |
| User CV15: | None    |
| User CV30: | 1.00    |
| TR Min:    | 400.0   |
| TR Max:    | 11000.0 |

|                         |   |
|-------------------------|---|
| Non-Viewable Parameters | ñ |
|-------------------------|---|