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\\User

Head

Epilepsy

sola_xa61_spine_scoliosis

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T1	tse_sag_dixon	2.5mm_lumbar	*
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\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\localizer HASTE TOP *

TA: 14 sec Coil Selection: Auto Voxel Size: 1.4×1.4×6.0 mm³ Acc:: None Rel. SNR: 1.00 | Substep: 1/2**Properties**

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	On
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Contrast - Common

Reconstruction	Magnitude
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Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	1.00

Routine

Slice Group	1
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
TR	1500.0 ms
TE	102.00 ms
Averages	1
Concatenations	7
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	None
Deep Resolve	Off
Phase Partial Fourier	5/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	On
Distortion Correction	2D
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
TR	1500.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	7

Contrast - Common

TR	1500.0 ms
TE	102.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None

Geometry - AutoAlign

Slice Group	1
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L0.0 P0.0 H14.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H14.0
L	0.0 mm
P	0.0 mm
H	14.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	0 mm
Table Position	H
Disable Voice Commands	Off
Inline Composing	On
Normalize	Weak
Save non-normalized	On
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
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System - Adjust Volume

Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	7

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	360 mm
FOV Phase	100.0 %
Phase Resolution	100 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	7

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Weak
Save non-normalized	On
Composing Function	Spine

Inline - Composing

Series Description

Sequence - Part 1

Sequence Name	h
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	399 Hz/Px
Echo Spacing	4.86 ms
Turbo Factor	256

Sequence - Part 2

Introduction	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\localizer HASTE TOP *

TA: 14 sec Coil Selection: Auto Voxel Size: 1.4×1.4×6.0 mm³ Acc:: None Rel. SNR: 1.00 | Substep: 2/2**Properties**

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	On
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Contrast - Common

Reconstruction	Magnitude
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Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	1.00

Routine

Slice Group	1
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
TR	1500.0 ms
TE	102.00 ms
Averages	1
Concatenations	7
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	None
Deep Resolve	Off
Phase Partial Fourier	5/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	On
Distortion Correction	2D
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	4
Distance Factor	100 %
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
TR	1500.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	7

Contrast - Common

TR	1500.0 ms
TE	102.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None

Geometry - AutoAlign

Slice Group	1
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L0.0 P0.0 F96.0 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H14.0
L	0.0 mm
P	0.0 mm
F	14.0 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	110 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Weak
Save non-normalized	On
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
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System - Adjust Volume

Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	7

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	360 mm
FOV Phase	100.0 %
Phase Resolution	100 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	7

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Weak
Save non-normalized	On
Composing Function	Spine

Inline - Composing

Series Description

Sequence - Part 1

Sequence Name	h
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	399 Hz/Px
Echo Spacing	4.86 ms
Turbo Factor	256

Sequence - Part 2

Introduction	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\2 Qtse_sag_2.5mm *

TA: 2:08 min Coil Selection: Auto Voxel Size: 0.4x0.4x2.5 mm³ Acc:: 2 Rel. SNR: 1.00 | Substep: 1/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	416
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	120 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	3000.0 ms
TE	91.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	120 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	3000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	3000.0 ms
TE	91.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	180 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm
Initial Orientation	S > C
S > C	-0.20

Geometry - AutoAlign

> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Saturation Region	2
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	15 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm

System - Adjust Volume

R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3000.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	qtseR_rr
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	Read
Bandwidth	191 Hz/Px
Echo Spacing	9.14 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	19
Echo Trains per Slice	20

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	TR
Max. TR	4500.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\2 Qtse_sag_2.5mm *

TA: 2:08 min Coil Selection: Auto Voxel Size: 0.4×0.4×2.5 mm³ Acc.: 2 Rel. SNR: 1.00 | Substep: 2/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	416
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
Phase Oversampling	120 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	3000.0 ms
TE	91.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
Phase Oversampling	120 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	3000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	3000.0 ms
TE	91.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	180 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm
Initial Orientation	S > C
S > C	-0.20

Geometry - AutoAlign

> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.0 A21.0 F225.8 mm
Orientation	C > T4.7 > S-0.4
Shape	Standard
Saturation Region	2
Thickness	80.00 mm
Position	R6.0 A21.0 F225.8 mm
Orientation	C > T4.7 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	258 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm

System - Adjust Volume

R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3000.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	100.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	qtseR_rr
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	Read
Bandwidth	191 Hz/Px
Echo Spacing	9.14 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	19
Echo Trains per Slice	20

Sequence - Part 2

Introduction	On
Phase Correction	Off
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	TR
Max. TR	4500.0 ms
Allowed Delay	30 s

\\User\\Head\\Epilepsy\\sola_xa61_spine_scoliosis\\T2 COR-dixon *

TA: 2:35 min Coil Selection: Auto Voxel Size: 0.4x0.4x3.5 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	100 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	3.5 mm
TR	3560.0 ms
TE	92.00 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	3560.0 ms
TE	92.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Dixon
Fat Saturation	Strong
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	3.5 mm
Base Resolution	432
Phase Resolution	75 %
Trajectory	Cartesian
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Deep Resolve	On
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	100 %
FOV Read	360 mm
FOV Phase	100.0 %
Slice Thickness	3.5 mm
TR	3560.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm

Geometry - AutoAlign

Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	L0.0 A60.0 H0.0 mm
Orientation	Coronal
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Coronal
Rotation	0.00 deg
R >> L	360 mm
F >> H	360 mm
A >> P	58 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3560.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Dixon
Magn. Preparation	None
Dark Blood	Off
FOV Read	360 mm
FOV Phase	100.0 %
Phase Resolution	75 %
Trajectory	Cartesian

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	tseR
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	257 Hz/Px
Echo Spacing	13.08 ms
Asymmetric Echo	Off
Define	Turbo Factor
Turbo Factor	16
Echo Trains per Slice	21

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Red. EC Sensitivity	Off
Reduce Motion Sens.	On

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\t2_tse_tra 4mm 180fov *

TA: 1:32 min Coil Selection: Auto Voxel Size: 0.4×0.4×4.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	180 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	75 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	30
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	30
Distance Factor	25 %
Position	L5.5 P33.4 F104.3 mm
Orientation	T > C16.3 > S1.5
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	180 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
TR	3000.0 ms
TE	86.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	30
Distance Factor	25 %
Position	L5.5 P33.4 F104.3 mm
Orientation	T > C16.3 > S1.5
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	180 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
TR	3000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	3000.0 ms
TE	86.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	L5.5 P33.4 F104.3 mm
Orientation	T > C16.3 > S1.5
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L5.5 P33.4 F104.3
L	5.5 mm
P	33.4 mm
F	104.3 mm
Initial Orientation	T > C
T > C	16.30

Geometry - AutoAlign

> S	1.50
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	71.00 mm
Position	L6.0 A44.1 F99.5 mm
Orientation	C > T-16.3 > S0.5
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	104 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3000.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	180 mm
FOV Phase	81.3 %
Phase Resolution	75 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
------------------	-----

Sequence - Part 1

Sequence Name	tseR_rs
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	Slice
Bandwidth	212 Hz/Px
Echo Spacing	10.7 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	15
Echo Trains per Slice	14

Sequence - Part 2

Introduction	On
Phase Correction	Off

Sequence - Part 2

Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	Off
Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR
Min Flip Angle	130 deg
Max. TR	6000.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\t1_qtse_tra_4mm_conus *

TA: 2:11 min Coil Selection: Auto Voxel Size: 0.4x0.4x4.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	200 mm
FOV Phase	73.5 %
Slice Thickness	4.0 mm
Base Resolution	272
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	40
Distance Factor	25 %
Position	R20.4 P81.3 F341.7 mm
Orientation	T > C6.4 > S-2.5
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	73.5 %
Slice Thickness	4.0 mm
TR	600.0 ms
TE	10.00 ms
Averages	1
Concatenations	3
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	25 %
Position	R20.4 P81.3 F341.7 mm
Orientation	T > C6.4 > S-2.5
Phase Encoding Dir.	A >> P
Phase Oversampling	150 %
FOV Read	200 mm
FOV Phase	73.5 %
Slice Thickness	4.0 mm
TR	600.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	3

Contrast - Common

TR	600.0 ms
TE	10.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	129 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	R20.4 P81.3 F341.7 mm
Orientation	T > C6.4 > S-2.5
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R20.4 P81.3 F341.7
R	20.4 mm
P	81.3 mm
F	341.7 mm
Initial Orientation	T > C
T > C	6.40

Geometry - AutoAlign

> S	-2.50
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	53.00 mm
Position	L12.6 A7.8 F374.3 mm
Orientation	C > T13.0 > S-1.6
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	342 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R20.4 P81.3 F341.7 mm
Orientation	T > C6.4 > S-2.5
Rotation	0.00 deg
A >> P	148 mm
R >> L	200 mm
F >> H	199 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	600.0 ms
Concatenations	3

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	200 mm
FOV Phase	73.5 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	3

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	qtse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	202 Hz/Px
Echo Spacing	10.2 ms
Free Echo Spacing	On
Define	Turbo Factor
Turbo Factor	3
Echo Trains per Slice	71

Sequence - Part 2

Introduction	On
Phase Correction	Automatic

Sequence - Part 2

Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR > RF Pulse Type
Min Flip Angle	120 deg
Max. TR	750.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\T1 tse_sag_dixon 2.5mm_lumbar *

TA: 2:47 min Coil Selection: Auto Voxel Size: 0.6×0.6×2.5 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
TE	13.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Contrast - Common

TR	520.0 ms
TE	13.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Dixon
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	288
Phase Resolution	75 %
Trajectory	Cartesian
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm

Geometry - AutoAlign

Initial Orientation	S > C
S > C	-0.20
> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	15 mm
Table Position	F
Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Series Description	
Composing Group	3
Last Step	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Rotation	90.00 deg
F >> H	320 mm
A >> P	320 mm
R >> L	41 mm

System - Adjust Volume

Reset	Off
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System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	520.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Dixon
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	100.0 %
Phase Resolution	75 %
Trajectory	Cartesian

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Composing Group	3
Last Step	Off
Series Description	

Sequence - Part 1

Sequence Name	tse
---------------	-----

Sequence - Part 1

RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	322 Hz/Px
Echo Spacing	12.62 ms
Asymmetric Echo	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	79

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Red. EC Sensitivity	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	125 deg
Allowed Delay	20 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\T1 tse_sag_dixon 2.5mm_lumbar *

TA: 2:47 min Coil Selection: Auto Voxel Size: 0.6×0.6×2.5 mm³ Acc:: 2 Rel. SNR: 1.00 | Substep: 1/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
TE	13.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Contrast - Common

TR	520.0 ms
TE	13.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Dixon
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	288
Phase Resolution	75 %
Trajectory	Cartesian
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm

Geometry - AutoAlign

Initial Orientation	S > C
S > C	-0.20
> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	15 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Rotation	90.00 deg
F >> H	320 mm
A >> P	320 mm
R >> L	41 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	520.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Dixon
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	100.0 %
Phase Resolution	75 %
Trajectory	Cartesian

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	tse
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	322 Hz/Px
Echo Spacing	12.62 ms

Sequence - Part 1

Asymmetric Echo	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	79

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Red. EC Sensitivity	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	125 deg
Allowed Delay	20 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\T1 tse_sag_dixon 2.5mm_lumbar *

TA: 2:47 min Coil Selection: Auto Voxel Size: 0.6×0.6×2.5 mm³ Acc:: 2 Rel. SNR: 1.00 | Substep: 2/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F84.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
TE	13.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Contrast - Common

TR	520.0 ms
TE	13.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Dixon
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	288
Phase Resolution	75 %
Trajectory	Cartesian
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Deep Resolve	On
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F84.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	180 %
FOV Read	320 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	520.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P50.5 F84.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm

Geometry - AutoAlign

Initial Orientation	S > C
S > C	-0.20
> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	85 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R3.8 P50.5 F84.7 mm
Orientation	S > C-0.2 > T-0.1
Rotation	90.00 deg
F >> H	320 mm
A >> P	320 mm
R >> L	41 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	520.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Dixon
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	100.0 %
Phase Resolution	75 %
Trajectory	Cartesian

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Medium
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	tse
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	322 Hz/Px
Echo Spacing	12.62 ms

Sequence - Part 1

Asymmetric Echo	Off
Define	Turbo Factor
Turbo Factor	4
Echo Trains per Slice	79

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Red. EC Sensitivity	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	125 deg
Allowed Delay	20 s

\\User\Head\Epilepsy\Isola_xa61_spine_scoliosis\T1 Axial (4mm)+- Gd *

TA: 58 sec Coil Selection: Auto Voxel Size: 0.4x0.4x4.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	27
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	20
Distance Factor	30 %
Position	R0.6 P30.1 F0.3 mm
Orientation	T > C12.3 > S0.4
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	4.0 mm
TR	493.0 ms
TE	12.00 ms
Averages	1
Concatenations	2
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	20
Distance Factor	30 %
Position	R0.6 P30.1 F0.3 mm
Orientation	T > C12.3 > S0.4
Phase Encoding Dir.	A >> P
Phase Oversampling	100 %
FOV Read	210 mm
FOV Phase	75.0 %
Slice Thickness	4.0 mm
TR	493.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	2

Contrast - Common

TR	493.0 ms
TE	12.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	R0.6 P30.1 F0.3 mm
Orientation	T > C12.3 > S0.4
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R0.6 P30.1 F0.3
R	0.6 mm
P	30.1 mm
F	0.3 mm
Initial Orientation	T > C
T > C	12.30

Geometry - AutoAlign

> S	0.40
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	L15.0 A48.2 H12.6 mm
Orientation	C > T-8.5 > S0.1
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	493.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	210 mm
FOV Phase	75.0 %
Phase Resolution	80 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
------------------	-----

Sequence - Part 1

Sequence Name	qtse
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	130 Hz/Px
Echo Spacing	12.2 ms
Free Echo Spacing	Off
Define	Turbo Factor
Turbo Factor	3
Echo Trains per Slice	56

Sequence - Part 2

Introduction	On
Phase Correction	Automatic

Sequence - Part 2

Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR > RF Pulse Type
Min Flip Angle	125 deg
Max. TR	700.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\t2_stir_qtse_sag 2.5mm *

TA: 2:29 min Coil Selection: Auto Voxel Size: 0.5×0.5×2.5 mm³ Acc:: 3 Rel. SNR: 1.00 | Substep: 1/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
Base Resolution	336
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	41
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	150 %
FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
TR	4200.0 ms
TE	61.00 ms
Averages	2
Concatenations	1
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
Phase Oversampling	150 %
FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
TR	4200.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	4200.0 ms
TE	61.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	130 ms
Freeze Suppr. Tissue	Off
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P50.5 F14.7 mm
Orientation	S > C-0.2 > T-0.1
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm
Initial Orientation	S > C
S > C	-0.20

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Saturation Region	2
Thickness	80.00 mm
Position	R6.1 A16.4 F24.2 mm
Orientation	C > T-6.4 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	15 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm

System - Adjust Volume

R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4200.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	130 ms
Dark Blood	Off
FOV Read	320 mm
FOV Phase	98.2 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	qtir_rr
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	Read
Bandwidth	201 Hz/Px
Echo Spacing	10.2 ms
Free Echo Spacing	On
Define	Turbo Factor
Turbo Factor	13
Echo Trains per Slice	17

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR > RF Pulse Type
Min Flip Angle	125 deg
Max. TR	5000.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_spine_scoliosis\t2_stir_qtse_sag 2.5mm *

TA: 2:29 min Coil Selection: Auto Voxel Size: 0.5×0.5×2.5 mm³ Acc:: 3 Rel. SNR: 1.00 | Substep: 2/2**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
Base Resolution	336
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	41
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
Phase Oversampling	150 %
FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
TR	4200.0 ms
TE	61.00 ms
Averages	2
Concatenations	1
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
Phase Oversampling	150 %
FOV Read	320 mm
FOV Phase	98.2 %
Slice Thickness	2.5 mm
TR	4200.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	4200.0 ms
TE	61.00 ms
MTC	Off
Magn. Preparation	Slice-sel. IR
TI	130 ms
Freeze Suppr. Tissue	Off
Flip Angle 1	150 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	R3.8 P52.3 F258.4 mm
Orientation	S > T-1.7 > C-0.2
Phase Encoding Dir.	H >> F
AutoAlign	---
Initial Position	R3.8 P50.5 F14.7
R	3.8 mm
P	50.5 mm
F	14.7 mm
Initial Orientation	S > C
S > C	-0.20

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

> T	-0.10
Initial Rotation	90.00 deg

Geometry - Navigator**Geometry - Saturation**

Saturation Region	1
Thickness	80.00 mm
Position	R6.0 A21.0 F225.8 mm
Orientation	C > T4.7 > S-0.4
Shape	Standard
Saturation Region	2
Thickness	80.00 mm
Position	R6.0 A21.0 F225.8 mm
Orientation	C > T4.7 > S-0.4
Shape	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	On
Table Position	258 mm
Table Position	F
Disable Voice Commands	Off
Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Series Description	

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm

System - Adjust Volume

R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4200.0 ms
Concatenations	1

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Slice-sel. IR
TI	130 ms
Dark Blood	Off
FOV Read	320 mm
FOV Phase	98.2 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Strong
Save non-normalized	Off
Composing Function	Spine
Series Description	

Sequence - Part 1

Sequence Name	qtir_rr
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	Read
Bandwidth	201 Hz/Px
Echo Spacing	10.2 ms
Free Echo Spacing	On
Define	Turbo Factor
Turbo Factor	13
Echo Trains per Slice	17

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle > TR > RF Pulse Type
Min Flip Angle	125 deg
Max. TR	5000.0 ms
Allowed Delay	30 s

\\User\Head\Epilepsylsola_xa61_spine_scoliosis\resolve_diff_sag_b800 *

TA: 3:26 min Coil Selection: Auto Voxel Size: 1.0×1.0×3.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Phase	59.8 %
Slice Thickness	3.0 mm
Base Resolution	164
Phase Resolution	100 %
Interpolation	On

Resolution - Acceleration

Accel. Mode	GRAPPA
Reference Scans	EPI/Separate
Acceleration Factor PE	2
Reference Lines PE	72
Phase Partial Fourier	Off
Readout Partial Fourier	6/8
Readout Segments	5

Routine

Slice Group	1
Slices	15
Distance Factor	10 %
Position	L3.1 P61.6 F161.3 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	45 %
FOV Read	320 mm
FOV Phase	59.8 %
Slice Thickness	3.0 mm
TR	3140.0 ms
TE 1	55 ms
TE 2	88 ms
Concatenations	1
AutoAlign	---

Resolution - Filter

Raw Filter	On
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	10 %
Position	L3.1 P61.6 F161.3 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	45 %
FOV Read	320 mm
FOV Phase	59.8 %
Slice Thickness	3.0 mm
TR	3140.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	3140.0 ms
TE 1	55 ms
TE 2	88 ms
MTC	Off
Magn. Preparation	None
Flip Angle	180 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1

Resolution - Common

FOV Read	320 mm
----------	--------

Geometry - AutoAlign

Slice Group	1
Position	L3.1 P61.6 F161.3 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L3.1 P61.6 F161.3
L	3.1 mm
P	61.6 mm
F	161.3 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Region	1
Thickness	80.00 mm
Position	R18.0 P146.6 F180.7 mm
Orientation	C > T-13.6 > S-0.4
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	161 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS Restricted
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Advanced
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L3.1 P61.6 F161.3 mm
Orientation	Sagittal
Rotation	0.00 deg
A >> P	192 mm
F >> H	320 mm
R >> L	50 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665083 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3140.0 ms
Concatenations	1

Diff

Diffusion Mode	4-Scan Trace
Diff. Directions	4
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm ²
b-value 2	800 s/mm ²
Averages 1	1
Averages 2	3
Invert Gray Scale	Off
Diff. Weighted Images	Off
Trace Weighted Images	On
Tensor	Off
FA Maps	Off
ADC Maps	On
Exponential ADC Maps	Off
b-value >=	0 s/mm ²
ADC Noise Threshold	40
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	resolve
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Bandwidth	897 Hz/Px
Echo Spacing	0.36 ms
Optimization	Min. TE
EPI Factor	72

Sequence - Part 2

Introduction	On
Reacquisition Mode	On

Sequence - Assistant

SAR Assistant	Off
Optimization	Min. TE