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\USER

Weber_NiLab

spine-generic

spine-generic_CimaX.XA61_20251119

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\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\Localizer

TA: 19 sec Coil Selection: Auto Voxel Size: 1.0x1.0x6.0 mm³ Acc:: None 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

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	500 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
Base Resolution	256
Phase Resolution	80 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	None
Deep Resolve	Off
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	5
Distance Factor	300 %
Position	L0.0 P10.0 H0.0 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slice Group	2
Slices	5
Distance Factor	300 %
Position	L0.0 P10.0 H0.0 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L

Phase Oversampling	38 %
FOV Read	500 mm
FOV Phase	100.0 %
Slice Thickness	6.0 mm
TR	7.8 ms
TE	3.69 ms
Averages	1
Concatenations	8
AutoAlign	---

Contrast - Common

TR	7.8 ms
TE	3.69 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	20 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	L0.0 P10.0 H0.0 mm

Geometry - AutoAlign

Orientation	Coronal
Phase Encoding Dir.	R >> L
Slice Group	2
Position	L0.0 P10.0 H0.0 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P10.0 H0.0
L	0.0 mm
P	10.0 mm
H	0.0 mm
Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	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
B1 Shim	TrueForm
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 - pTx

B1 Shim	TrueForm
Excitation	Slice-sel.
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	7.8 ms
Segments	1
Concatenations	8

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	500 mm
FOV Phase	100.0 %
Phase Resolution	80 %

Physio - PACE

Resp. Control	Off
Concatenations	8

Inline - Liver

Liver Registration	Off
Save Original Images	On

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 - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off

Inline - Soft Tissue

PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - Maplt

Maplt	None
Flip Angle	20 deg
Measurements	1
Contrasts	1
TE	3.69 ms
TR	7.8 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	320 Hz/Px
Asymmetric Echo	Off
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\T1w

TA: 4:44 min Coil Selection: Auto Voxel Size: 1.0x1.0x1.0 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 Read	320 mm
FOV Phase	81.3 %
Slice Thickness	1.00 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L3.6 A33.5 H39.4 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	320 mm
FOV Phase	81.3 %
Slice Thickness	1.00 mm
TR	2000.0 ms
TE	3.72 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	3D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	50 %
Position	L3.6 A33.5 H39.4 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Slices per Slab	192
Phase Oversampling	0 %
Slice Oversampling	0.0 %
FOV Read	320 mm
FOV Phase	81.3 %
Slice Thickness	1.00 mm
TR	2000.0 ms
Multi-Slice Mode	Single Shot
Series	Ascending
Concatenations	1

Contrast - Common

TR	2000.0 ms
TE	3.72 ms
Magn. Preparation	Non-sel. IR
TI	1000 ms
Flip Angle	9 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Slab Group	1
Position	L3.6 A33.5 H39.4 mm
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---

Geometry - AutoAlign

Initial Position	L3.6 A33.5 H39.4
L	3.6 mm
A	33.5 mm
H	39.4 mm
Initial Orientation	Sagittal
Initial Rotation	0.00 deg

Physio - Signal

1st Signal/Mode	None
TR	2000.0 ms
Concatenations	1

Geometry - Navigator**Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table Position	39 mm
Table Position	H
Inline Composing	Off

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	Non-sel. IR
TI	1000 ms
Dark Blood	Off
FOV Read	320 mm
FOV Phase	81.3 %
Phase Resolution	100 %
Motion Correction	None

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
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

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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Inline - Maplt

Maplt	None
Flip Angle	9 deg
Measurements	1
Contrasts	1
TE	3.72 ms
TR	2000.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Sequence - Part 1

Sequence Name	tfl
Dimension	3D
Excitation	Slab-sel.

Sequence - Part 1

RF Pulse Type	Normal
Gradient Mode	Normal
Flow Compensation	None
Reordering	Linear
Bandwidth	150 Hz/Px
Echo Spacing	10.18 ms
Asymmetric Echo	Allowed
Turbo Factor	192

Sequence - Part 2

Introduction	On
RF Spoiling	On
Incr. Gradient Spoiling	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Off
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\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\T2w

TA: 4:06 min Coil Selection: Auto Voxel Size: 0.8x0.8x0.8 mm³ Acc:: 3 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

Routine

Slab Group	1
Slabs	1
Position	L1.9 A14.4 F42.3 mm
Orientation	S > T-0.9
Phase Encoding Dir.	H >> F
Slices per Slab	64
Phase Oversampling	80 %
Slice Oversampling	12.5 %
FOV Read	256 mm
FOV Phase	100.0 %
Slice Thickness	0.80 mm
TR	1500.0 ms
TE	122.00 ms
Averages	1.4
Concatenations	1
AutoAlign	---

Contrast - Common

TR	1500.0 ms
TE	122.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle Mode	Constant
Flip Angle 1	120 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Blood Suppression	Off
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Contrast - Dynamic

Reordering	Linear
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Resolution - Common

FOV Read	256 mm
FOV Phase	100.0 %
Slice Thickness	0.80 mm
Base Resolution	320
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Total Factor	3
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	32
Acceleration Factor 3D	1
Phase Partial Fourier	Allowed
Slice Partial Fourier	6/8
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	On
Elliptical Filter	Off
Distortion Correction	3D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Position	L1.9 A14.4 F42.3 mm
Orientation	S > T-0.9
Phase Encoding Dir.	H >> F
Slices per Slab	64
Phase Oversampling	80 %
Slice Oversampling	12.5 %
FOV Read	256 mm
FOV Phase	100.0 %
Slice Thickness	0.80 mm
TR	1500.0 ms
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	L1.9 A14.4 F42.3 mm
Orientation	S > T-0.9
Phase Encoding Dir.	H >> F
AutoAlign	---

Geometry - AutoAlign

Initial Position	L1.9 A14.4 F42.3
L	1.9 mm
A	14.4 mm
F	42.3 mm
Initial Orientation	S > T
S > T	-0.90
> C	0.00
Initial Rotation	90.00 deg

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	4.000
Gain	High

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	42 mm
Table Position	F
Inline Composing	Off

Physio - Signal

1st Signal/Mode	None
Trigger Delay	0 ms
TR	1500.0 ms
Concatenations	1

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

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	256 mm
FOV Phase	100.0 %
Phase Resolution	100 %

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

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

System - Adjust Volume

Position	L1.9 A14.4 F42.3 mm
Orientation	S > T-0.9
Rotation	90.00 deg
F >> H	256 mm
A >> P	256 mm
R >> L	52 mm
Reset	Off

Inline - Composing

Inline Composing	Off
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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	spcR
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.

Sequence - Part 1

Reordering	Linear
Bandwidth	625 Hz/Px
Echo Spacing	4.08 ms
Turbo Factor	100
Echo Train Duration	318 ms

Sequence - Part 2

Introduction	On
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Sequence - Assistant

SAR Assistant	Off
Allowed Delay	30 s

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\DWI

TA: 2:36 min Coil Selection: Auto Voxel Size: 0.9x0.9x5.0 mm³ Acc:: None 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

Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Deep Resolve	Off
Phase Partial Fourier	7/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	Off
Static Field Correction	Off
Normalize	Prescan
Noise Masking	Off

Routine

Slice Group	1
Slices	15
Distance Factor	0 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	86 mm
FOV Phase	37.5 %
Slice Thickness	5.0 mm
TR	790.0 ms
TE	72.00 ms
Concatenations	5
AutoAlign	---

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	0 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	86 mm
FOV Phase	37.5 %
Slice Thickness	5.0 mm
TR	790.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	5

Contrast - Common

TR	790.0 ms
TE	72.00 ms
MTC	Off
Magn. Preparation	None
Fat-Water Contrast	SPAIR
Fat Saturation	Weak
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L4.5 A14.7 H9.0
L	4.5 mm
A	14.7 mm
H	9.0 mm
Initial Orientation	T > C
T > C	-6.40
> S	0.00
Initial Rotation	0.00 deg

Contrast - Dynamic

Dynamic Mode	Standard
Multiple Series	Off
Delay in TR	0.00 ms

Geometry - Navigator

FOV Read	86 mm
FOV Phase	37.5 %
Slice Thickness	5.0 mm
Base Resolution	96

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	9 mm
Table Position	H
Inline Composing	Off

Physio - Signal

Captured Cycle	-not set-
Acquisition Window	3600 ms
Trigger Pulse	1
Trigger Delay	0 ms
TR	790.0 ms
Concatenations	5
Phases	1

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

Physio - PACE

Resp. Control	Off
Concatenations	5

Diff

Diffusion Mode	MDDW
Diff. Directions	30
Diffusion Scheme	Monopolar
Diff. Weightings	2
b-value 1	0 s/mm ²
b-value 2	800 s/mm ²
Averages 1	5
Averages 2	1
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	Off
Tensor	Off
FA Maps	Off
ADC Maps	Off
Exponential ADC Maps	Off
Noise Masking	Off
Calculated Image	Off

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L3.9 A15.4 H9.0 mm
! Orientation	T > C-6.4
! Rotation	0.00 deg
! A >> P	53 mm
! R >> L	38 mm
! F >> H	75 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	ZOOMit
pTx Pulse	1
pTx Volume	1
Vol. Property	Optimization Vol.

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	5.000

Physio - Signal

1st Signal/Mode	Pulse/Trigger
Average Cycle	920 ± 114 ms

Sequence - Part 1

Sequence Name	ezse
Excitation	ZOOMit
RF Pulse Type	Normal
Gradient Mode	Performance*
Bandwidth	754 Hz/Px
Echo Spacing	1.85 ms
Free Echo Spacing	Off
Optimization	None
EPI Factor	36

Sequence - Part 2

Introduction	On
Phase Correction	Internal
Ghost Reduction	Off

Sequence - Assistant

SAR Assistant	Off
Optimization	None

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\GRE-ME

TA: 4:45 min Coil Selection: Auto Voxel Size: 0.5x0.5x5.0 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

Routine

Slice Group	1
Slices	15
Distance Factor	0 %
Position	L2.4 A15.3 F8.0 mm
Orientation	T > C-0.6
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	224 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	600.0 ms
TE	14.00 ms
Averages	2
Concatenations	1
AutoAlign	---

Contrast - Common

TR	600.0 ms
TE	14.00 ms
MTC	Off
Flip Angle	30 deg
Fat-Water Contrast	Standard
Combined Echoes	3
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FOV Read	224 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm

Resolution - Common

Base Resolution	448
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	24
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	15
Distance Factor	0 %
Position	L2.4 A15.3 F8.0 mm
Orientation	T > C-0.6
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	224 mm
FOV Phase	100.0 %
Slice Thickness	5.0 mm
TR	600.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	L2.4 A15.3 F8.0 mm
Orientation	T > C-0.6
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L2.4 A15.3 F8.0
L	2.4 mm
A	15.3 mm
F	8.0 mm
Initial Orientation	T > C
T > C	-0.60
> S	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Region	1
Thickness	100.00 mm
Position	L0.0 A97.8 F110.1 mm
Orientation	C > T-11.2
Special Saturation	None

Physio - Signal

Concatenations	1
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Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	8 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	ACS All but spine
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

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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Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	me_r
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	On
Bandwidth	260 Hz/Px

Sequence - Part 2

Introduction	On
RF Spoiling	On

Sequence - Assistant

SAR Assistant	Off
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System - Adjust Volume

! Position	L2.4 A15.3 F8.0 mm
! Orientation	T > C-0.6
! Rotation	0.00 deg
! A >> P	68 mm
! R >> L	64 mm
! F >> H	83 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
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System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	600.0 ms

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\GRE-T1w

TA: 57 sec Coil Selection: Auto Voxel Size: 0.9×0.9×5.0 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 Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	15.0 ms
TE	3.16 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Deep Resolve	Off
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	15.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	15.0 ms
TE	3.16 ms
MTC	Off
Magn. Preparation	None
Flip Angle	15 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Geometry - AutoAlign

Slab Group	1
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

AutoAlign	---
Initial Position	L4.5 A14.7 H9.0
L	4.5 mm
A	14.7 mm
H	9.0 mm
Initial Orientation	T > C
T > C	-6.40
> S	0.00
Initial Rotation	0.00 deg

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	5.000

Physio - Signal

1st Signal/Mode	None
TR	15.0 ms
Segments	1
Concatenations	1

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	9 mm
Table Position	H
Inline Composing	Off

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	230 mm
FOV Phase	100.0 %
Phase Resolution	100 %

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 Neck
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L4.5 A14.7 H9.0 mm
! Orientation	T > C-6.4
! Rotation	0.00 deg
! A >> P	58 mm
! R >> L	90 mm
! F >> H	117 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.
LR Balancing	Off

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	5.000

Physio - Signal

1st Signal/Mode	None
TR	15.0 ms
Segments	1
Concatenations	1

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	230 mm
FOV Phase	100.0 %
Phase Resolution	100 %

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

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 - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - Maplt

Maplt	None
Flip Angle	15 deg
Measurements	1
Contrasts	1
TE	3.16 ms
TR	15.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	260 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\GRE-MT1

TA: 2:12 min Coil Selection: Auto Voxel Size: 0.9x0.9x5.0 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 Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	35.0 ms
TE	3.16 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Deep Resolve	Off
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	35.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	35.0 ms
TE	3.16 ms
MTC	On
Magn. Preparation	None
Flip Angle	9 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Geometry - AutoAlign

Slab Group	1
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

AutoAlign	---
Initial Position	L4.5 A14.7 H9.0
L	4.5 mm
A	14.7 mm
H	9.0 mm
Initial Orientation	T > C
T > C	-6.40
> S	0.00
Initial Rotation	0.00 deg

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	5.000

Physio - Signal

1st Signal/Mode	None
TR	35.0 ms
Segments	1
Concatenations	1

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	9 mm
Table Position	H
Inline Composing	Off

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	230 mm
FOV Phase	100.0 %
Phase Resolution	100 %

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 Neck
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L4.5 A14.7 H9.0 mm
! Orientation	T > C-6.4
! Rotation	0.00 deg
! A >> P	58 mm
! R >> L	90 mm
! F >> H	117 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.
LR Balancing	Off

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

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 - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - Maplt

Maplt	None
Flip Angle	9 deg
Measurements	1
Contrasts	1
TE	3.16 ms
TR	35.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	260 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s

\USER\Weber_NiLab\spine-generic\spine-generic_CimaX.XA61_20251119\GRE-MTO

TA: 2:12 min Coil Selection: Auto Voxel Size: 0.9x0.9x5.0 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 Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
Base Resolution	256
Phase Resolution	100 %
Slice Resolution	100 %
Interpolation	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	35.0 ms
TE	3.16 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	32
Acceleration Factor 3D	1
Deep Resolve	Off
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Allowed
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P
Slices per Slab	22
Phase Oversampling	0 %
Slice Oversampling	18.2 %
FOV Read	230 mm
FOV Phase	100.0 %
Slice Thickness	5.00 mm
TR	35.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	35.0 ms
TE	3.16 ms
MTC	Off
Magn. Preparation	None
Flip Angle	9 deg
Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Geometry - AutoAlign

Slab Group	1
Position	L4.5 A14.7 H9.0 mm
Orientation	T > C-6.4
Phase Encoding Dir.	A >> P

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

AutoAlign	---
Initial Position	L4.5 A14.7 H9.0
L	4.5 mm
A	14.7 mm
H	9.0 mm
Initial Orientation	T > C
T > C	-6.40
> S	0.00
Initial Rotation	0.00 deg

System - Tx/Rx

Frequency 1H	123.254379 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	5.000

Physio - Signal

1st Signal/Mode	None
TR	35.0 ms
Segments	1
Concatenations	1

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	9 mm
Table Position	H
Inline Composing	Off

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	230 mm
FOV Phase	100.0 %
Phase Resolution	100 %

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 Neck
B1 Shim	TrueForm
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

! Position	L4.5 A14.7 H9.0 mm
! Orientation	T > C-6.4
! Rotation	0.00 deg
! A >> P	58 mm
! R >> L	90 mm
! F >> H	117 mm
Reset	Off

System - pTx

B1 Shim	TrueForm
Excitation	Slab-sel.
LR Balancing	Off

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

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 - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - Maplt

Maplt	None
Flip Angle	9 deg
Measurements	1
Contrasts	1
TE	3.16 ms
TR	35.0 ms
Save Original Images	On

Inline - Open Recon

Algorithm	None
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Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	260 Hz/Px
Asymmetric Echo	Allowed
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
Allowed Delay	0 s