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BODY

SPR_abdomen_library

SPR_2023

TRA_T2_HASTE
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\\spr\BODY\SPR_abdomen_library\SPR_2023\TRA_T2_HASTE

TA: 53 sec Coil Selection: Auto Voxel Size: 1.3×1.3×4.5 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	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Acceleration

Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Phase Partial Fourier	5/8

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	44
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	25 %
FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
TR	1200.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	2

Routine

Slice Group	1
Slices	44
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	25 %
FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
TR	1200.0 ms
TE	78.00 ms
Averages	1
Concatenations	2
AutoAlign	---
Coil Elements	BO1,2;SP2-4

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.19 deg

Contrast - Common

TR	1200.0 ms
TE	78.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 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	Off

Resolution - Common

FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
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Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Default
MSMA	S - C - T
Sagittal	L >> R
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off

System - Miscellaneous

Coil Focus	Flat
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System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.19 deg
A >> P	287 mm
R >> L	340 mm
F >> H	198 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1200.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	340 mm
FoV Phase	84.4 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	78.00 ms
TR	1200.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off

Inline - MIP

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	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	698 Hz/Px
Echo Spacing	4.08 ms
Turbo Factor	216

Sequence - Part 2

Introduction	Off
Hypercho	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

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TA: 48 sec Coil Selection: Auto Voxel Size: 1.3×1.3×4.0 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	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	13 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1200.0 ms
TE	76.00 ms
Averages	1
Concatenations	2
AutoAlign	---
Coil Elements	BO1-3;SP2-4

Contrast - Common

TR	1200.0 ms
TE	76.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 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	Off

Resolution - Common

FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
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Resolution - Acceleration

Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	26
Phase Partial Fourier	5/8

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	13 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1200.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	2

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
Initial Orientation	Coronal
Initial Rotation	-0.70 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Default
MSMA	S - C - T
Sagittal	L >> R
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off

System - Miscellaneous

Coil Focus	Flat
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System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Coronal
Rotation	-0.70 deg
R >> L	340 mm
F >> H	340 mm
A >> P	181 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1200.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	340 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	76.00 ms
TR	1200.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off

Inline - MIP

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	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	698 Hz/Px
Echo Spacing	4.20 ms
Turbo Factor	256

Sequence - Part 2

Introduction	Off
Hyperecho	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

\\spr\BODY\SPR_abdomen_library\SPR_2023\TRA_T2_HASTE_SPAIR

TA: 57 sec Coil Selection: Auto Voxel Size: 1.3×1.3×4.5 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	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Phase Partial Fourier	5/8

Resolution - Filter

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

Routine

Slice Group	1
Slices	44
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
TR	1300.0 ms
TE	78.00 ms
Averages	1
Concatenations	2
AutoAlign	---
Coil Elements	BO1,2;SP2-4

Geometry - Common

Slice Group	1
Slices	44
Distance Factor	0 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
TR	1300.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.19 deg

Contrast - Common

TR	1300.0 ms
TE	78.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 deg
Fat-Water Contrast	SPAIR
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	340 mm
FoV Phase	84.4 %
Slice Thickness	4.5 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Default
MSMA	S - C - T
Sagittal	L >> R
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine

System - Miscellaneous

Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.19 deg
A >> P	287 mm
R >> L	340 mm
F >> H	198 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1300.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	SPAIR
Magn. Preparation	None
Dark Blood	Off
FoV Read	340 mm
FoV Phase	84.4 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	78.00 ms
TR	1300.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off

Inline - MIP

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	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	698 Hz/Px
Echo Spacing	4.08 ms
Turbo Factor	216

Sequence - Part 2

Introduction	Off
Hyperecho	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

\\spr\BODY\SPR_abdomen_library\SPR_2023\AX DWI SMS

TA: 2:02 min Coil Selection: Manual Voxel Size: 1.2×1.2×5.0 mm³ Acc:: 4 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
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	40
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	350 mm
FoV Phase	88.0 %
Slice Thickness	5.0 mm
TR	3500.0 ms
TE	62.00 ms
Concatenations	1
AutoAlign	---
Coil Elements	BO1-3;S2-7

Contrast - Common

TR	3500.0 ms
TE	62.00 ms
MTC	Off
Magn. Preparation	None
Fat-Water Contrast	Fat Saturation
Fat Saturation	Strong
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Delay in TR	0.00 ms

Resolution - Common

FoV Read	350 mm
FoV Phase	88.0 %
Slice Thickness	5.0 mm
Base Resolution	150
Phase Resolution	100 %
Interpolation	On

Resolution - Acceleration

Acceleration mode	SMS
Reference Scans	EPI/Separate
Acceleration Factor PE	2
Reference Lines PE	32
SMS Factor	2
Phase Partial Fourier	Off

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FoV Read	350 mm
FoV Phase	88.0 %
Slice Thickness	5.0 mm
TR	3500.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Manual
MSMA	S - C - T
Sagittal	R >> L
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Performance
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
Adjustment Tolerance	Auto

System - Adjustments

Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

Sequence - Part 2

Introduction	Off
Phase Correction	Internal

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	308 mm
R >> L	350 mm
F >> H	239 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	3500.0 ms
Concatenations	1

Physio - PACE

Resp. Control	Off
Concatenations	1

Diff

Diffusion Mode	4-Scan Trace
Diff. Directions	4
Diffusion Scheme	Monopolar
Diff. Weightings	3
b-value 1	50 s/mm ²
b-value 2	400 s/mm ²
b-value 3	1000 s/mm ²
Averages 1	1
Averages 2	2
Averages 3	4
Dynamic Field Correction	On
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 >=	50 s/mm ²
ADC Noise Threshold	1
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Excitation	Standard
RF Pulse Type	Normal
Gradient Mode	Fast
Bandwidth	1960 Hz/Px
Echo Spacing	0.57 ms
Free Echo Spacing	Off
Optimization	None
EPI Factor	132

\\spr\BODY\SPR_abdomen_library\SPR_2023\COR_T2_HASTE_SPAIR

TA: 52 sec Coil Selection: Auto Voxel Size: 1.3×1.3×4.0 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	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	26
Phase Partial Fourier	5/8

Resolution - Filter

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

Routine

Slice Group	1
Slices	40
Distance Factor	13 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1300.0 ms
TE	76.00 ms
Averages	1
Concatenations	2
AutoAlign	---
Coil Elements	BO1-3;SP2-4

Geometry - Common

Slice Group	1
Slices	40
Distance Factor	13 %
Position	Isocenter
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1300.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	2

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
Initial Orientation	Coronal
Initial Rotation	-0.70 deg

Contrast - Common

TR	1300.0 ms
TE	76.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 deg
Fat-Water Contrast	SPAIR
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Off

Resolution - Common

FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Default
MSMA	S - C - T
Sagittal	L >> R
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine

System - Miscellaneous

Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Coronal
Rotation	-0.70 deg
R >> L	340 mm
F >> H	340 mm
A >> P	181 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1300.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	SPAIR
Magn. Preparation	None
Dark Blood	Off
FoV Read	340 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	76.00 ms
TR	1300.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off

Inline - MIP

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	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	698 Hz/Px
Echo Spacing	4.20 ms
Turbo Factor	256

Sequence - Part 2

Introduction	Off
Hyperecho	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s

\\spr\BODY\SPR_abdomen_library\SPR_2023\AX T1 VIBE DIXON

TA: 55 sec Coil Selection: Auto Voxel Size: 1.1×1.1×5.0 mm³ Acc:: 4 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	On
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FoV Read	380 mm
FoV Phase	100.0 %
Slice Thickness	5.0 mm
TR	4.0 ms
TE 1	1.34 ms
TE 2	2.57 ms
Averages	4
Concatenations	1
AutoAlign	---
Coil Elements	BO1-3;SP2,3

Contrast - Common

TR	4.0 ms
TE 1	1.34 ms
TE 2	2.57 ms
Flip Angle	9 deg
Fat-Water Contrast	Dixon
Lines per Shot	44
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Reordering	Linear
Time to Center	8.1 s
Burn Time to Center	Off

Resolution - Common

FoV Read	380 mm
FoV Phase	100.0 %
Slice Thickness	5.0 mm
Base Resolution	352

Resolution - Common

Phase Resolution	80 %
Slice Resolution	61 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration mode	CAIPIRINHA
CAIPIRINHA Mode	Body Tra
Total Factor	4
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	2
Reference Lines 3D	24
Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	Off
Asymmetric Echo	Weak
Elliptical Scanning	Off

Resolution - Filter

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

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FoV Read	380 mm
FoV Phase	100.0 %
Slice Thickness	5.0 mm
TR	4.0 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	Parallel F/H
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Geometry - Saturation

Gap	10.00 mm
Thickness	60.00 mm

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
B1 Shim	TrueForm
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	380 mm
R >> L	380 mm
F >> H	280 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - PACE

Resp. Control	Breath-hold
Concatenations	1

Inline - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Flip Angle	9 deg
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Time to Center	8.1 s
Burn Time to Center	Off

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Save Original Images	On
Contrasts	2
TE 1	1.34 ms
TE 2	2.57 ms
TR	4.0 ms

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 - MapIt

MapIt	None
Flip Angle	9 deg
Measurements	1
Contrasts	2
TE 1	1.34 ms
TE 2	2.57 ms
TR	4.0 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Reordering	Linear
Bandwidth	1090 Hz/Px
Asymmetric Echo	Weak
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	On

Sequence - Assistant

SAR Assistant	Off
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Sequence - Assistant

Allowed Delay	60 s
Optimization	Opp/In

\\spr\BODY\SPR_abdomen_library\SPR_2023\SAG_T2_HASTE

TA: 1:12 min Coil Selection: Auto Voxel Size: 1.3×1.3×4.0 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	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	Off
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	55
Distance Factor	13 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	25 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1300.0 ms
TE	76.00 ms
Averages	1
Concatenations	2
AutoAlign	---
Coil Elements	BO1-3;SP2-4

Contrast - Common

TR	1300.0 ms
TE	76.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	120 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	Off

Resolution - Common

FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	100 %
Interpolation	Off

Resolution - Acceleration

Acceleration mode	GRAPPA
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Resolution - Acceleration

Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	26
Phase Partial Fourier	5/8

Resolution - Filter

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

Geometry - Common

Slice Group	1
Slices	55
Distance Factor	13 %
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
Phase Oversampling	25 %
FoV Read	340 mm
FoV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1300.0 ms
Multi-Slice Mode	Single Shot
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice Group	1
Position	Isocenter
Orientation	Sagittal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 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	Off
Table Position	0 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Default
MSMA	S - C - T
Sagittal	L >> R
Coronal	P >> A
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off

System - Miscellaneous

Coil Focus	Flat
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System - Adjustments

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

System - Adjust Volume

Position	Isocenter
Orientation	Sagittal
Rotation	0.00 deg
A >> P	340 mm
F >> H	340 mm
R >> L	249 mm
Reset	Off

System - Tx/Rx

Frequency 1H	123.200000 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Correction Factor	1.00
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	1300.0 ms
Concatenations	2

Physio - Cardiac

Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FoV Read	340 mm
FoV Phase	100.0 %
Phase Resolution	100 %
Dynamic Mode	Standard

Physio - PACE

Resp. Control	Off
Concatenations	2

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - Cardiac

Magn. Preparation	None
Save Original Images	On
Contrasts	1
TE	76.00 ms
TR	1300.0 ms

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off

Inline - MIP

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	h
Dimension	2D
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	698 Hz/Px
Echo Spacing	4.20 ms
Turbo Factor	256

Sequence - Part 2

Introduction	Off
Hypercho	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	140 deg
Allowed Delay	30 s