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\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\localizer *

TA: 8.6 s PM: REF Voxel size: 1.3×1.3×7.0 mmPAT: Off Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A3.9 H12.5 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	20 %
Position	R90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	4
Slices	1
Dist. factor	20 %
Position	L0.0 P36.1 H12.5 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	400 mm
FoV phase	100,0 %
Slice thickness	7,0 mm
TR	7,4 ms
TE	3,01 ms
Averages	1
Concatenations	4
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	7,4 ms
TE	3,01 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	20 deg
Fat suppr.	None
Water suppr.	None

Contrast - Common

SWI	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	400 mm
FoV phase	100,0 %
Slice thickness	7,0 mm
Base resolution	320
Phase resolution	75 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	1
Dist. factor	20 %
Position	L0.0 A3.9 H12.5 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	20 %
Position	R90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Slices	1
Dist. factor	20 %
Position	L90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	4
Slices	1
Dist. factor	20 %
Position	L0.0 P36.1 H12.5 mm
Orientation	Transversal
Phase enc. dir.	A >> P

Geometry - Common

FoV read	400 mm
FoV phase	100,0 %
Slice thickness	7,0 mm
TR	7,4 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	4

Geometry - AutoAlign

Slice group	1
Position	L0.0 A3.9 H12.5 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	3
Position	L90.0 P36.1 H12.5 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	4
Position	L0.0 P36.1 H12.5 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	0,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off

System - Adjustments

Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

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 Volumes

B1 Shim mode	TrueForm
Excitation	Slice-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	7,4 ms
Concatenations	4
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	400 mm
FoV phase	100,0 %
Phase resolution	75 %

Physio - PACE

Resp. control	Off
Concatenations	4

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off

Inline - Soft Tissue

MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	20 deg
Measurements	1
Contrasts	1
TR	7,4 ms
TE	3,01 ms

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	None
RF pulse type	Fast
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\tirm_tra_prothese_overview *

TA: 0:30 PM: REF Voxel size: 1.1×1.1×6.0 mmPAT: 2 Rel. SNR: 1.00 : tir

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	5
Dist. factor	100 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	19 %
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	6,0 mm
TR	1800,0 ms
TE	53,0 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	1800,0 ms
TE	53,0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	230 ms
Flip angle	120 deg
Fat suppr.	None
Water suppr.	Water sat.
Restore magn.	Off
Freeze suppressed tissue	Off

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	340 mm
FoV phase	100,0 %
Slice thickness	6,0 mm
Base resolution	320
Phase resolution	75 %
Phase partial Fourier	Off
Trajectory	Cartesian

Resolution - Common

Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	43
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	5
Dist. factor	100 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	6,0 mm
TR	1800,0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	0,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	Water sat.
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	On
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Rotation	90,00 deg
R >> L	340 mm
A >> P	340 mm
F >> H	54 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	1800,0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	230 ms
Fat suppr.	None
Dark blood	Off
FoV read	340 mm
FoV phase	100,0 %
Phase resolution	75 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	8,86 ms
Bandwidth	300 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	15
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Normal
Hyperecho	Off
WARP	Off
Red. EC sensitivity	Off
Turbo factor	11

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\tirm_ws_tra_silicone_prothese *

TA: 2:53 PM: FIX Voxel size: 0.9×0.9×4.0 mmPAT: 2 Rel. SNR: 1.00 : tir

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	32
Dist. factor	20 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	29 %
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	3900,0 ms
TE	64,0 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	3900,0 ms
TE	64,0 ms
TD	0,0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	230 ms
Flip angle	80 deg
Fat suppr.	None
Water suppr.	Water sat.
Restore magn.	Off
Freeze suppressed tissue	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	384
Phase resolution	85 %
Phase partial Fourier	Off

Resolution - Common

Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	39
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	32
Dist. factor	20 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	3900,0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	0,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	Water sat.
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	On
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Rotation	90,00 deg
R >> L	340 mm
A >> P	340 mm
F >> H	153 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	3900,0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	230 ms
Fat suppr.	None
Dark blood	Off
FoV read	340 mm
FoV phase	100,0 %
Phase resolution	85 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9,08 ms
Bandwidth	303 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	21
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Normal
Hyperecho	On
WARP	Off
Red. EC sensitivity	Off
Turbo factor	11

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\resolve_diff_tra_spair_p2 *

TA: 2:53 PM: FIX Voxel size: 1.5×1.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : resolve

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
TR	5190 ms
TE 1	46 ms
TE 2	74 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5190 ms
TE 1	46 ms
TE 2	74 ms
MTC	Off
Magn. preparation	None
Flip angle	180 deg
Fat suppr.	SPAIR
Fat sat. mode	Strong

Contrast - Dynamic

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
Base resolution	232
Phase resolution	80 %
Phase partial Fourier	Off
Readout partial Fourier	5/8
Readout segments	5
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	47
Reference scan mode	EPI/separate

Resolution - Filter Image

Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off

Resolution - Filter Rawdata

Raw filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
TR	5190 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.8 A2.2 H0.0
R	0,8 mm
A	2,2 mm
H	0,0 mm
Initial Rotation	-0,80 deg
Initial Orientation	Transversal

Geometry - Saturation

Sat. region	1
Thickness	110 mm
Position	R2.5 P121.1 H0.0 mm
Orientation	C > S1.2
Sat. region	2
Thickness	110 mm
Position	L3.2 P180.6 H0.0 mm
Orientation	C > S-1.0
Fat sat. mode	Strong
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Rotation	-0,80 deg
A >> P	170 mm
R >> L	340 mm
F >> H	134 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	8,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	5190 ms
Concatenations	1

Diff - Neuro

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	3
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	5

Diff - Body

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	3
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	On
Calculated bValue	1400 s/mm²
b-Value >=	0 s/mm²
Noise level	5

Diff - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Contrasts	2
Optimization	Min. TE
Multi-slice mode	Interleaved
Echo spacing	0,38 ms
Bandwidth	829 Hz/Px

Sequence - Part 2

EPI factor	47
RF pulse type	Low SAR
Gradient mode	Fast
Reacquisition mode	Off

Sequence - Assistant

Mode	Off

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\tirm_tra_NaCl-prothese *

TA: 2:53 PM: FIX Voxel size: 0.9×0.9×4.0 mmPAT: 2 Rel. SNR: 1.00 : tir

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	32
Dist. factor	20 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	29 %
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	3900,0 ms
TE	64,0 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	3900,0 ms
TE	64,0 ms
TD	0,0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	230 ms
Flip angle	80 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Freeze suppressed tissue	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
Base resolution	384
Phase resolution	85 %
Phase partial Fourier	Off

Resolution - Common

Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	39
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	32
Dist. factor	20 %
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	340 mm
FoV phase	100,0 %
Slice thickness	4,0 mm
TR	3900,0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
Position	L0.0 P50.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	0,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

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 Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	3900,0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	Slice-sel. IR
TI	230 ms
Fat suppr.	None
Dark blood	Off
FoV read	340 mm
FoV phase	100,0 %
Phase resolution	85 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9,08 ms
Bandwidth	303 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	21
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Low SAR
Gradient mode	Normal
Hyperecho	On
WARP	Off
Red. EC sensitivity	Off
Turbo factor	11

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\resolve_diff_tra_spair_p2 *

TA: 2:53 PM: FIX Voxel size: 1.5×1.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : resolve

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
TR	5190 ms
TE 1	46 ms
TE 2	74 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5190 ms
TE 1	46 ms
TE 2	74 ms
MTC	Off
Magn. preparation	None
Flip angle	180 deg
Fat suppr.	SPAIR
Fat sat. mode	Strong

Contrast - Dynamic

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
Base resolution	232
Phase resolution	80 %
Phase partial Fourier	Off
Readout partial Fourier	5/8
Readout segments	5
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	47
Reference scan mode	EPI/separate

Resolution - Filter Image

Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off

Resolution - Filter Rawdata

Raw filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	340 mm
FoV phase	50,0 %
Slice thickness	4,0 mm
TR	5190 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.8 A2.2 H0.0
R	0,8 mm
A	2,2 mm
H	0,0 mm
Initial Rotation	-0,80 deg
Initial Orientation	Transversal

Geometry - Saturation

Sat. region	1
Thickness	110 mm
Position	R2.5 P121.1 H0.0 mm
Orientation	C > S1.2
Sat. region	2
Thickness	110 mm
Position	L3.2 P180.6 H0.0 mm
Orientation	C > S-1.0
Fat sat. mode	Strong
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Rotation	-0,80 deg
A >> P	170 mm
R >> L	340 mm
F >> H	134 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	8,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	5190 ms
Concatenations	1

Diff - Neuro

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	3
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	5

Diff - Body

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	0 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	3
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	On
Calculated bValue	1400 s/mm²
b-Value >=	0 s/mm²
Noise level	5

Diff - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Contrasts	2
Optimization	Min. TE
Multi-slice mode	Interleaved
Echo spacing	0,38 ms
Bandwidth	829 Hz/Px

Sequence - Part 2

EPI factor	47
RF pulse type	Low SAR
Gradient mode	Fast
Reacquisition mode	Off

Sequence - Assistant

Mode	Off

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\resolve_diff_tra_spair_p2 *

TA: 4:07 PM: FIX Voxel size: 1.5×1.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : resolve

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	360 mm
FoV phase	40,5 %
Slice thickness	4,0 mm
TR	5110 ms
TE 1	47 ms
TE 2	75 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5110 ms
TE 1	47 ms
TE 2	75 ms
MTC	Off
Magn. preparation	None
Flip angle	180 deg
Fat suppr.	SPAIR
Fat sat. mode	Strong

Contrast - Dynamic

Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	360 mm
FoV phase	40,5 %
Slice thickness	4,0 mm
Base resolution	242
Phase resolution	100 %
Phase partial Fourier	Off
Readout partial Fourier	5/8
Readout segments	5
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	49
Reference scan mode	EPI/separate

Resolution - Filter Image

Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off

Resolution - Filter Rawdata

Raw filter	Off

Geometry - Common

Slice group	1
Slices	28
Dist. factor	20 %
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	360 mm
FoV phase	40,5 %
Slice thickness	4,0 mm
TR	5110 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slice group	1
Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R0.8 A2.2 H0.0
R	0,8 mm
A	2,2 mm
H	0,0 mm
Initial Rotation	-0,80 deg
Initial Orientation	Transversal

Geometry - Saturation

Sat. region	1
Thickness	110 mm
Position	R2.5 P121.1 H0.0 mm
Orientation	C > S1.2
Sat. region	2
Thickness	110 mm
Position	L3.2 P180.6 H0.0 mm
Orientation	C > S-1.0
Fat sat. mode	Strong
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - All

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R0.8 A2.2 H0.0 mm
Orientation	Transversal
Rotation	-0,80 deg
A >> P	146 mm
R >> L	360 mm
F >> H	134 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	8,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	5110 ms
Concatenations	1

Diff - Neuro

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	50 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	4
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	5

Diff - Body

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	2
b-value 1	50 s/mm²
b-value 2	800 s/mm²
b-value 1	1
b-value 2	4
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	On
Calculated bValue	1400 s/mm²
b-Value >=	0 s/mm²
Noise level	5

Diff - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	On
Dimension	2D
Contrasts	2
Optimization	Min. TE
Multi-slice mode	Interleaved
Echo spacing	0,38 ms
Bandwidth	861 Hz/Px

Sequence - Part 2

EPI factor	49
RF pulse type	Low SAR
Gradient mode	Fast
Reacquisition mode	Off

Sequence - Assistant

Mode	Off

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\Cal_t1_fl3d_tra_Dixon *

TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	5,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	5,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	5,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\t1_fl3d_tra_Dixon_pre *

TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	15,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	15,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\Perfusie_t1_twist *

TA: 2:03 PM: FIX Voxel size: 0.9×0.9×2.5 mmPAT: 3 Rel. SNR: 1.00 : fldyn

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	On
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	0,0 %
Slices per slab	60
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,50 mm
TR	4,09 ms
TE	2,06 ms
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	4,09 ms
TE	2,06 ms
Flip angle	20 deg
Fat suppr.	None

Contrast - Dynamic

Reconstruction	Magnitude
Measurements	20
Pause after meas. 1	0,0 s
Pause after meas. 2	0,0 s
Pause after meas. 3	0,0 s
Pause after meas. 4	0,0 s
Pause after meas. 5	0,0 s
Pause after meas. 6	0,0 s
Pause after meas. 7	0,0 s
Pause after meas. 8	0,0 s
Pause after meas. 9	0,0 s
Pause after meas. 10	0,0 s
Pause after meas. 11	0,0 s
Pause after meas. 12	0,0 s
Pause after meas. 13	0,0 s
Pause after meas. 14	0,0 s
Pause after meas. 15	0,0 s
Pause after meas. 16	0,0 s
Pause after meas. 17	0,0 s
Pause after meas. 18	0,0 s
Pause after meas. 19	0,0 s

Contrast - Dynamic

Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,50 mm
Base resolution	384
Phase resolution	90 %
Slice resolution	77 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
View sharing	TWIST
Central region A	15 %
Sampling density B	10 %
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slab group	1
Slabs	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	0,0 %
Slices per slab	60
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,50 mm
TR	4,09 ms

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm

Geometry - AutoAlign

Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Maximum

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 Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Angio - Common

View sharing	TWIST
Central region A	15 %
Sampling density B	10 %
Dynamic recon mode	Symmetric Share
Flip angle	20 deg

Angio - Common

Temporal resolution	4,57 s
Measurements	20
Pause after meas. 1	0,0 s
Pause after meas. 2	0,0 s
Pause after meas. 3	0,0 s
Pause after meas. 4	0,0 s
Pause after meas. 5	0,0 s
Pause after meas. 6	0,0 s
Pause after meas. 7	0,0 s
Pause after meas. 8	0,0 s
Pause after meas. 9	0,0 s
Pause after meas. 10	0,0 s
Pause after meas. 11	0,0 s
Pause after meas. 12	0,0 s
Pause after meas. 13	0,0 s
Pause after meas. 14	0,0 s
Pause after meas. 15	0,0 s
Pause after meas. 16	0,0 s
Pause after meas. 17	0,0 s
Pause after meas. 18	0,0 s
Pause after meas. 19	0,0 s
Burn time-to-center	On
Temporal interpolation	1
Time to center	18,1 s

Angio - Inline

Subtract	On
Save images	Off
Autoscaling	Off
Scaling factor	1
Offset	50
Subtrahend	1
Subtraction indices	
Subtraction group	1
Measurements	20
StdDev	Off
Save original images	On

Angio - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	On
MIP-Time	On
Save original images	On

Angio - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Optimization	Min. TE TR
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Slab-sel.
RF spoiling	On
Phase Enc. Rewinder	On

Sequence - Assistant

Mode	Off
Allowed delay	0 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\t1_fl3d_tra_Dixon_post *

TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	15,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	15,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

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TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	15,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	15,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\t1_fl3d_tra_Dixon_post *

TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	15,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	15,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\t1_fl3d_tra_Dixon_post *

TA: 1:03 PM: FIX Voxel size: 0.9×0.9×1.0 mmPAT: 3 Rel. SNR: 1.00 : fl

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	20 %
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms
Flip angle	15,0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On
Dixon evaluation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
Base resolution	416
Phase resolution	86 %
Slice resolution	55 %

Resolution - Common

Phase partial Fourier	7/8
Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On
POCS	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	22,2 %
Slices per slab	144
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	1,0 mm
TR	5,68 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	None

Geometry - Saturation

Water suppr.	None
Dixon	On
Dixon evaluation	Off
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - Coil Memory

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	144 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

View sharing	Off
Flip angle	15,0 deg
Measurements	1

Inline - Common

Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off
	null

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Soft Tissue

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15,0 deg
Measurements	1
Contrasts	2
TR	5,68 ms
TE 1	2,46 ms
TE 2	3,69 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reduce Motion Sens.	On
Asymmetric echo	Weak
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	860 Hz/Px
Bandwidth 2	860 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast*
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

Sequence - Assistant

Mode	Off
Allowed delay	60 s

\\USER_MR3\MAMMAE\MAMMAE\KLINIEK/SCREENING\t2_tse_dixon_fast_p3 *

TA: 2:23 PM: FIX Voxel size: 0.9×0.9×2.5 mmPAT: 3 Rel. SNR: 1.00 : tse

Properties

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	Off
Load images to graphic segments	Off
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	70 %
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,5 mm
TR	5110,0 ms
TE	81 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter, Image Filter
Coil elements	7BL;7BR;AXL;AXR

Contrast - Common

TR	5110,0 ms
TE	81 ms
TD	0,0 ms
MTC	Off
Magn. preparation	None
Flip angle	120 deg
Fat sat. mode	Strong
Water suppr.	None
Dixon	On
Fast Dixon	On
Restore magn.	Off

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

Resolution - Common

FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,5 mm
Base resolution	384
Phase resolution	80 %

Resolution - Common

Phase partial Fourier	Allowed
Trajectory	Cartesian
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	29
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	On
Intensity	Medium
Edge Enhancement	3
Smoothing	3
Unfiltered images	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	60
Dist. factor	0 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
FoV read	360 mm
FoV phase	100,0 %
Slice thickness	2,5 mm
TR	5110,0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	2

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0,0 mm
P	0,0 mm
H	0,0 mm
Initial Rotation	90,00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat sat. mode	Strong
Water suppr.	None
Dixon	On

Geometry - Saturation

Fast Dixon	On
Restore magn.	Off
Special sat.	None

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	On
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90,00 deg
R >> L	360 mm
A >> P	360 mm
F >> H	150 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm

System - Tx/Rx

Frequency 1H	123,235025 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1,000
Reset	Off
? Ref. amplitude 1H	0,000 V

Physio - Signal1

1st Signal/Mode	None
TR	5110,0 ms
Concatenations	2

Physio - Cardiac

Magn. preparation	None
Dark blood	Off

Physio - Cardiac

FoV read	360 mm
FoV phase	100,0 %
Phase resolution	80 %
Trajectory	Cartesian

Physio - PACE

Resp. control	Off
Concatenations	2

Inline - Common

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off
MIP-Cor	Off
MIP-Tra	Off
MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

Sequence - Part 1

Introduction	Off
Dimension	2D
Reduce Motion Sens.	On
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Echo spacing	11,6 ms
Bandwidth	930 Hz/Px

Sequence - Part 2

Define	Turbo factor
Echo trains per slice	13
Phase correction	Automatic
RF pulse type	Normal
Gradient mode	Fast
Hyperecho	On
Red. EC sensitivity	Off
Turbo factor	15

Sequence - Assistant

Mode	Off
Allowed delay	30 s