

Note: Sepp recommends HIGH receiver gain, independent of the coverage and bandwidth

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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Renzo

[XT-ID:93-M-0170]Renzo_fast

20240911_MAU_fast_scanning

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\USER\Renzo\XT-ID:93-M-0170\Renzo_fast\20240911_MAU_fast_scanning\localicer_sag	
TA: 0:15 PM: REF Voxel size: 0.8×0.8×1.6 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	On
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

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
TE	1.62 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	3.6 ms
TE	1.62 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	On
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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.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Sagittal
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	Sagittal

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

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Geometry - Tim Planning Suite

Inline Composing	Off
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Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	128
Slice thickness	1.60 mm
Dist. factor	20 %
FoV read	260 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	REF
Table position	F
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	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
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
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3.6 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - Maplt

Save original images	On
Maplt	None
Flip angle	12 deg
Measurements	1
Contrasts	1
TR	3.6 ms
TE	1.62 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	540 Hz/Px

Sequence - Part 2

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

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Sequence - Part 2

RF spoiling	On
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Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\localicer_trans	
TA: 0:15 PM: REF Voxel size: 0.8×0.8×1.6 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	On
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

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
TE	1.62 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	3.6 ms
TE	1.62 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	On
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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.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
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

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Geometry - Tim Planning Suite

Inline Composing	Off
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Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	128
Slice thickness	1.60 mm
Dist. factor	20 %
FoV read	260 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	REF
Table position	F
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	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
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
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3.6 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - Maplt

Save original images	On
Maplt	None
Flip angle	12 deg
Measurements	1
Contrasts	1
TR	3.6 ms
TE	1.62 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	540 Hz/Px

Sequence - Part 2

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

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Sequence - Part 2

RF spoiling	On
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Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_setup_highres	
TA: 0:25 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 16 Rel. SNR: 1.00 : nih5k	

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
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	59.0 ms
TR 2	2714 ms
TE 1	19.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	59.0 ms
TR 2	2714 ms
TE 1	19.50 ms
Multi-echo spacing	48.7 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
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

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRNHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAIPI 3D Shift	0
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	59.0 ms
TR 2	2714 ms

Geometry - AutoAlign

Slab group	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R30.3 A27.7 H5.7
R	30.3 mm
A	27.7 mm
H	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

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

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Geometry - Tim Planning Suite

Inline Composing	Off
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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A18.9 H4.4 mm
! Orientation	Sagittal
! Rotation	90.00 deg
! F >> H	200 mm
! A >> P	215 mm
! R >> L	168 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.14 ms
Bandwidth	1436 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	Off
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNabs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_ME	
TA: 0:19 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 16 Rel. SNR: 1.00 : nih5k	

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
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	59.3 ms
TR 2	1245 ms
TE 1	8.04 ms
TE 2	26.24 ms
TE 3	44.44 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	59.3 ms
TR 2	1245 ms
TE 1	8.04 ms
TE 2	26.24 ms
TE 3	44.44 ms
Multi-echo spacing	18.20 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
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

Resolution - Common

FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm

Resolution - Common

Base resolution	100
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	60
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	59.3 ms
TR 2	1245 ms

Geometry - AutoAlign

Slab group	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R30.3 A27.7 H5.7
R	30.3 mm
A	27.7 mm
H	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A18.9 H4.4 mm
! Orientation	Sagittal
! Rotation	90.00 deg
! F >> H	200 mm
! A >> P	215 mm
! R >> L	168 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	3
Echo spacing	0.76 ms
Bandwidth	2000 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Part 2

Turbo factor	21
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Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	Off
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_ME_ramp_samplin	
g TA: 0:17 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 16 Rel. SNR: 1.00 : nih5k	

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
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Multi-echo spacing	18.20 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
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

Resolution - Common

FoV read	200 mm
FoV phase	122.0 %

Resolution - Common

Slice thickness	2.00 mm
Base resolution	100
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	60
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms

Geometry - AutoAlign

Slab group	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R30.3 A27.7 H5.7
R	30.3 mm
A	27.7 mm
H	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
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SIEMENS MAGNETOM Investigational_Device_7T_Plus

Geometry - Saturation

Fat suppr.	None
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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A18.9 H4.4 mm
! Orientation	Sagittal
! Rotation	90.00 deg
! F >> H	200 mm
! A >> P	215 mm
! R >> L	168 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	3
Echo spacing	0.6 ms
Bandwidth	2000 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	1
RF pulse type	Normal

Sequence - Part 2

Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	21

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

Sequence - Assistant

Mode	Off
------	-----

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_single_echo	
TA: 0:14 PM: REF Voxel size: 2.0×2.0×2.0 mmPAT: 18 Rel. SNR: 1.00 : nih5k	

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
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	30.0 ms
TR 2	420 ms
TE 1	10.40 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	30.0 ms
TR 2	420 ms
TE 1	10.40 ms
Multi-echo spacing	24.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
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

Resolution - Common

FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
Base resolution	100
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRNHA
Acc. factor PE	3
Ref. lines PE	80
Acc. factor 3D	6
Ref. lines 3D	60
CAIPI 3D Shift	3
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	18

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	30.0 ms
TR 2	420 ms

Geometry - AutoAlign

Slab group	1
Position	R30.3 A27.7 H5.7 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R30.3 A27.7 H5.7
R	30.3 mm
A	27.7 mm
H	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

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

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Geometry - Tim Planning Suite

Inline Composing	Off
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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A18.9 H4.4 mm
! Orientation	Sagittal
! Rotation	90.00 deg
! F >> H	200 mm
! A >> P	215 mm
! R >> L	168 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	0.76 ms
Bandwidth	2000 Hz/Px

Sequence - Part 2

EPI factor	31
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	14

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	Off
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNabs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

Sequence - Assistant

Mode	Off
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\USER\Renzo\XT-ID:93-M-0170\Renzo_fast\20240911_MAU_fast_scanning\localicer_sag	
TA: 0:15 PM: REF Voxel size: 0.8×0.8×1.6 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	On
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

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
TE	1.62 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	3.6 ms
TE	1.62 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	On
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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.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
Orientation	Sagittal
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	Sagittal

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

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Geometry - Tim Planning Suite

Inline Composing	Off
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Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	128
Slice thickness	1.60 mm
Dist. factor	20 %
FoV read	260 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	REF
Table position	F
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	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
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
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3.6 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - Maplt

Save original images	On
Maplt	None
Flip angle	12 deg
Measurements	1
Contrasts	1
TR	3.6 ms
TE	1.62 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	540 Hz/Px

Sequence - Part 2

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

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Sequence - Part 2

RF spoiling	On
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Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\localicer_trans	
TA: 0:15 PM: REF Voxel size: 0.8×0.8×1.6 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	On
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

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
TE	1.62 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	AC

Contrast - Common

TR	3.6 ms
TE	1.62 ms
MTC	Off
Magn. preparation	None
Flip angle	12 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

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

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8

Resolution - Common

Interpolation	On
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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.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.60 mm
TR	3.6 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	Isocenter
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

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Geometry - Tim Planning Suite

Inline Composing	Off
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Geometry - Tim CT

Tim CT mode	Off
Slabs	1
Slices per slab	128
Slice thickness	1.60 mm
Dist. factor	20 %
FoV read	260 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	REF
Table position	F
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	Default

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
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
Excitation	Non-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3.6 ms
Concatenations	1
Segments	1

Physio - Cardiac

Tagging	None
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Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	260 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

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
MIP - time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - Maplt

Save original images	On
Maplt	None
Flip angle	12 deg
Measurements	1
Contrasts	1
TR	3.6 ms
TE	1.62 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Elliptical scanning	Off
Phase stabilisation	Off
Asymmetric echo	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Bandwidth	540 Hz/Px

Sequence - Part 2

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

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Sequence - Part 2

RF spoiling	On
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Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_setup_highres
TA: 2:28 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 16 Rel. SNR: 1.00 : nih5k

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
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	59.0 ms
TR 2	2714 ms
TE 1	19.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	59.0 ms
TR 2	2714 ms
TE 1	19.50 ms
Multi-echo spacing	48.7 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAIPI 3D Shift	0
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	59.0 ms
TR 2	2714 ms

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.14 ms
Bandwidth	1436 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	Off
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
------	-----

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_16_CAIPI	
TA: 2:13 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 16 Rel. SNR: 1.00 : nih5k	

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
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	2438 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	53.0 ms
TR 2	2438 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

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Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	2438 ms

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
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\USER\Renzo\XT-ID:93-M-0170\Renzo_fast\20240911_MAU_fast_scanning\WB_16_CAIPI_gfactor

TA: 0:13 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 16 Rel. SNR: 1.00 : nih5k

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
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	2438 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	53.0 ms
TR 2	2438 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRNHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	2438 ms

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

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

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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	On
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_12_setup_highres_tSNR
TA: 2:42 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 12 Rel. SNR: 1.00 : nih5k

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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	66.0 ms
TR 2	3036 ms
TE 1	21.10 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	66.0 ms
TR 2	3036 ms
TE 1	21.10 ms
Multi-echo spacing	56.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Resolution - iPAT

PAT mode	CAPIRINHA
Acc. factor PE	3
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAPI 3D Shift	0
Reference Scan Mode	EPI/separate
CAPI Mode (tooltip)	Skipped-CAPI
Total PAT factor	12

SIEMENS MAGNETOM Investigational_Device_7T_Plus

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	66.0 ms
TR 2	3036 ms

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	0.99 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	56
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
------	-----

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_12_setup_highres_gfactor

TA: 0:13 PM: REF Voxel size: 0.9×0.9×0.8 mmPAT: 12 Rel. SNR: 1.00 : nih5k

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

Resolution - iPAT

PAT mode	CAIPIRHNA
Acc. factor PE	3
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	36
CAIPI 3D Shift	0
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	12

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	66.0 ms
TR 2	3036 ms
TE 1	21.10 ms
Averages	1
Filter	None
Coil elements	AC

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	66.0 ms
TR 2	3036 ms

Contrast - Common

TR 1	66.0 ms
TR 2	3036 ms
TE 1	21.10 ms
Multi-echo spacing	56.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Geometry - Tim Planning Suite

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

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	On
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	0.99 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	56
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_8_setup_highres_t
SNR

TA: 4:15 PM: REF Voxel size: 0.9×0.9×0.8 mmPAT: 8 Rel. SNR: 1.00 : nih5k

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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	4876 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	53.0 ms
TR 2	4876 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Resolution - iPAT

PAT mode	CAPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	2
Ref. lines 3D	36
CAPI 3D Shift	1
Reference Scan Mode	EPI/separate
CAPI Mode (tooltip)	Skipped-CAPI
Total PAT factor	8

SIEMENS MAGNETOM Investigational_Device_7T_Plus

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	4876 ms

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	92

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_8_setup_highres_g factor	
TA: 0:16 PM: REF Voxel size: 0.9x0.9x0.8 mmPAT: 8 Rel. SNR: 1.00 : nih5k	

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
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	4876 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	53.0 ms
TR 2	4876 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	2
Ref. lines 3D	36
CAIPI 3D Shift	1
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	8

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.0 ms
TR 2	4876 ms

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Geometry - Tim Planning Suite

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

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	On
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	92

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_4_setup_highres_t
SNR

TA: 8:23 PM: REF Voxel size: 0.9×0.9×0.8 mmPAT: 4 Rel. SNR: 1.00 : nih5k

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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.5 ms
TR 2	9844 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	53.5 ms
TR 2	9844 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Resolution - iPAT

PAT mode	CAPIRINHA
Acc. factor PE	2
Ref. lines PE	80
Acc. factor 3D	2
Ref. lines 3D	36
CAPI 3D Shift	1
Reference Scan Mode	EPI/separate
CAPI Mode (tooltip)	Skipped-CAPI
Total PAT factor	4

SIEMENS MAGNETOM Investigational_Device_7T_Plus

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.5 ms
TR 2	9844 ms

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	184

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
------	-----

\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_4_setup_highres_g
TA: 0:21 PM: REF Voxel size: 0.9×0.9×0.8 mmPAT: 4 Rel. SNR: 1.00 : nih5k

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

Resolution - iPAT

PAT mode	CAIPIRNHA
Acc. factor PE	2
Ref. lines PE	80
Acc. factor 3D	2
Ref. lines 3D	36
CAIPI 3D Shift	1
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	4

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.5 ms
TR 2	9844 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	53.5 ms
TR 2	9844 ms

Contrast - Common

TR 1	53.5 ms
TR 2	9844 ms
TE 1	17.50 ms
Multi-echo spacing	43.3 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Geometry - Tim Planning Suite

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

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

Sequence - Special

Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	On
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	42
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	184

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8

\USER\Renzo\XT-ID:93-M-0170\Renzo_fast\20240911_MAU_fast_scanning\WB_1_10	
TA: 3:27 PM: REF Voxel size: 0.9×0.9×0.8 mmPAT: 2 Rel. SNR: 1.00 : nih5k	

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
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	54.8 ms
TR 2	20166 ms
TE 1	17.50 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	54.8 ms
TR 2	20166 ms
TE 1	17.50 ms
Multi-echo spacing	44.5 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	10
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

Resolution - Common

FoV read	200 mm
FoV phase	96.6 %

Resolution - Common

Slice thickness	0.85 mm
Base resolution	232
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Acc. factor PE	1
Ref. lines PE	24
Acc. factor 3D	2
Ref. lines 3D	24
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	184
FoV read	200 mm
FoV phase	96.6 %
Slice thickness	0.85 mm
TR 1	54.8 ms
TR 2	20166 ms

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

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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	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.01 ms
Bandwidth	1134 Hz/Px

Sequence - Part 2

EPI factor	43
Segmentation	4
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Part 2

Turbo factor	368
--------------	-----

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	On
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
G-factor map	Off
POCS Iterations	8
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_18_ME_ramp_sampling_tSNR	
TA: 1:10 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 16 Rel. SNR: 1.00 : nih5k	

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

Contrast - Dynamic

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
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Pause after meas. 22	0.0 s
Pause after meas. 23	0.0 s
Pause after meas. 24	0.0 s
Pause after meas. 25	0.0 s
Pause after meas. 26	0.0 s
Pause after meas. 27	0.0 s
Pause after meas. 28	0.0 s
Pause after meas. 29	0.0 s
Pause after meas. 30	0.0 s
Pause after meas. 31	0.0 s
Pause after meas. 32	0.0 s
Pause after meas. 33	0.0 s
Pause after meas. 34	0.0 s
Pause after meas. 35	0.0 s
Pause after meas. 36	0.0 s
Pause after meas. 37	0.0 s
Pause after meas. 38	0.0 s
Pause after meas. 39	0.0 s
Pause after meas. 40	0.0 s
Pause after meas. 41	0.0 s
Pause after meas. 42	0.0 s
Pause after meas. 43	0.0 s
Pause after meas. 44	0.0 s
Pause after meas. 45	0.0 s
Pause after meas. 46	0.0 s
Pause after meas. 47	0.0 s
Pause after meas. 48	0.0 s
Pause after meas. 49	0.0 s

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Multi-echo spacing	18.20 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Resolution - Common

FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
Base resolution	100
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	50
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

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	60

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Resolution - iPAT

CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	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

System - Miscellaneous

Coil Combine Mode	Sum of Squares
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	3
Echo spacing	0.6 ms
Bandwidth	2000 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	21

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On

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Sequence - Special

Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

Sequence - Assistant

Mode	Off
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\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_18_ME_ramp_sampling_gfactor

TA: 0:12 PM: FIX Voxel size: 2.0×2.0×2.0 mmPAT: 16 Rel. SNR: 1.00 : nih5k

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

Resolution - Common

Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	4
Ref. lines PE	80
Acc. factor 3D	4
Ref. lines 3D	60
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	Skipped-CAIPI
Total PAT factor	16

Routine

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Averages	1
Filter	None
Coil elements	AC

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
Slab Scale	-10 %
Slices per slab	84
FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
TR 1	55.7 ms
TR 2	1169 ms

Geometry - AutoAlign

Slab group	1
Position	R3.8 A11.3 H3.8 mm
Orientation	T > C-10.1
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R3.8 A11.3 H3.8
R	3.8 mm
A	11.3 mm
H	3.8 mm
Initial Rotation	0.00 deg
Initial Orientation	T > C
T > C	-10.1
> S	0.0

Contrast - Common

TR 1	55.7 ms
TR 2	1169 ms
TE 1	6.80 ms
TE 2	25 ms
TE 3	43.2 ms
Multi-echo spacing	18.20 ms
Magn. preparation	None
Flip angle	18 deg
Fat suppr.	None
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	200 mm
FoV phase	122.0 %
Slice thickness	2.00 mm
Base resolution	100
Phase resolution	100 %
Slice resolution	100 %

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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	Default

System - Adjustments

B0 Shim mode	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	L0.0 A3.8 H5.0 mm
! Orientation	Sagittal
! Rotation	101.54 deg
! F >> H	88 mm
! A >> P	141 mm
! R >> L	113 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.204312 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	215.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	3
Echo spacing	0.6 ms
Bandwidth	2000 Hz/Px

Sequence - Part 2

EPI factor	23
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On

Sequence - Part 2

Turbo factor	21
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Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
ETL per RTEB	1
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	On
SVDPC	On
Sym VASO	On
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	Off
Disable PF reco	On
Disable PF reco	On
Save sampling	Off
PE VComp	Off
Water Exc.	Long bino-11
External PC	per Series
FIDNavs	-none-
EPI rise time factor	1.10
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	On
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

Sequence - Assistant

Mode	Off
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