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\\USER Renzo [XT-ID:93-M-0170]Renzo_fast 20240911 MAU fast scanning localicer_sag localicer_trans WB_setup_highres WB_ME WB_ME_ramp_sampling WB_single_echo localicer_sag localicer_trans WB_setup_highres WB_16_CAIPI WB_16_CAIPI_gfactor WB_12_setup_highres_tSNR WB_12_setup_highres_gfactor WB_8_setup_highres_tsNR WB_8_setup_highres_gfactor WB_4_setup_highres_tsNR WB_4_setup_highres_gfactor WB 1 10 WB_18_ME_ramp_sampling_tSNR

WB_18_ME_ramp_sampling_gfactor

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

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
Р	0.0 mm
Н	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

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

Geometry - Tim Planning Suite

Inline Composing	Off

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

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 MIP-Cor MIP-Tra MIP-Time	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 - MapIt

Save original images	On
MapIt	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	
Sequence - Assistant		
Mode	Off	

$\verb|\USER\Renzo|[XT-ID:93-M-0170]| Renzo_fast \verb|\20240911_MAU_fast_scanning\\| localicer_transitive for the property of the pro$

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

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
Р	0.0 mm
Н	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

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

Geometry - Tim Planning Suite

Inline Composing	Off

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

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 - MapIt

Save original images	On
MapIt	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	
Sequence - Assistant		
Mode	Off	

TA: 0:25 PM: REF Voxel size: 0.9×0.9×0.8 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	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

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
Α	27.7 mm
н	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

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

Geometry - Tim Planning Suite

Inline Composing	Off	

System - Miscellaneous

Positioning mode	REF
Table position	Н
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
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

Mode	Off

\\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	Off
preparation	
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
	39.3 1118
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
Н	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	Н	
Table position	0 mm	
Inline Composing	Off	

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	

Sequence - Special

PATRef FA	3 deg
RF duration	1400 us
RF BWT product	8
Ernst T1	o 1200 ms
PATRef prep. shots	1200 ms 10
· ·	• •
Volume dummy shots	0
Dummy Measurements	1
ETL per RTEB	•
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

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

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	Off
preparation	
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

0.3 A27.7 H5.7 mm
0.3 A27.7 H5.7 mm
nsversal
> P
0.3 A27.7 H5.7
3 mm
7 mm
mm
0 deg
nsversal

Geometry - Saturation

Catumatian manda	Ctanalana
Saturation mode	Standard

Geometry - Saturation

Fat suppr.	None	

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	Н
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

Mode	Off	

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	Off
preparation	
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	CAIPIRINHA
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
Α	27.7 mm
н	5.7 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None

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

Geometry - Tim Planning Suite

Inline Composing	Off

System - Miscellaneous

REF
Н
0 mm
S - C - T
R >> L
A >> P
F >> H
Sum of Squares
Off
Off
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	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
- 1010101	Off
GRAPPA Regularization	10 10^-6
Var. FA /MAGEC	1

	Mode	Off
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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	On
preparation	
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	

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
Р	0.0 mm
Н	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

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

Geometry - Tim Planning Suite

Inline Composing	Off

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

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 MIP-Cor MIP-Tra MIP-Time	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 - MapIt

Save original images	On	
MapIt	None	
Flip angle	12 deg	
Measurements	1	
Contrasts	1	
TR	3.6 ms	
TF	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	
Sequence - Assistant		
Mode	Off	

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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	On
preparation	
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	

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
Р	0.0 mm
Н	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

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

Geometry - Tim Planning Suite

Inline Composing	Off

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

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 - MapIt

Save original images	On	
MapIt	None	
Flip angle	12 deg	
Measurements	1	
Contrasts	1	
TR	3.6 ms	
TF	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

Mode

RF spoiling	On	
Sequence - Assistant		

Off

-	21	-

TA: 2:28 PM: REF Voxel size: 0.9×0.9×0.8 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

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

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	59.0 ms
TR 2	2714 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
Α	11.3 mm
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	1.14 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	

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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

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: 0.9×0.9×0.8 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

John Bynamio		
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

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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	42
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	46

Sequence - Special

<u>'</u>	
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

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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

Mode	Off	

TA: 0:13 PM: REF Voxel size: 0.9×0.9×0.8 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	Off
preparation	
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	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

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
Α	11.3 mm
Н	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

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

System - Miscellaneous

Positioning mode	REF
Table position	Н
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 ! A >> P	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

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

Mode	Off	

\\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: 0.9×0.9×0.8 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

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

66.0 ms
3036 ms
21.10 ms
56.3 ms
None
18 deg
None
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

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

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	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

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

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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

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

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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

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

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

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	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

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

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
Α	11.3 mm
Н	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

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

System - Miscellaneous

Positioning mode	REF
Table position	Н
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 ! A >> P	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

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
·	

Mode	Off	

\\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

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	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

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

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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	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	

SIEMENS MAGNETOM Investigational_Device_7T_Plus

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

Mode	Off	

\\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: 0.9×0.9×0.8 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

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

occinion y manorangin	
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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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	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

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

Mode	Off	

\\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	Off
preparation	
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	53.5 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	

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

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

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	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

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

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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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
! F >> H ! 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	

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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

Mode	Off

\\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_4_setup_highres_g factor

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	Off
preparation	
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	53.5 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	

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	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

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

1
1
R3.8 A11.3 H3.8 mm
T > C-10.1
A >> P
-10 %
184
200 mm
96.6 %
0.85 mm
53.5 ms
9844 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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	REF
Table position	Н
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 ! A >> P	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

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

Mode	Off	

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	Off
preparation	
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 - AutoAlian

Joonnou'y /tato/tingii	
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
Н	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	Н	
Table position	0 mm	
Inline Composing	Off	

System - Miscellaneous

Positioning mode	REF
Table position	Н
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

ocquerios operiai	
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

Mode Off	
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\\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_18_ME_ramp_samp ling_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

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

Contrast - Dynamic

1
Long term
Magnitude
50
0.0 s

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

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

Resolution - iPAT

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

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
Α	11.3 mm
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	FIX
Table position	Н
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	

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

Mode	Off	

\\USER\Renzo\[XT-ID:93-M-0170]Renzo_fast\20240911_MAU_fast_scanning\WB_18_ME_ramp_samp ling_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

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	

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 %

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

Resolution - Filter Image

Image Filter	Off
Image Filter 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

01.1	4
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
Н	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	Н
Table position	0 mm
Inline Composing	Off

System - Miscellaneous

Positioning mode	FIX
Table position	Н
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	

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

Mode Off	
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