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FMRIF
[XT-ID:93-M-0170]|Renzo
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\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\scout_sag

TA: 0:14 PM: REF Voxel size: 1.6×1.6×1.6 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	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	128
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	AC

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

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

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
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	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	A >> P
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	6.3 s

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	16.0 deg
Measurements	1
Contrasts	1

Inline - MapIt

TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\scout_trans

TA: 0:20 PM: REF Voxel size: 1.6×1.6×1.6 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	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Phase oversampling	0 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
TE	1.53 ms
Averages	1
Concatenations	1
Filter	B1 filter
Coil elements	AC

Contrast - Common

TR	3.25 ms
TE	1.53 ms
Flip angle	16.0 deg

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Resolution - Common

FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
Base resolution	160
Phase resolution	100 %
Slice resolution	69 %
Phase partial Fourier	6/8
Slice partial Fourier	6/8
Trajectory	Cartesian

Resolution - iPAT

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

Resolution - iPAT

Reference scan mode	Integrated

Resolution - Filter Image

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

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	22.2 %
Slices per slab	144
FoV read	260 mm
FoV phase	100.0 %
Slice thickness	1.6 mm
TR	3.25 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A30.0 H0.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Initial Position	L0.0 A30.0 H0.0
L	0.0 mm
A	30.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Miscellaneous

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	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Flip angle	16.0 deg
Measurements	1
Time to center	8.3 s

Inline - Inline

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	16.0 deg
Measurements	1
Contrasts	1

Inline - MapIt

TR	3.25 ms
TE	1.53 ms

Sequence - Part 1

Introduction	On
Dimension	3D
Asymmetric echo	Weak
Contrasts	1
Multi-slice mode	Sequential
Bandwidth	540 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Normal
Excitation	Non-sel.
RF spoiling	On

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\test

TA: 1:17 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	7898 ms
TE 1	16.00 ms
Averages	2
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	7898 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	4
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off

Resolution - Common

Interpolation	Off

Resolution - iPAT

PAT mode	CAIPIRINHA
Acc. factor PE	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	7898 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table position	H

Geometry - Tim Planning Suite

Table position	0 mm
Inline Composing	Off

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run1_RO

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run1_OR

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run3_OR

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\VASO_RO

TA: 4:32 PM: FIX Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4297 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4297 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1217.2 ms
Flip angle	45 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	60
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
Pause after meas. 50	0.0 s
Pause after meas. 51	0.0 s
Pause after meas. 52	0.0 s
Pause after meas. 53	0.0 s
Pause after meas. 54	0.0 s
Pause after meas. 55	0.0 s
Pause after meas. 56	0.0 s
Pause after meas. 57	0.0 s
Pause after meas. 58	0.0 s
Pause after meas. 59	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4297 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
Ernst T1	1200 ms
PATRef prep. shots	10

Sequence - Special

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	Off
SVDPC	On
Sym VASO	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
HSN RF power scale	3.00
Inversion Delay	0 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run4_OR

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run5_RO

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	Off
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
G-factor map	Off
GRAPPA Regularization	100 10^-6
Var. FA /MAGEC	1
MAGEC FA ratio	50

Sequence - Assistant

Mode	Off

\\USER\FMRIF\[XT-ID:93-M-0170]|Renzo\20250310_HEI\Run6_OR

TA: 11:47 PM: REF Voxel size: 0.4×0.4×0.4 mmPAT: 3 Rel. SNR: 1.00 : nih5m

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Averages	1
Filter	None
Coil elements	AC

Contrast - Common

TR 1	50.3 ms
TR 2	4276 ms
TE 1	16.00 ms
Multi-echo spacing	37.8 ms
Magn. preparation	None
Flip angle	30 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	1

Contrast - Dynamic

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	162
Pause after meas.	0.0 s

Resolution - Common

FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
Base resolution	340
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	1
Ref. lines PE	75
Acc. factor 3D	3
Ref. lines 3D	12
CAIPI 3D Shift	2
Reference Scan Mode	EPI/separate
CAIPI Mode (tooltip)	w/o z-blips
Total PAT factor	3

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	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
Slab Scale	-10 %
Slices per slab	18
FoV read	140 mm
FoV phase	100.0 %
Slice thickness	0.39 mm
TR 1	50.3 ms
TR 2	4276 ms

Geometry - AutoAlign

Slab group	1
Position	R7.6 P55.7 H6.7 mm
Orientation	C > T-22.4
Phase enc. dir.	F >> H
AutoAlign	---
Initial Position	R7.6 P55.7 H6.7
R	7.6 mm
P	55.7 mm
H	6.7 mm
Initial Rotation	90.00 deg
Initial Orientation	C > T
C > T	-22.4
> S	0.0

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	Fat sat.

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R1.1 P50.4 H4.5 mm
! Orientation	C > T-20.7
! Rotation	0.00 deg
! R >> L	117 mm
! F >> H	119 mm
! A >> P	39 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	Volume-selective
Excitation	Slab-sel.
pTx Volume	1
Vol. Property	B1 Shim Vol.
Position	R1.1 P59.3 H6.9 mm
Orientation	C > T-21.4
Rotation	0.00 deg
R >> L	118 mm
F >> H	119 mm
A >> P	30 mm
Vol. Visibility	On

System - Tx/Rx

Frequency 1H	297.178818 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Contrasts	1
Echo spacing	1.65 ms
Bandwidth	700 Hz/Px

Sequence - Part 2

EPI factor	22
Segmentation	12
RF pulse type	Normal
Gradient mode	Fast

Sequence - Part 2

Excitation	Slab-sel.
RF spoiling	On
Turbo factor	72

Sequence - Special

PATRef FA	3 deg
RF duration	2500 us
RF BWT product	12
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	Off
Dual-pol. EPI	Off
Invert RO	On
Invert 3D	On
Disable PF reco	Off
Disable PF reco	Off
Save sampling	Off
PE VComp	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
FIDNavs	-none-
EPI rise time factor	1.07
Mosaic DICOMs	On
Modify Ice Config	On
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Sequence - Assistant

Mode	Off