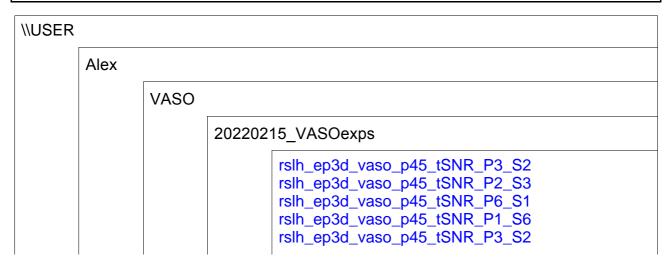| Table of contents |
|---|

\\USER\Alex\VASO\20220215_VASOexps\rslh_ep3d_vaso_p45_tSNR_P3_S2

TA: 5:03 PM: REF Voxel size: 0.5×0.5×0.4 mmPAT: 3 Rel. SNR: 1.00 : d238999c

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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	5912 ms
TE 1	19.00 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	54.4 ms
TR 2	5912 ms
TE 1	19.00 ms
Multi-echo spacing	50.67 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1149.6 ms
TI 2	2128.8 ms
Flip angle	15 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	2

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

Contrast - Dynamic

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	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	374
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	75
Acc. factor 3D	1
Ref. lines 3D	16
CAIPI 3D Shift	0
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	5912 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P40.5 H20.0
L	0.0 mm
P	40.5 mm
H	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-44.3
> 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

System - Miscellaneous

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	L0.0 P39.5 H14.9 mm
! Orientation	T > C-43.8
! Rotation	0.00 deg
! A >> P	167 mm
! R >> L	350 mm
! F >> H	33 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.192340 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.600
Reset	Off
! Ref. amplitude 1H	280.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.06 ms
Bandwidth	1028 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On

Sequence - Special

Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\USER\Alex\VASO\20220215_VASOexps\rslh_ep3d_vaso_p45_tSNR_P2_S3
TA: 7:31 PM: REF Voxel size: 0.5×0.5×0.4 mmPAT: 2 Rel. SNR: 1.00 : d238999c

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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.5 ms
TR 2	8879 ms
TE 1	19.10 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	54.5 ms
TR 2	8879 ms
TE 1	19.10 ms
Multi-echo spacing	50.67 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1150.5 ms
TI 2	2131.5 ms
Flip angle	15 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	3

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

Contrast - Dynamic

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	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	374
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	75
Acc. factor 3D	1
Ref. lines 3D	16
CAIPI 3D Shift	0
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.5 ms
TR 2	8879 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P40.5 H20.0
L	0.0 mm
P	40.5 mm
H	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-44.3
> 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

System - Miscellaneous

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	L0.0 P39.5 H14.9 mm
! Orientation	T > C-43.8
! Rotation	0.00 deg
! A >> P	167 mm
! R >> L	350 mm
! F >> H	33 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.192340 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.600
Reset	Off
! Ref. amplitude 1H	280.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.06 ms
Bandwidth	1028 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	3
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On

Sequence - Special

Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\USER\Alex\VASO\20220215_VASOexps\rslh_ep3d_vaso_p45_tSNR_P6_S1
TA: 2:35 PM: REF Voxel size: 0.5×0.5×0.4 mmPAT: 6 Rel. SNR: 1.00 : d238999c

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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	2956 ms
TE 1	19.00 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	54.4 ms
TR 2	2956 ms
TE 1	19.00 ms
Multi-echo spacing	50.67 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1149.6 ms
TI 2	2128.8 ms
Flip angle	15 deg
Fat suppr.	Fat sat.
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

Contrast - Dynamic

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	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	374
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	6
Ref. lines PE	75
Acc. factor 3D	1
Ref. lines 3D	16
CAIPI 3D Shift	0
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	2956 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P40.5 H20.0
L	0.0 mm
P	40.5 mm
H	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-44.3
> 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

System - Miscellaneous

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	L0.0 P39.5 H14.9 mm
! Orientation	T > C-43.8
! Rotation	0.00 deg
! A >> P	167 mm
! R >> L	350 mm
! F >> H	33 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.192340 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.600
Reset	Off
! Ref. amplitude 1H	280.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.06 ms
Bandwidth	1028 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	1
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On

Sequence - Special

Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\USER\Alex\VASO\20220215_VASOexps\rslh_ep3d_vaso_p45_tSNR_P1_S6
TA: 15:49 PM: FIX Voxel size: 0.5×0.5×0.4 mmPAT: Off Rel. SNR: 1.00 : d238999c

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	L0.0 P50.8 H17.0 mm
Orientation	C > T-36.1
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	60.0 ms
TR 2	18947 ms
TE 1	19.10 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	60.0 ms
TR 2	18947 ms
TE 1	19.10 ms
Multi-echo spacing	50.67 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1200 ms
TI 2	2280 ms
Flip angle	15 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	6

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

Contrast - Dynamic

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	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	374
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	6/8
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	Off
Prescan Normalize	Off

Resolution - Filter Image

Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Position	L0.0 P50.8 H17.0 mm
Orientation	C > T-36.1
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	60.0 ms
TR 2	18947 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P50.8 H17.0 mm
Orientation	C > T-36.1
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P50.8 H17.0
L	0.0 mm
P	50.8 mm
H	17.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-36.1
> 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
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	L0.0 P42.2 H19.6 mm
! Orientation	C > T-36.7
! Rotation	-90.00 deg
! F >> H	209 mm
! R >> L	350 mm
! A >> P	40 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.192340 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.150
Reset	Off
! Ref. amplitude 1H	250.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	1.06 ms
Bandwidth	1028 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	6
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On
Ramp Sampling	On
NORDIC	Off
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	Off

Sequence - Special

HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off

\\USER\Alex\VASO\20220215_VASOexps\rslh_ep3d_vaso_p45_tSNR_P3_S2
TA: 5:03 PM: REF Voxel size: 0.5×0.5×0.4 mmPAT: 3 Rel. SNR: 1.00 : d238999c

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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	5912 ms
TE 1	14.20 ms
Averages	1
Multi-echo Shots	1
Filter	Distortion Corr.(3D)
Coil elements	R96

Contrast - Common

TR 1	54.4 ms
TR 2	5912 ms
TE 1	14.20 ms
Multi-echo spacing	36.57 ms
Magn. preparation	Non-sel. HSN IR
TI 1	1149.6 ms
TI 2	2128.8 ms
Flip angle	15 deg
Fat suppr.	Fat sat.
Magn. Prep. Shots	2

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

Contrast - Dynamic

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	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
Base resolution	374
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	75
Acc. factor 3D	1
Ref. lines 3D	16
CAIPI 3D Shift	0
Reference Scan Mode	GRE/separate
CAIPIRINHA mode	Free

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	On
Mode	3D
Unfiltered images	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	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
Slab Scale	-10 %
Slices per slab	18
FoV read	170 mm
FoV phase	100.0 %
Slice thickness	0.45 mm
TR 1	54.4 ms
TR 2	5912 ms
Multi-slice mode	Interleaved
Series	Ascending
Multi-echo Shots	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 P40.5 H20.0 mm
Orientation	C > T-44.3
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 P40.5 H20.0
L	0.0 mm
P	40.5 mm
H	20.0 mm
Initial Rotation	0.00 deg
Initial Orientation	C > T
C > T	-44.3
> 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

System - Miscellaneous

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	L0.0 P39.5 H14.9 mm
! Orientation	T > C-43.8
! Rotation	0.00 deg
! A >> P	167 mm
! R >> L	350 mm
! F >> H	33 mm
Reset	Off

System - pTx Volumes

B1 Shim mode	TrueForm
Excitation	Slab-sel.

System - Tx/Rx

Frequency 1H	297.192340 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	0.600
Reset	Off
! Ref. amplitude 1H	280.000 V

Sequence - Part 1

Introduction	On
Dimension	3D
Reordering	Linear
Asymmetric echo	Off
Contrasts	1
Multi-slice mode	Interleaved
Echo spacing	0.76 ms
Bandwidth	1486 Hz/Px

Sequence - Part 2

EPI factor	47
Segmentation	2
RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Turbo factor	18

Sequence - Special

PATRef FA	3 deg
RF duration	2000 us
RF BWT product	15
Ernst T1	1200 ms
PATRef prep. shots	10
Volume dummy shots	0
Dummy Measurements	0
Invert PE	Off
Min. TE if PF	On
Echo Time Shift	On

Sequence - Special

Ramp Sampling	On
NORDIC	On
Water Exc.	-none-
External PC	per Series
Saturation RF	per Shot
EPI rise time factor	1.00
Mosaic DICOMs	On
Modify Ice Config	On
GRAPPA Regularization	50000 10^-6
HSN RF power scale	2.50
Inversion Delay	650 ms
Relaxation Delay	0 ms
Var. FA /MAGEC	0

Sequence - Assistant

Mode	Off