

Table of contents

\\User

Head

Epilepsy

sola_xa61_liver_primovist_eovist

localizer		*
t1_starvibe_dixon_tra		*
ep2d_diff_3d_diag_we_p3	drb	*
t1_vibe-grasp_fs_tra		*
t1_vibe_dixon_cor+C		*
t1_vibe-twist_dixon_tra_pre		*
Care_Bolus_cor		*
t1_vibe-twist_dixon_tra_3phase_dynamic+C		*
t1_vibe_dixon_tra_p4_bh_PV+C		*
t1_vibe_dixon_cor+C		*
t1_vibe_dixon_tra_p4_bh_delayed		*
t2_fblade_fs_tra_p3_trig_300		*
t2_tse_fs_tra_p2_mbh		*
t2_tse_dixon_cor_p2_trig		*
t1_starvibe_dixon_tra	Delayed	*

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\localizer *

TA: 15 sec Coil Selection: Auto Voxel Size: 0.8×0.8×10.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	On
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	400 mm
FOV Phase	100.0 %
Slice Thickness	10.0 mm
TR	15.0 ms
TE	5.00 ms
Averages	1
Concatenations	7
AutoAlign	---

Contrast - Common

TR	15.0 ms
TE	5.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle	40 deg

Contrast - Common

Fat-Water Contrast	Standard
Dark Blood	Off
Contrasts	1
SWI	Off
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	400 mm
FOV Phase	100.0 %
Slice Thickness	10.0 mm
Base Resolution	256
Phase Resolution	50 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	None
Phase Partial Fourier	Off
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	On
Distortion Correction	2D
Normalize	Off
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	3
Slices	3
Distance Factor	50 %
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P

Geometry - Common

Phase Oversampling	0 %
FOV Read	400 mm
FOV Phase	100.0 %
Slice Thickness	10.0 mm
TR	15.0 ms
Multi-Slice Mode	Sequential
Series	Interleaved
Concatenations	7

Geometry - AutoAlign

Slice Group	1
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	2
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slice Group	3
Position	L12.8 P30.2 H24.5 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L12.8 P30.2 H24.5
L	12.8 mm
P	30.2 mm
H	24.5 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Saturation Mode	Standard
Special Saturation	None

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	21 mm
Table Position	H
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up

System - Adjustments

CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

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 - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	15.0 ms
Segments	1
Concatenations	7

Physio - Cardiac

Tagging	None
Fat-Water Contrast	Standard
Magn. Preparation	None
Dark Blood	Off
FOV Read	400 mm
FOV Phase	100.0 %
Phase Resolution	50 %

Physio - PACE

Resp. Control	Off
Concatenations	7

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off

Inline - MIP

MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - Maplt

Maplt	None
Flip Angle	40 deg
Measurements	1
Contrasts	1
TE	5.00 ms
TR	15.0 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Fast
Gradient Mode	Normal
Flow Compensation	None
Bandwidth	180 Hz/Px
Asymmetric Echo	Off
Segments	1

Sequence - Part 2

Introduction	On
RF Spoiling	On
Acoustic noise reduction	Off

Sequence - Assistant

SAR Assistant	Off
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\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovistlt1_starvibe_dixon_tra *

TA: 2:56 min Coil Selection: Auto Voxel Size: 0.9×0.9×2.5 mm³ Acc:: None Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	On
Graphic segment	3rd Segment
Inline Movie	Off

Resolution - Common

FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	320
Slice Resolution	50 %
Trajectory	Radial
Radial Views	900
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	6.10 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	6.10 ms
Series	Ascending
Concatenations	1

Contrast - Common

TR	6.10 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Burn Time to Center	Off

Geometry - AutoAlign

H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Performance
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	280 mm
A >> P	280 mm
F >> H	140 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
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Inline - Liver

Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.10 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	780 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovistlep2d_diff_3d_diag_we_p3 drb *

TA: 2:58 min Coil Selection: Auto Voxel Size: 0.9×0.9×3.5 mm³ Acc:: 3 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	GRE/Separate
Acceleration Factor PE	3
Reference Lines PE	42
Deep Resolve	On
Phase Partial Fourier	6/8

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off

Routine

Slice Group	1
Slices	32
Distance Factor	10 %
Position	L8.9 P44.6 F120.4 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	290 mm
FOV Phase	70.4 %
Slice Thickness	3.5 mm
TR	4700.0 ms
TE	57.00 ms
Concatenations	1
AutoAlign	---

Geometry - Common

Slice Group	1
Slices	32
Distance Factor	10 %
Position	L8.9 P44.6 F120.4 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	290 mm
FOV Phase	70.4 %
Slice Thickness	3.5 mm
TR	4700.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	1

Contrast - Common

TR	4700.0 ms
TE	57.00 ms
MTC	Off
Magn. Preparation	None
Fat-Water Contrast	Water Excitation
Reconstruction	Magnitude

Geometry - AutoAlign

Slice Group	1
Position	L8.9 P44.6 F120.4 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	L8.9 P44.6 F120.4
L	8.9 mm
P	44.6 mm
F	120.4 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Contrast - Dynamic

Dynamic Mode	Standard
Delay in TR	0.00 ms

Resolution - Common

FOV Read	290 mm
FOV Phase	70.4 %
Slice Thickness	3.5 mm
Base Resolution	162
Phase Resolution	70 %
Interpolation	On

Geometry - Navigator**Geometry - Saturation**

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
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Geometry - Tim Planning Suite

Table Position	120 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	L8.9 P44.6 F120.4 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	205 mm
R >> L	290 mm
F >> H	123 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	4700.0 ms
Concatenations	1

Physio - PACE

Resp. Control	Off
Concatenations	1

Diff

Diffusion Mode	3D Diagonal
Diff. Directions	1
Diffusion Scheme	Monopolar
Diff. Weightings	3
b-value 1	50 s/mm ²

Diff

b-value 2	400 s/mm ²
b-value 3	800 s/mm ²
Averages 1	3
Averages 2	16
Averages 3	16
Complex Averaging	Off
Dynamic Field Correction	Off
Invert Gray Scale	Off
Diff. Weighted Images	On
Trace Weighted Images	Off
Tensor	Off
FA Maps	Off
ADC Maps	On
Exponential ADC Maps	Off
b-value >=	0 s/mm ²
ADC Noise Threshold	40
Noise Masking	Off
Calculated Image	Off

Sequence - Part 1

Sequence Name	epse
Excitation	Standard
RF Pulse Type	Low SAR
Gradient Mode	Fast
Bandwidth	1816 Hz/Px
Echo Spacing	0.81 ms
Free Echo Spacing	Off
Optimization	None
EPI Factor	80

Sequence - Part 2

Introduction	On
Phase Correction	Internal

Sequence - Assistant

SAR Assistant	Off
Optimization	None

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe-grasp_fs_tra *

TA: 5:10 min Coil Selection: Auto Voxel Size: 0.9×0.9×3.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	On
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Contrast - Dynamic

Duration 4	45 s
Temporal Resolution 1	14.1 s
Temporal Resolution 2	8.7 s
Temporal Resolution 3	14.1 s
Temporal Resolution 4	14.1 s
Reconstructed Volumes 1	1
Reconstructed Volumes 2	3
Reconstructed Volumes 3	1
Reconstructed Volumes 4	1
Workflow	Liver
Liver Gating	On
Preview	Off
Reordering	Linear
Auto Bolus Detection	On
Delay After Bolus	5.00

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	0 %
Slice Oversampling	22.2 %
FOV Read	300 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4.19 ms
TE	2.35 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Common

FOV Read	300 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
Base Resolution	320
Slice Resolution	50 %
Trajectory	Radial
Radial Views	1954
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Slice Partial Fourier	5/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	On

Contrast - Common

TR	4.19 ms
TE	2.35 ms
Flip Angle	12 deg
Fat-Water Contrast	Fast Fat Saturation
Lines per Shot	31
Contrasts	1
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	GRASP
Reconstruction	Complete and Reduced Series
Phases	4
Duration 1	20 s
Duration 2	30 s
Duration 3	180 s

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	0 %

Geometry - Common

Slice Oversampling	22.2 %
FOV Read	300 mm
FOV Phase	100.0 %
Slice Thickness	3.0 mm
TR	4.19 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Sum of Squares
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Rotation	0.00 deg

System - Adjust Volume

A >> P	300 mm
R >> L	300 mm
F >> H	216 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On

Inline - Subtraction

Subtract	Off
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	12 deg
Contrasts	1
TE	2.35 ms
TR	4.19 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Gradient Mode	Fast
Reordering	Linear
Bandwidth	580 Hz/Px
Asymmetric Echo	Off
Optimization	None

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	10 deg
Optimization	None

\\User\Head\Epilepsy\Isola_xa61_liver_primovist_eovist\t1_vibe_dixon_cor+C *

TA: 17 sec Coil Selection: Auto Voxel Size: 1.0x1.0x2.0 mm³ Acc:: 3 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	30 %
Slice Oversampling	25.0 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
TR	6.74 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6.74 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Each Measurement
3D Reordering	Standard
Time to Center	6.2 s

Contrast - Dynamic

Burn Time to Center	Off
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Resolution - Common

FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
Base Resolution	288
Phase Resolution	90 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Total Factor	3
Reference Scans	GRE/Separate
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Reference Lines 3D	25
Reordering Shift 3D	0
Phase Partial Fourier	7/8
Slice Partial Fourier	5/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	30 %
Slice Oversampling	25.0 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
TR	6.74 ms

Geometry - Common

Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R14.5 P68.6 F33.7
R	14.5 mm
P	68.6 mm
F	33.7 mm
Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	34 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	242 mm
F >> H	300 mm
A >> P	128 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Breath-hold
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.74 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel. PE
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	580 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	On
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe-twist_dixon_tra_pre *

TA: 12 sec Coil Selection: Auto Voxel Size: 1.0×1.0×3.0 mm³ Acc:: 4 Rel. SNR: 1.00

Properties

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Contrast - Dynamic

Measurements	1
Multiple Series	Each Measurement
3D Reordering	Standard
Time to Center	2.9 s
Burn Time to Center	Off

Resolution - Common

FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	70 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	0 %
Slice Oversampling	22.2 %
FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
TR	6.29 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Total Factor	4
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	2
Reference Lines 3D	24
Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Contrast - Common

TR	6.29 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	TWIST
Central Region A	20 %
Sampling Density B	25 %
Reconstruction Scheme	Forward Share
Temporal Resolution	3.82 s
Temporal Interpolation	1

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	0 %
Slice Oversampling	22.2 %

Geometry - Common

FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
TR	6.29 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	225 mm

System - Adjust Volume

R >> L	300 mm
F >> H	216 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms

Inline - MapIt

TE 2	4.77 ms
TR	6.29 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	790 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\Care_Bolus_cor *

TA: 1:02 min Coil Selection: Auto Voxel Size: 1.3×1.3×30.0 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	On
Start measurements	Single Measurement
Prio Recon	On
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Contrast - Dynamic

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
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

Routine

Slice Group	1
Slices	1
Distance Factor	20 %
Position	R6.4 P77.4 F4.6 mm
Orientation	C > S0.3
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FOV Read	320 mm
FOV Phase	81.3 %
Slice Thickness	30.0 mm
TR	35.38 ms
TE	1.37 ms
Averages	1
AutoAlign	---

Contrast - Common

TR	35.38 ms
TE	1.37 ms
Magn. Preparation	None
Flip Angle	24 deg
Fat-Water Contrast	Standard
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
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

Contrast - Dynamic

Multiple Series	Off
Reordering	Linear

Resolution - Common

FOV Read	320 mm
FOV Phase	81.3 %
Slice Thickness	30.0 mm
Base Resolution	256
Phase Resolution	96 %
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Phase Partial Fourier	Off
Asymmetric Echo	Allowed

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	1
Distance Factor	20 %
Position	R6.4 P77.4 F4.6 mm
Orientation	C > S0.3
Phase Encoding Dir.	R >> L
Phase Oversampling	0 %
FOV Read	320 mm
FOV Phase	81.3 %
Slice Thickness	30.0 mm
TR	35.38 ms
Multi-Slice Mode	Sequential
Series	Ascending

Geometry - AutoAlign

Slice Group	1
Position	R6.4 P77.4 F4.6 mm
Orientation	C > S0.3
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R6.4 P77.4 H0.4
R	6.4 mm
P	77.4 mm
F	0.4 mm
Initial Orientation	C > S
C > S	0.30
> T	0.00
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	Parallel A/P
Gap	5.00 mm
Thickness	50.00 mm

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Sum of Squares
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Tune up
CoilShim	Off
Adjustment Tolerance	Maximum
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

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 - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	35.38 ms
Segments	7

Inline - Subtraction

Subtract	Off
Measurements	60
StdDev	Off

Inline - Subtraction

Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	fl
Dimension	2D
Excitation	Slice-sel.
RF Pulse Type	Normal
Gradient Mode	Fast
Reordering	Linear
Bandwidth	400 Hz/Px
Asymmetric Echo	Allowed
Optimization	Min. TE TR
Segments	7

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Phase Enc. Rewinder	On
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	18 deg
Optimization	Min. TE TR

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe-twist_dixon_tra_3phase_dynamic+C *

TA: 19 sec Coil Selection: Auto Voxel Size: 1.0×1.0×3.0 mm³ Acc:: 4 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	Off
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	0 %
Slice Oversampling	22.2 %
FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
TR	6.29 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6.29 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	TWIST
Central Region A	20 %
Sampling Density B	25 %
Reconstruction Scheme	Forward Share
Temporal Resolution	3.82 s
Temporal Interpolation	1

Contrast - Dynamic

Measurements	3
Pause after Meas. 1	0.0 s
Pause after Meas. 2	0.0 s
Multiple Series	Each Measurement
3D Reordering	Standard
Time to Center	8.7 s
Burn Time to Center	Off

Resolution - Common

FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	70 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Total Factor	4
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	2
Reference Lines 3D	24
Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72

Geometry - Common

Phase Oversampling	0 %
Slice Oversampling	22.2 %
FOV Read	300 mm
FOV Phase	75.0 %
Slice Thickness	3.0 mm
TR	6.29 ms
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal

System - Adjust Volume

Rotation	0.00 deg
A >> P	225 mm
R >> L	300 mm
F >> H	216 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	3
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	3
Pause after Meas. 1	0.0 s
Pause after Meas. 2	0.0 s

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
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Inline - MapIt

Flip Angle	10 deg
Measurements	3
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.29 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fldyn
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	790 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe_dixon_tra_p4_bh_PV+C *

TA: 15 sec Coil Selection: Auto Voxel Size: 1.0×1.0×3.0 mm³ Acc:: 4 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	30 %
Slice Oversampling	33.3 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
TR	6.63 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6.63 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Time to Center	7.0 s

Contrast - Dynamic

Burn Time to Center	Off
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Resolution - Common

FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	70 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Body Tra
Total Factor	4
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	2
Reference Lines 3D	24
Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Asymmetric Echo	Weak
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	30 %
Slice Oversampling	33.3 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
TR	6.63 ms

Geometry - Common

Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	242 mm
R >> L	300 mm
F >> H	216 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Breath-hold
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.63 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	510 Hz/Px
Asymmetric Echo	Weak
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe_dixon_cor+C *

TA: 17 sec Coil Selection: Auto Voxel Size: 1.0x1.0x2.0 mm³ Acc:: 3 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	30 %
Slice Oversampling	25.0 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
TR	6.74 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6.74 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Each Measurement
3D Reordering	Standard
Time to Center	6.2 s

Contrast - Dynamic

Burn Time to Center	Off
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Resolution - Common

FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
Base Resolution	288
Phase Resolution	90 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Free
Total Factor	3
Reference Scans	GRE/Separate
Acceleration Factor PE	3
Reference Lines PE	24
Acceleration Factor 3D	1
Reference Lines 3D	25
Reordering Shift 3D	0
Phase Partial Fourier	7/8
Slice Partial Fourier	5/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Slices per Slab	64
Phase Oversampling	30 %
Slice Oversampling	25.0 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	2.0 mm
TR	6.74 ms

Geometry - Common

Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R14.5 P68.6 F33.7
R	14.5 mm
P	68.6 mm
F	33.7 mm
Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	34 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	242 mm
F >> H	300 mm
A >> P	128 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Breath-hold
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.74 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel. PE
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	580 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	On
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t1_vibe_dixon_tra_p4_bh_delayed *

TA: 15 sec Coil Selection: Auto Voxel Size: 1.0×1.0×3.0 mm³ Acc:: 4 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	30 %
Slice Oversampling	33.3 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
TR	6.63 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Contrast - Common

TR	6.63 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Time to Center	7.0 s

Contrast - Dynamic

Burn Time to Center	Off
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Resolution - Common

FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
Base Resolution	288
Phase Resolution	70 %
Slice Resolution	50 %
Trajectory	Cartesian
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	CAIPIRINHA
CAIPIRINHA Mode	Body Tra
Total Factor	4
Reference Scans	GRE/Separate
Acceleration Factor PE	2
Reference Lines PE	24
Acceleration Factor 3D	2
Reference Lines 3D	24
Reordering Shift 3D	1
Phase Partial Fourier	Off
Slice Partial Fourier	6/8
Asymmetric Echo	Weak
Elliptical Scanning	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Slices per Slab	72
Phase Oversampling	30 %
Slice Oversampling	33.3 %
FOV Read	300 mm
FOV Phase	80.6 %
Slice Thickness	3.0 mm
TR	6.63 ms

Geometry - Common

Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	242 mm
R >> L	300 mm
F >> H	216 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Breath-hold
Concatenations	1

Inline - Liver

Liver Registration	Off
Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.63 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	510 Hz/Px
Asymmetric Echo	Weak
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t2_fblade_fs_tra_p3_trig_300 *

TA: 6:30 min Coil Selection: Auto Voxel Size: 0.9×0.9×4.0 mm³ Acc:: 2 Rel. SNR: 1.00

Properties

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
Base Resolution	320
Trajectory	BLADE
BLADE Coverage	100.0 %

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	2
Reference Lines PE	8
Ramp Sampling	Off

Routine

Slice Group	1
Slices	35
Distance Factor	5 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	50.0 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1900.0 ms
TE	93.00 ms
Concatenations	8
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	35
Distance Factor	5 %
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
Phase Oversampling	50.0 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	4.0 mm
TR	1900.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	8

Contrast - Common

TR	1900.0 ms
TE	93.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	134 deg
Flip Angle 2	90 deg
Fat-Water Contrast	SPAIR
Fat Saturation	Weak
Dark Blood	Off
Wrap-up Magn.	Restore

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement
Reordering	Linear

Geometry - AutoAlign

Slice Group	1
Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R11.8 P77.1 F5.3
R	11.8 mm
P	77.1 mm
F	5.3 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Geometry - Navigator

Navigator	1
Position	R66.0 P54.2 H47.1 mm
Orientation	Coronal
Rotation	0.00 deg
FOV Phase	32 mm
FOV Read	96 mm
Thickness	10 mm

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	5 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R11.8 P77.1 F5.3 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	280 mm
A >> P	280 mm
F >> H	147 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
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Physio - Signal

TR	1900.0 ms
Concatenations	8

Physio - Cardiac

Fat-Water Contrast	SPAIR
Magn. Preparation	None
Dark Blood	Off
FOV Read	280 mm
FOV Phase	100.0 %
BLADE Coverage	100.0 %
Trajectory	BLADE
Motion Correction	Off

Physio - PACE

Resp. Control	Trigger
Scout Mode	Off
Scout TR	285 ms
Accept Window \pm	2.0 mm
Position Accept Window	Automatic
Select Acquisition Window	Automatic
Acquisition Window	35 %
Scout Type	Liver Dome Scout
Trigger Pulse	1
Concatenations	8
Store Profile Images	On

Diff

Diffusion Mode	None
Averages	1
Invert Gray Scale	Off
Diff. Weighted Images	Off
Trace Weighted Images	Off
Tensor	Off
FA Maps	Off
ADC Maps	Off
Exponential ADC Maps	Off
Calculated Image	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off

Inline - MIP

MPR Tra	Off
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Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	ftseBNR
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None
Reordering	Linear
Bandwidth	781 Hz/Px
Echo Spacing	3.58 ms
Free Echo Spacing	Off
Turbo Factor	51
EPI Factor	1

Sequence - Part 2

Introduction	On
Fast Mode	On
Acoustic noise reduction	Off
Motion Correction	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	100 deg
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovistlt2_tse_fs_tra_p2_mbh *

TA: 1:03 min Coil Selection: Auto Voxel Size: 0.4x0.4x4.0 mm³ Acc:: 3 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	On
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Resolution - Common

FOV Read	280 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
Base Resolution	320
Phase Resolution	70 %
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Integrated
Acceleration Factor PE	3
Reference Lines PE	29
Deep Resolve	On
Phase Partial Fourier	Off

Routine

Slice Group	1
Slices	32
Distance Factor	10 %
Position	R19.3 A38.8 H53.6 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	280 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
TR	2800.0 ms
TE	88.00 ms
Averages	1
Concatenations	4
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	32
Distance Factor	10 %
Position	R19.3 A38.8 H53.6 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
Phase Oversampling	0 %
FOV Read	280 mm
FOV Phase	81.3 %
Slice Thickness	4.0 mm
TR	2800.0 ms
Multi-Slice Mode	Interleaved
Series	Interl. in B.-h.
Concatenations	4

Contrast - Common

TR	2800.0 ms
TE	88.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	160 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Fat Saturation
Fat Saturation	Weak
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	Restore
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Geometry - AutoAlign

Slice Group	1
Position	R19.3 A38.8 H53.6 mm
Orientation	Transversal
Phase Encoding Dir.	A >> P
AutoAlign	---
Initial Position	R19.3 A38.8 H53.6
R	19.3 mm
A	38.8 mm
H	53.6 mm
Initial Orientation	Transversal
Initial Rotation	0.00 deg

Geometry - Navigator**Geometry - Saturation**

Special Saturation	Parallel F/H
Gap	10.00 mm
Thickness	60.00 mm

Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	54 mm
Table Position	H
Inline Composing	On
Normalize	Off
Save non-normalized	On
Composing Function	Diffusion
Series Description	
Composing Group	1
Last Step	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	SliceAdjust
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R19.3 A38.8 H53.6 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	228 mm
R >> L	280 mm
F >> H	141 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - Signal

1st Signal/Mode	None
TR	2800.0 ms
Concatenations	4

Physio - Cardiac

Fat-Water Contrast	Fat Saturation
Magn. Preparation	None
Dark Blood	Off
FOV Read	280 mm
FOV Phase	81.3 %
Phase Resolution	70 %
Motion Correction	None

Physio - PACE

Resp. Control	Breath-hold
Concatenations	4

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Motion Correction	None
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	On
Normalize	Off
Save non-normalized	On
Composing Function	Diffusion
Composing Group	1
Last Step	Off
Series Description	

Sequence - Part 1

Sequence Name	qtseR
Dimension	2D
RF Pulse Type	Normal
Gradient Mode	Fast
Flow Compensation	None
Bandwidth	260 Hz/Px
Echo Spacing	8.0 ms
Free Echo Spacing	On
Define	Turbo Factor

Sequence - Part 1

Turbo Factor	27
Echo Trains per Slice	3

Sequence - Part 2

Introduction	Off
Phase Correction	Automatic
Compensate T2 Decay	Off
Fast Mode	Off
WARP	Off
Red. EC Sensitivity	Off
Acoustic noise reduction	On
Reduce Motion Sens.	Off
Motion Correction	None

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	150 deg
Allowed Delay	30 s

\\User\Head\Epilepsy\sola_xa61_liver_primovist_eovist\t2_tse_dixon_cor_p2_trig *

TA: 5:25 min Coil Selection: Auto Voxel Size: 0.6x0.6x4.0 mm³ Acc:: 2 Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	On
Auto Close Inline Display	On
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	On
Load Images to Graphic Segments	On
Graphic segment	Default
Inline Movie	Off

Routine

Slice Group	1
Slices	20
Distance Factor	10 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FOV Read	320 mm
FOV Phase	87.5 %
Slice Thickness	4.0 mm
TR	2000.0 ms
TE	99.00 ms
Averages	2
Concatenations	5
AutoAlign	---

Contrast - Common

TR	2000.0 ms
TE	99.00 ms
TD	0.00 ms
MTC	Off
Magn. Preparation	None
Flip Angle 1	159 deg
Flip Angle 2	90 deg
Fat-Water Contrast	Fast Dixon
Fat Saturation	Strong
Dark Blood	Off
Contrasts	1
Wrap-up Magn.	None
Reconstruction	Magnitude

Contrast - Dynamic

Dynamic Mode	Standard
Measurements	1
Multiple Series	Each Measurement

Resolution - Common

FOV Read	320 mm
FOV Phase	87.5 %
Slice Thickness	4.0 mm
Base Resolution	256
Phase Resolution	80 %
Trajectory	Cartesian
Interpolation	On

Resolution - Acceleration

Acceleration Mode	GRAPPA
Reference Scans	Self-calibration
Acceleration Factor PE	2
Reference Lines PE	32
Deep Resolve	Off
Phase Partial Fourier	Allowed
Asymmetric Echo	Off

Resolution - Filter

Raw Filter	Off
Elliptical Filter	On
Distortion Correction	2D
Normalize	Prescan
Image Filter	Off

Geometry - Common

Slice Group	1
Slices	20
Distance Factor	10 %
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
Phase Oversampling	50 %
FOV Read	320 mm
FOV Phase	87.5 %
Slice Thickness	4.0 mm
TR	2000.0 ms
Multi-Slice Mode	Interleaved
Series	Interleaved
Concatenations	5

Geometry - AutoAlign

Slice Group	1
Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	R14.5 P68.6 F33.7
R	14.5 mm
P	68.6 mm
F	33.7 mm

Geometry - AutoAlign

Initial Orientation	Coronal
Initial Rotation	0.00 deg

Geometry - Navigator

Navigator	1
Position	R66.0 P54.2 H47.1 mm
Orientation	Coronal
Rotation	0.00 deg
FOV Phase	32 mm
FOV Read	96 mm
Thickness	10 mm

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

Set-n-Go Protocol	Off
Table Position	34 mm
Table Position	F
Inline Composing	Off

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Standard
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	R14.5 P68.6 F33.7 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	280 mm
F >> H	320 mm
A >> P	88 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off

System - Tx/Rx

Image Scaling	1.000
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Physio - Signal

1st Signal/Mode	None
TR	2000.0 ms
Concatenations	5

Physio - Cardiac

Fat-Water Contrast	Fast Dixon
Magn. Preparation	None
Dark Blood	Off
FOV Read	320 mm
FOV Phase	87.5 %
Phase Resolution	80 %
Trajectory	Cartesian

Physio - PACE

Resp. Control	Trigger
Scout Mode	Off
Scout TR	150 ms
Accept Window \pm	2.0 mm
Position Accept Window	Automatic
Select Acquisition Window	Automatic
Acquisition Window	35 %
Scout Type	Liver Dome Scout
Trigger Pulse	1
Concatenations	5
Store Profile Images	On

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Composing

Inline Composing	Off
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Sequence - Part 1

Sequence Name	tse
RF Pulse Type	Fast
Gradient Mode	Fast
Flow Compensation	None

Sequence - Part 1

Bandwidth	651 Hz/Px
Echo Spacing	8.96 ms
Asymmetric Echo	Off
Define	Turbo Factor
Turbo Factor	23
Echo Trains per Slice	6

Sequence - Part 2

Introduction	On
Phase Correction	Automatic
Red. EC Sensitivity	Off
Reduce Motion Sens.	Off

Sequence - Assistant

SAR Assistant	Flip Angle
Min Flip Angle	120 deg
Allowed Delay	0 s

\\User\Head\Epilepsysola_xa61_liver_primovist_eovist\t1_starvibe_dixon_tra Delayed *

TA: 2:56 min Coil Selection: Auto Voxel Size: 0.9×0.9×2.5 mm³ Acc:: None Rel. SNR: 1.00**Properties**

Start measurement without further preparation	On
Wait for User to Start	Off
Start measurements	Single Measurement
Prio Recon	Off
Auto Open Inline Display	Off
Auto Close Inline Display	Off
Load Images to MR View&GO	On
Auto Store Images	On
Disable auto transfer to PACS	Off
Load Images to Stamp Segments	Off
Load Images to Graphic Segments	On
Graphic segment	3rd Segment
Inline Movie	Off

Resolution - Common

FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
Base Resolution	320
Slice Resolution	50 %
Trajectory	Radial
Radial Views	900
Interpolation	Off

Resolution - Acceleration

Acceleration Mode	None
Slice Partial Fourier	7/8
Asymmetric Echo	Off
Elliptical Scanning	Off

Routine

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	6.10 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
AutoAlign	---

Resolution - Filter

Raw Filter	Off
Elliptical Filter	Off
POCS	Off
Distortion Correction	2D
Normalize	Prescan
Noise Masking	Off
Image Filter	Off

Geometry - Common

Slab Group	1
Slabs	1
Distance Factor	20 %
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
Slices per Slab	56
Phase Oversampling	0 %
Slice Oversampling	28.6 %
FOV Read	280 mm
FOV Phase	100.0 %
Slice Thickness	2.5 mm
TR	6.10 ms
Series	Ascending
Concatenations	1

Contrast - Common

TR	6.10 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip Angle	10 deg
Fat-Water Contrast	Dixon
Contrasts	2
Reconstruction	Magnitude

Geometry - AutoAlign

Slab Group	1
Position	Isocenter
Orientation	Transversal
Phase Encoding Dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm

Contrast - Dynamic

Dynamic Mode	Standard
Temporal Interpolation	1
Measurements	1
Multiple Series	Off
3D Reordering	Standard
Burn Time to Center	Off

Geometry - AutoAlign

H	0.0 mm
Initial Orientation	Transversal
Initial Rotation	90.00 deg

Geometry - Saturation

Special Saturation	None
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Geometry - Tim Planning Suite

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

System - Miscellaneous

Coil Selection	Auto Coil Select
Radial Sorting	Off
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combination	Adaptive Combine
Matrix Optimization	Performance
Coil Focus	Flat

System - Adjustments

Adjustment Strategy	Standard
B0 Shim	Abdomen
CoilShim	Off
Adjustment Tolerance	Auto
Adjust with Body Coil	Off
Confirm Frequency	Never
Assume Silicone	Off

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	90.00 deg
R >> L	280 mm
A >> P	280 mm
F >> H	140 mm
Reset	Off

System - Tx/Rx

Frequency 1H	63.665299 MHz
? Ref. Amplitude 1H	0.000 V
Reset	Off
Image Scaling	1.000

Physio - PACE

Resp. Control	Off
Concatenations	1

Inline - Liver

Liver Registration	Off
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Inline - Liver

Save Original Images	On
Dixon Evaluation	Off
Fat Fraction (2pt)	Off

Inline - Subtraction

Subtract	Off
Measurements	1
StdDev	Off
Save Original Images	On

Inline - MIP

MIP Sag	Off
MIP Cor	Off
MIP Tra	Off
MIP Time	Off
Radial MIP	Off
Save Original Images	On
MPR Sag	Off
MPR Cor	Off
MPR Tra	Off

Inline - Soft Tissue

Wash-in	Off
Wash-out	Off
TTP	Off
PEI	Off
MIP Time	Off
Measurements	1

Inline - Composing

Inline Composing	Off
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Inline - MapIt

MapIt	None
Flip Angle	10 deg
Measurements	1
Contrasts	2
TE 1	2.39 ms
TE 2	4.77 ms
TR	6.10 ms
Save Original Images	On

Sequence - Part 1

Sequence Name	fl
Dimension	3D
Excitation	Slab-sel.
RF Pulse Type	Fast
Readout Mode	Bipolar
Gradient Mode	Fast
Bandwidth	780 Hz/Px
Asymmetric Echo	Off
Optimization	Opp/In

Sequence - Part 2

Introduction	Off
RF Spoiling	On
Incr. Gradient Spoiling	Off
Breast Application	Off
Phase Enc. Order	Automatic

Sequence - Assistant

SAR Assistant	Off
Optimization	Opp/In