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\USER

Exports

WBMR no TimCT

WBMR no TimCT

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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\headneck\_localizer

TA: 9.0 s PM: ISO Voxel size: 1.4×1.4×6.0 mmPAT: 2 Rel. SNR: 1.00 : h

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	25 %
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
TE	85 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1,2;HE1-4;NE1,2;SP1,2

**Contrast - Common**

TR	1500.0 ms
TE	85 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	160 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Off
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**Resolution - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
Base resolution	320
Phase resolution	80 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
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**Geometry - AutoAlign**

Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R100.0 P0.0 H0.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	90.00 deg
Initial Orientation	Sagittal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	H
Table position	0 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive
Composing Group	1
Last Step	Off

**System - Miscellaneous**

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg

**System - Adjust Volume**

A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	450 mm
FoV phase	100.0 %
Phase resolution	80 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Composing Group	1
Last Step	Off
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.56 ms
Bandwidth	710 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	256

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	140 deg
Allowed delay	30 s

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TA: 0:17 PM: ISO Voxel size: 1.4×1.4×6.0 mmPAT: 2 Rel. SNR: 1.00 : h

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F200.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Slices	5
Dist. factor	150 %
Position	L0.0 P0.0 F280.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	25 %
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
TE	85 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;HE3,4;NE1,2;SP1,3

**Contrast - Common**

TR	1500.0 ms
TE	85 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	160 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
Base resolution	320
Phase resolution	80 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F200.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Slices	5
Dist. factor	150 %
Position	L0.0 P0.0 F280.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P

**Geometry - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R100.0 P0.0 F200.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Position	L0.0 P0.0 F280.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 F280.0
L	0.0 mm
P	0.0 mm
F	280.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	F
Table position	200 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive
Composing Group	1
Last Step	Off

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	200 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	On - AutoCoilSelect
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**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	450 mm
FoV phase	100.0 %
Phase resolution	80 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Composing Group	1
Last Step	Off
Normalize	Off

**Inline - Composing**

Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.56 ms
Bandwidth	710 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	256

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	140 deg
Allowed delay	30 s

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TA: 0:17 PM: ISO Voxel size: 1.4×1.4×6.0 mmPAT: 2 Rel. SNR: 1.00 : h

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F400.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Slices	5
Dist. factor	150 %
Position	L0.0 P0.0 F250.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	25 %
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
TE	85 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1,2;BO1-3;SP1-4

**Contrast - Common**

TR	1500.0 ms
TE	85 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	160 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
Base resolution	320
Phase resolution	80 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F400.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Slices	5
Dist. factor	150 %
Position	L0.0 P0.0 F250.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P



**Geometry - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R100.0 P0.0 F400.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	4
Position	L0.0 P0.0 F250.0 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 F250.0
L	0.0 mm
P	0.0 mm
F	250.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	F
Table position	400 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive
Composing Group	1
Last Step	Off

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	400 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---

**System - Miscellaneous**

Coil Select Mode	On - AutoCoilSelect
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**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	450 mm
FoV phase	100.0 %
Phase resolution	80 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Composing Group	1
Last Step	Off
Normalize	Off

**Inline - Composing**

Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.56 ms
Bandwidth	710 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	256

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	140 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\pelv\_localizer

TA: 9.0 s PM: ISO Voxel size: 1.4×1.4×6.0 mmPAT: 2 Rel. SNR: 1.00 : h

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	On
Auto open inline display	Off
Auto close inline display	Off
Start measurement without further preparation	On
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F650.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	25 %
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
TE	85 ms
Averages	1
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;BO3;SP3-6

**Contrast - Common**

TR	1500.0 ms
TE	85 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	160 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1

**Contrast - Dynamic**

Multiple series	Off
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**Resolution - Common**

FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
Base resolution	320
Phase resolution	80 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	3
Dist. factor	100 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Slices	1
Dist. factor	50 %
Position	R100.0 P0.0 F650.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Slices	1
Dist. factor	50 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
FoV read	450 mm
FoV phase	100.0 %
Slice thickness	6.0 mm
TR	1500.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
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**Geometry - AutoAlign**

Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
Slice group	2
Position	R100.0 P0.0 F650.0 mm
Orientation	Sagittal
Phase enc. dir.	H >> F
Slice group	3
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	L0.0 P0.0 F650.0
L	0.0 mm
P	0.0 mm
F	650.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Coronal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	Off
Table position	F
Table position	650 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive
Composing Group	1
Last Step	On

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	650 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg

**System - Adjust Volume**

A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	1500.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	450 mm
FoV phase	100.0 %
Phase resolution	80 %

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Composing Group	1
Last Step	On
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	3.56 ms
Bandwidth	710 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	256

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	140 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_tirm\_tse\_sag

TA: 2:30 PM: ISO Voxel size: 1.0×1.0×4.0 mmPAT: 2 Rel. SNR: 1.00 : tirR\_rr | Substep: 1/2

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	100 %
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5110.0 ms
TE	69.0 ms
Averages	2
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	HE4;NE2;SP1,2

**Contrast - Common**

TR	5110.0 ms
TE	69.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	160 ms
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	On
Freeze suppressed tissue	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	384
Phase resolution	60 %
Phase partial Fourier	Off
Trajectory	Cartesian

**Resolution - Common**

Interpolation	Off
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**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5110.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	L10.1 A39.4 F41.7
L	10.1 mm
A	39.4 mm
F	41.7 mm
Initial Rotation	90.00 deg
Initial Orientation	S > T
S > T	1.0
> C	0.0

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	On
Special sat.	None

**Geometry - Navigator**

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	42 mm
Inline Composing	On
Normalize	Off
Composing Function	Spine

**Geometry - Tim CT**

Tim CT mode	Off
Slices	15
Slice thickness	4.0 mm
Dist. factor	20 %
FoV read	380 mm
FoV phase	100.0 %

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	42 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Rotation	90.00 deg
F >> H	380 mm
A >> P	380 mm
R >> L	72 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	5110.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Slice-sel. IR
TI	160 ms

**Physio - Cardiac**

Fat suppr.	None
Dark blood	Off
FoV read	380 mm
FoV phase	100.0 %
Phase resolution	60 %
Trajectory	Cartesian

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Spine
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	Read
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9.84 ms
Bandwidth	191 Hz/Px

**Sequence - Part 2**

Define	Turbo factor
Echo trains per slice	14
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Normal
WARP	Off
Red. EC sensitivity	Off
Turbo factor	17

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	130 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_tirm\_tse\_sag

TA: 2:30 PM: ISO Voxel size: 1.0×1.0×4.0 mmPAT: 2 Rel. SNR: 1.00 : tirR\_rr | Substep: 2/2

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	100 %
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5110.0 ms
TE	69.0 ms
Averages	2
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	SP2-4

**Contrast - Common**

TR	5110.0 ms
TE	69.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	160 ms
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	On
Freeze suppressed tissue	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	384
Phase resolution	60 %
Phase partial Fourier	Off
Trajectory	Cartesian

**Resolution - Common**

Interpolation	Off
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**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	5110.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
F	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	On
Special sat.	None

**Geometry - Navigator**



**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	372 mm
Inline Composing	On
Normalize	Off
Composing Function	Spine

**Geometry - Tim CT**

Tim CT mode	Off
Slices	15
Slice thickness	4.0 mm
Dist. factor	20 %
FoV read	380 mm
FoV phase	100.0 %

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	372 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Rotation	90.00 deg
F >> H	380 mm
A >> P	380 mm
R >> L	72 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	5110.0 ms
Concatenations	1

**Physio - Cardiac**

Magn. preparation	Slice-sel. IR
TI	160 ms

**Physio - Cardiac**

Fat suppr.	None
Dark blood	Off
FoV read	380 mm
FoV phase	100.0 %
Phase resolution	60 %
Trajectory	Cartesian

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Spine
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	Read
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9.84 ms
Bandwidth	191 Hz/Px

**Sequence - Part 2**

Define	Turbo factor
Echo trains per slice	14
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Normal
WARP	Off
Red. EC sensitivity	Off
Turbo factor	17

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	130 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_tse\_sag

TA: 1:07 PM: ISO Voxel size: 1.5×1.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : tse | Substep: 1/2

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	80 %
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	200.0 ms
TE	9.6 ms
Averages	2
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	HE4;NE2;SP1,2

**Contrast - Common**

TR	200.0 ms
TE	9.6 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	70 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	200.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L10.1 A39.4 F41.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	L10.1 A39.4 F41.7
L	10.1 mm
A	39.4 mm
F	41.7 mm
Initial Rotation	90.00 deg
Initial Orientation	S > T
S > T	1.0
> C	0.0

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F

**Geometry - Tim Planning Suite**

Table position	42 mm
Inline Composing	On
Normalize	Off
Composing Function	Spine

**Geometry - Tim CT**

Tim CT mode	Off
Slices	15
Slice thickness	4.0 mm
Dist. factor	20 %
FoV read	380 mm
FoV phase	100.0 %

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	42 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	200.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	380 mm

**Physio - Cardiac**

FoV phase	100.0 %
Phase resolution	70 %
Trajectory	Cartesian

**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Spine
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9.58 ms
Bandwidth	181 Hz/Px

**Sequence - Part 2**

Define	Turbo factor
Echo trains per slice	54
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
WARP	Off
Red. EC sensitivity	Off
Turbo factor	3

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	130 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_tse\_sag

TA: 1:07 PM: ISO Voxel size: 1.5×1.5×4.0 mmPAT: 2 Rel. SNR: 1.00 : tse | Substep: 2/2

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Phase oversampling	80 %
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	200.0 ms
TE	9.6 ms
Averages	2
Concatenations	3
Filter	Distortion Corr.(2D), Prescan Normalize, Elliptical filter
Coil elements	SP2-4

**Contrast - Common**

TR	200.0 ms
TE	9.6 ms
TD	0.0 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

Averages	2
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Multiple series	Each measurement

**Resolution - Common**

FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
Base resolution	256
Phase resolution	70 %
Phase partial Fourier	Off
Trajectory	Cartesian
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32
Reference scan mode	Self-calibration

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	On

**Geometry - Common**

Slice group	1
Slices	15
Dist. factor	20 %
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
FoV read	380 mm
FoV phase	100.0 %
Slice thickness	4.0 mm
TR	200.0 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	3

**Geometry - AutoAlign**

Slice group	1
Position	L4.3 A39.4 F371.7 mm
Orientation	S > T1.0
Phase enc. dir.	H >> F
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
F	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	372 mm
Inline Composing	On

**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Spine

**Geometry - Tim CT**

Tim CT mode	Off
Slices	15
Slice thickness	4.0 mm
Dist. factor	20 %
FoV read	380 mm
FoV phase	100.0 %

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	372 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Off - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Tune up
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm
R >> L	350 mm
F >> H	350 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	200.0 ms
Concatenations	3

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	380 mm
FoV phase	100.0 %
Phase resolution	70 %

**Physio - Cardiac**

Trajectory	Cartesian
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**Physio - PACE**

Resp. control	Off
Concatenations	3

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Spine
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Compensate T2 decay	Off
Reduce Motion Sens.	On
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	9.58 ms
Bandwidth	181 Hz/Px

**Sequence - Part 2**

Define	Turbo factor
Echo trains per slice	54
Phase correction	Automatic
Acoustic noise reduction	None
RF pulse type	Normal
Gradient mode	Fast
WARP	Off
Red. EC sensitivity	Off
Turbo factor	3

**Sequence - Assistant**

Mode	Min flip angle
Min flip angle	130 deg
Allowed delay	30 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_tra\_caipi3\_bh

TA: 0:17 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 3 Rel. SNR: 1.00 : fl | Substep: 1/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE2,4;NE2

**Contrast - Common**

TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	17.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

**Resolution - Common**

Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	3
Ref. lines 3D	27
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Tra
Total PAT factor	3

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A19.4 H73.9
L	0.0 mm
A	19.4 mm
H	73.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	H
Table position	74 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	H
Table position	74 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	17.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1
3D centric reordering	Off

**Inline - Common**

Time to center	7.7 s
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**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	17.0 deg
Measurements	1
Contrasts	2
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	470 Hz/Px
Bandwidth 2	470 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_tra\_caipi3\_bh

TA: 0:17 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 3 Rel. SNR: 1.00 : fl | Substep: 2/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;NE2;SP1

**Contrast - Common**

TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	17.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

**Resolution - Common**

Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	3
Ref. lines 3D	27
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Tra
Total PAT factor	3

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	126 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	126 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	17.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	7.7 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	17.0 deg
Measurements	1
Contrasts	2
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	470 Hz/Px
Bandwidth 2	470 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_tra\_caipi3\_bh

TA: 0:17 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 3 Rel. SNR: 1.00 : fl | Substep: 3/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;SP2,3

**Contrast - Common**

TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	17.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

**Resolution - Common**

Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	3
Ref. lines 3D	27
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Tra
Total PAT factor	3

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	326 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	326 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	17.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	7.7 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	17.0 deg
Measurements	1
Contrasts	2
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	470 Hz/Px
Bandwidth 2	470 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_tra\_caipi3\_bh

TA: 0:17 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 3 Rel. SNR: 1.00 : fl | Substep: 4/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;BO3;SP3,4

**Contrast - Common**

TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	17.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

**Resolution - Common**

Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	3
Ref. lines 3D	27
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Tra
Total PAT factor	3

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	526 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	526 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	17.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	7.7 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	17.0 deg
Measurements	1
Contrasts	2
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	470 Hz/Px
Bandwidth 2	470 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On



**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_tra\_caipi3\_bh

TA: 0:17 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 3 Rel. SNR: 1.00 : fl | Substep: 5/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
Load images to graphic segments	Off
Auto open inline display	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO2,3;SP4-6

**Contrast - Common**

TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	17.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

Averages	1
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1
Multiple series	Off

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	75 %
Slice resolution	69 %
Phase partial Fourier	Off

**Resolution - Common**

Slice partial Fourier	6/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	3
Ref. lines 3D	27
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Tra
Total PAT factor	3

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
Slice oversampling	30.0 %
Slices per slab	40
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	7.00 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	726 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	726 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	17.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	7.7 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	17.0 deg
Measurements	1
Contrasts	2
TR	7.00 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	470 Hz/Px
Bandwidth 2	470 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\ep2d\_diff\_stir\_b50\_600\_900\_tra\_p2

TA: 4:15 PM: ISO Voxel size: 1.7×1.7×5.0 mmPAT: 2 Rel. SNR: 1.00 : epir | Substep: 1/5

**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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
TE	66.0 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE2,4;NE2

**Contrast - Common**

TR	6370 ms
TE	66.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	180 ms
IR scheme	Sequential
Fat suppr.	None

**Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32

**Resolution - iPAT**

Reference scan mode	GRE/separate
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**Resolution - Filter Image**

Distortion Corr.	On
Mode	2D
Prescan Normalize	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A19.4 H73.9
L	0.0 mm
A	19.4 mm
H	73.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	H
Table position	74 mm
Inline Composing	On
Normalize	Off
Composing Function	Diffusion

**System - Miscellaneous**

Positioning mode	ISO
Table position	H
Table position	74 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.500
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	6370 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	3

**Diff - Body**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	50 s/mm <sup>2</sup>
Noise level	3

**Diff - Composing**

Inline Composing	On
Composing Function	Diffusion
Normalize	Off
Series Description	COMBO
Distortion Corr.	On
Mode	2D

**Sequence - Part 1**

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	116
RF pulse type	Low SAR
Gradient mode	Fast

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\ep2d\_diff\_stir\_b50\_600\_900\_tra\_p2

TA: 4:15 PM: ISO Voxel size: 1.7×1.7×5.0 mmPAT: 2 Rel. SNR: 1.00 : epir | Substep: 2/5

**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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
TE	66.0 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;NE2;SP1

**Contrast - Common**

TR	6370 ms
TE	66.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	180 ms
IR scheme	Sequential
Fat suppr.	None

**Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32

**Resolution - iPAT**

Reference scan mode	GRE/separate
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**Resolution - Filter Image**

Distortion Corr.	On
Mode	2D
Prescan Normalize	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	126 mm
Inline Composing	On
Normalize	Off
Composing Function	Diffusion

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	126 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.500
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	6370 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	3

**Diff - Body**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	50 s/mm <sup>2</sup>
Noise level	3

**Diff - Composing**

Inline Composing	On
Composing Function	Diffusion
Normalize	Off
Series Description	COMBO
Distortion Corr.	On
Mode	2D

**Sequence - Part 1**

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	116
RF pulse type	Low SAR
Gradient mode	Fast



\\USER\Exports\WBMR no TimCT\WBMR no TimCT\ep2d\_diff\_stir\_b50\_600\_900\_tra\_p2

TA: 4:15 PM: ISO Voxel size: 1.7×1.7×5.0 mmPAT: 2 Rel. SNR: 1.00 : epir | Substep: 3/5

**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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
TE	66.0 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;SP2,3

**Contrast - Common**

TR	6370 ms
TE	66.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	180 ms
IR scheme	Sequential
Fat suppr.	None

**Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32

**Resolution - iPAT**

Reference scan mode	GRE/separate
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**Resolution - Filter Image**

Distortion Corr.	On
Mode	2D
Prescan Normalize	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	326 mm
Inline Composing	On
Normalize	Off
Composing Function	Diffusion

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	326 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.500
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	6370 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	3

**Diff - Body**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	50 s/mm <sup>2</sup>
Noise level	3

**Diff - Composing**

Inline Composing	On
Composing Function	Diffusion
Normalize	Off
Series Description	COMBO
Distortion Corr.	On
Mode	2D

**Sequence - Part 1**

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	116
RF pulse type	Low SAR
Gradient mode	Fast

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\ep2d\_diff\_stir\_b50\_600\_900\_tra\_p2

TA: 4:15 PM: ISO Voxel size: 1.7×1.7×5.0 mmPAT: 2 Rel. SNR: 1.00 : epir | Substep: 4/5

**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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
TE	66.0 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;BO3;SP3,4

**Contrast - Common**

TR	6370 ms
TE	66.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
TI	180 ms
IR scheme	Sequential
Fat suppr.	None

**Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32

**Resolution - iPAT**

Reference scan mode	GRE/separate
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**Resolution - Filter Image**

Distortion Corr.	On
Mode	2D
Prescan Normalize	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	526 mm
Inline Composing	On
Normalize	Off
Composing Function	Diffusion

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	526 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.500
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	6370 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	3

**Diff - Body**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	50 s/mm <sup>2</sup>
Noise level	3

**Diff - Composing**

Inline Composing	On
Composing Function	Diffusion
Normalize	Off
Series Description	COMBO
Distortion Corr.	On
Mode	2D

**Sequence - Part 1**

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	116
RF pulse type	Low SAR
Gradient mode	Fast

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\ep2d\_diff\_stir\_b50\_600\_900\_tra\_p2

TA: 4:15 PM: ISO Voxel size: 1.7×1.7×5.0 mmPAT: 2 Rel. SNR: 1.00 : epir | Substep: 5/5

**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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
TE	66.0 ms
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO2,3;SP4-6

**Contrast - Common**

TR	6370 ms
TE	66.0 ms
MTC	Off
Magn. preparation	Slice-sel. IR
T1	180 ms
IR scheme	Sequential
Fat suppr.	None

**Contrast - Dynamic**

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	1
Delay in TR	0 ms

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	128
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	On

**Resolution - iPAT**

Accel. mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	32

**Resolution - iPAT**

Reference scan mode	GRE/separate
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**Resolution - Filter Image**

Distortion Corr.	On
Mode	2D
Prescan Normalize	On
Dynamic Field Corr.	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	6370 ms
Multi-slice mode	Interleaved
Series	Interleaved
Concatenations	1

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	726 mm
Inline Composing	On
Normalize	Off
Composing Function	Diffusion

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	726 mm
MSMA	S - C - T

**System - Miscellaneous**

Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	On
Only after freq. change	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	3.500
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	6370 ms
Concatenations	1

**Physio - PACE**

Resp. control	Off
Concatenations	1

**Diff - Neuro**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
FA maps	Off
Mosaic	Off
Tensor	Off
Noise level	3

**Diff - Body**

Diffusion mode	3-Scan Trace
Diff. directions	3
Diffusion Scheme	Monopolar
Diff. weightings	3
b-value 1	50 s/mm <sup>2</sup>
b-value 2	600 s/mm <sup>2</sup>
b-value 3	900 s/mm <sup>2</sup>
b-value 1	2
b-value 2	5
b-value 3	6
Diff. weighted images	Off
Trace weighted images	On
ADC maps	On
Exponential ADC Maps	Off
FA maps	Off
Invert Gray Scale	Off
Calculated Image	Off
b-Value >=	50 s/mm <sup>2</sup>
Noise level	3

**Diff - Composing**

Inline Composing	On
Composing Function	Diffusion
Normalize	Off
Series Description	COMBO
Distortion Corr.	On
Mode	2D

**Sequence - Part 1**

Introduction	Off
Optimization	Min. TE
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.5 ms
Bandwidth	2298 Hz/Px

**Sequence - Part 2**

EPI factor	116
RF pulse type	Low SAR
Gradient mode	Fast

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_cor\_caipi5\_bh

TA: 0:19 PM: ISO Voxel size: 1.6×1.6×2.0 mmPAT: 5 Rel. SNR: 1.00 : fl | Substep: 1/3

**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	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	15 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;HE1-4;NE1,2;SP1,2

**Contrast - Common**

TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	21.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
Base resolution	288
Phase resolution	90 %
Slice resolution	50 %
Phase partial Fourier	6/8

**Resolution - Common**

Slice partial Fourier	5/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	5
Ref. lines 3D	25
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Cor
Total PAT factor	5

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L6.0 A21.0 H0.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L6.0 A21.0 H0.0
L	6.0 mm
A	21.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Coronal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	H
Table position	0 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L6.0 A21.0 H0.0 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	425 mm
F >> H	450 mm
A >> P	288 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	21.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	6.5 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	21.0 deg
Measurements	1
Contrasts	2
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	580 Hz/Px
Bandwidth 2	580 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel. PE
RF spoiling	On
Incr. Gradient spoiling	On



**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_cor\_caipi5\_bh

TA: 0:19 PM: ISO Voxel size: 1.6×1.6×2.0 mmPAT: 5 Rel. SNR: 1.00 : fl | Substep: 2/3

**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	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 F350.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	15 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;BO1-3;SP1-4

**Contrast - Common**

TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	21.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
Base resolution	288
Phase resolution	90 %
Slice resolution	50 %
Phase partial Fourier	6/8

**Resolution - Common**

Slice partial Fourier	5/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	5
Ref. lines 3D	25
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Cor
Total PAT factor	5

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 F350.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L6.0 A21.0 F350.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
F	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	350 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	350 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L6.0 A21.0 F350.0 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	425 mm
F >> H	450 mm
A >> P	288 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	21.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	6.5 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	21.0 deg
Measurements	1
Contrasts	2
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	580 Hz/Px
Bandwidth 2	580 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel. PE
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t1\_vibe\_dixon\_cor\_caipi5\_bh

TA: 0:19 PM: ISO Voxel size: 1.6×1.6×2.0 mmPAT: 5 Rel. SNR: 1.00 : fl | Substep: 3/3

**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	On
Auto close inline display	On
Start measurement without further preparation	Off
Wait for user to start	Off
Start measurements	Single measurement

**Routine**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 F700.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	15 %
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Averages	1
Concatenations	1
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;SP4-7

**Contrast - Common**

TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms
Flip angle	21.0 deg
Fat suppr.	None
Water suppr.	None
Dixon	On

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
Base resolution	288
Phase resolution	90 %
Slice resolution	50 %
Phase partial Fourier	6/8

**Resolution - Common**

Slice partial Fourier	5/8
Trajectory	Cartesian
View sharing	Off
Interpolation	Off

**Resolution - iPAT**

PAT mode	CAIPIRINHA
Accel. factor PE	1
Ref. lines PE	24
Accel. factor 3D	5
Ref. lines 3D	25
Reordering Shift 3D	2
Reference scan mode	GRE/separate
CAIPIRINHA mode	Body Cor
Total PAT factor	5

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off
POCS	Off

**Geometry - Common**

Slab group	1
Slabs	1
Dist. factor	20 %
Position	L6.0 A21.0 F700.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
Slice oversampling	22.2 %
Slices per slab	144
FoV read	450 mm
FoV phase	94.4 %
Slice thickness	2.0 mm
TR	6.64 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

**Geometry - AutoAlign**

Slab group	1
Position	L6.0 A21.0 F700.0 mm
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
F	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Dixon	On
Special sat.	None

**Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	700 mm
Inline Composing	On
Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	700 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	H >> F
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Performance
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	On - AutoCoilSelect

**System - Adjustments**

B0 Shim mode	Standard
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L6.0 A21.0 F700.0 mm
Orientation	Coronal
Rotation	0.00 deg
R >> L	425 mm
F >> H	450 mm
A >> P	288 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	Low
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	1

**Inline - Common**

View sharing	Off
Flip angle	21.0 deg
Measurements	1
Burn time-to-center	Off
Temporal interpolation	1

**Inline - Common**

3D centric reordering	Off
Time to center	6.5 s

**Inline - Inline**

Subtract	Off
Measurements	1
StdDev	Off
Liver registration	Off
Save original images	On

**Inline - MIP**

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

**Inline - Soft Tissue**

Wash - In	Off
Wash - Out	Off
TTP	Off
PEI	Off
MIP - time	Off
Measurements	1

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Inline - MapIt**

Save original images	On
MapIt	None
Flip angle	21.0 deg
Measurements	1
Contrasts	2
TR	6.64 ms
TE 1	2.39 ms
TE 2	4.77 ms

**Sequence - Part 1**

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Asymmetric echo	Off
Contrasts	2
Readout mode	Bipolar
Optimization	In phase
Multi-slice mode	Sequential
Bandwidth 1	580 Hz/Px
Bandwidth 2	580 Hz/Px

**Sequence - Part 2**

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel. PE
RF spoiling	On
Incr. Gradient spoiling	On

**Sequence - Assistant**

Mode	Off
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\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_haste\_tra\_bh

TA: 0:44 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 2 Rel. SNR: 1.00 : h | Substep: 1/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
TE	78 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	HE2,4;NE2

**Contrast - Common**

TR	800.0 ms
TE	78 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	78 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
Multi-slice mode	Single shot
Series	Interl. in B.-h.
Concatenations	2

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 A19.4 H73.9
L	0.0 mm
A	19.4 mm
H	73.9 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	H
Table position	74 mm
Inline Composing	On



**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	H
Table position	74 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Abdomen
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 H73.9 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800.0 ms
Concatenations	2

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	430 mm
FoV phase	90.6 %
Phase resolution	78 %

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	2

**Inline - Common**

Subtract	Off
Measurements	1
StdDev	Off

**Inline - Common**

Save original images	On
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**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.34 ms
Bandwidth	488 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	226

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\Exports\WBM R no TimCT\WBM R no TimCT\t2\_haste\_tra\_bh

TA: 0:44 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 2 Rel. SNR: 1.00 : h | Substep: 2/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
TE	78 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;NE2;SP1

**Contrast - Common**

TR	800.0 ms
TE	78 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	78 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
Multi-slice mode	Single shot
Series	Interl. in B.-h.
Concatenations	2

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	126 mm
Inline Composing	On

**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	126 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Abdomen
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F126.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800.0 ms
Concatenations	2

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	430 mm
FoV phase	90.6 %
Phase resolution	78 %

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	2

**Inline - Common**

Subtract	Off
Measurements	1

**Inline - Common**

StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.34 ms
Bandwidth	488 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	226

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_haste\_tra\_bh

TA: 0:44 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 2 Rel. SNR: 1.00 : h | Substep: 3/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
TE	78 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1-3;SP2,3

**Contrast - Common**

TR	800.0 ms
TE	78 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	78 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
Multi-slice mode	Single shot
Series	Interl. in B.-h.
Concatenations	2

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	326 mm
Inline Composing	On

**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	326 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Abdomen
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F326.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800.0 ms
Concatenations	2

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	430 mm
FoV phase	90.6 %
Phase resolution	78 %

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	2

**Inline - Common**

Subtract	Off
Measurements	1

**Inline - Common**

StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.34 ms
Bandwidth	488 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	226

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_haste\_tra\_bh

TA: 0:44 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 2 Rel. SNR: 1.00 : h | Substep: 4/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
TE	78 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO1;BO3;SP3,4

**Contrast - Common**

TR	800.0 ms
TE	78 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	78 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
Multi-slice mode	Single shot
Series	Interl. in B.-h.
Concatenations	2

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	526 mm
Inline Composing	On

**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	526 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Abdomen
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F526.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800.0 ms
Concatenations	2

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	430 mm
FoV phase	90.6 %
Phase resolution	78 %

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	2

**Inline - Common**

Subtract	Off
Measurements	1

**Inline - Common**

StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.34 ms
Bandwidth	488 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	226

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s

\\USER\Exports\WBMR no TimCT\WBMR no TimCT\t2\_haste\_tra\_bh

TA: 0:44 PM: ISO Voxel size: 1.3×1.3×5.0 mmPAT: 2 Rel. SNR: 1.00 : h | Substep: 5/5

**Properties**

Prio recon	Off
Load images to viewer	On
Inline movie	Off
Auto store images	On
Load images to stamp segments	On
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**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
TE	78 ms
Averages	1
Concatenations	2
Filter	Distortion Corr.(2D), Prescan Normalize
Coil elements	BO2,3;SP4-6

**Contrast - Common**

TR	800.0 ms
TE	78 ms
MTC	Off
Magn. preparation	None
Flip angle	150 deg
Fat suppr.	None
Water suppr.	None
Restore magn.	Off

**Contrast - Dynamic**

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

**Resolution - Common**

FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
Base resolution	320
Phase resolution	78 %
Phase partial Fourier	5/8
Interpolation	Off

**Resolution - iPAT**

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Integrated

**Resolution - Filter Image**

Image Filter	Off
Distortion Corr.	On
Mode	2D
Unfiltered images	Off
Prescan Normalize	On
Unfiltered images	Off
Normalize	Off
B1 filter	Off

**Resolution - Filter Rawdata**

Raw filter	Off
Elliptical filter	Off

**Geometry - Common**

Slice group	1
Slices	40
Dist. factor	0 %
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	430 mm
FoV phase	90.6 %
Slice thickness	5.0 mm
TR	800.0 ms
Multi-slice mode	Single shot
Series	Interl. in B.-h.
Concatenations	2

**Geometry - AutoAlign**

Slice group	1
Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L0.0 P0.0 H81.0
L	0.0 mm
P	0.0 mm
F	81.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

**Geometry - Saturation**

Fat suppr.	None
Water suppr.	None
Restore magn.	Off
Special sat.	None

**Geometry - Navigator****Geometry - Tim Planning Suite**

Set-n-Go Protocol	On
Table position	F
Table position	726 mm
Inline Composing	On



**Geometry - Tim Planning Suite**

Normalize	Off
Composing Function	Adaptive

**System - Miscellaneous**

Positioning mode	ISO
Table position	F
Table position	726 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Coil Combine Mode	Adaptive Combine
Save uncombined	Off
Matrix Optimization	Off
Coil Focus	Flat
AutoAlign	---
Coil Select Mode	Default

**System - Adjustments**

B0 Shim mode	Abdomen
Adjust with body coil	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

**System - Adjust Volume**

Position	L0.0 A19.4 F726.1 mm
Orientation	Transversal
Rotation	0.00 deg
A >> P	390 mm
R >> L	430 mm
F >> H	200 mm
Reset	Off

**System - Tx/Rx**

Frequency 1H	63.694710 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
? Ref. amplitude 1H	0.000 V

**Physio - Signal1**

1st Signal/Mode	None
TR	800.0 ms
Concatenations	2

**Physio - Cardiac**

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	430 mm
FoV phase	90.6 %
Phase resolution	78 %

**Physio - PACE**

Resp. control	Breath-hold
Concatenations	2

**Inline - Common**

Subtract	Off
Measurements	1

**Inline - Common**

StdDev	Off
Save original images	On

**Inline - MIP**

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

**Inline - Composing**

Inline Composing	On
Composing Function	Adaptive
Normalize	Off
Series Description	
Distortion Corr.	On
Mode	2D
Unfiltered images	Off

**Sequence - Part 1**

Introduction	On
Dimension	2D
Contrasts	1
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.34 ms
Bandwidth	488 Hz/Px

**Sequence - Part 2**

RF pulse type	Normal
Gradient mode	Fast
Turbo factor	226

**Sequence - Assistant**

Mode	Off
Allowed delay	0 s