## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

VASO sequence version 121

$\verb \USER\USerProtocols\Renzo\Whole\_slice\_template\M1\_study\_template\_KERNEL\_2x3  \\$						
TA: 33:27	PAT: 3	Voxel size: 0.8×0.8×1.0 mm	Rel. SNR: 1.00	UNKNOWN:		

		I PAT mode	GRAPPA
Properties		Accel, factor PE	3
Prio Recon	Off	Ref. lines PE	36
Before measurement			
After measurement		Accel. factor 3D	1
Load to viewer	On	Ref. lines 3D	24
Inline movie	Off	Reference scan mode	Separate
		Dunnan Mannadina	
Auto store images	On	Prescan Normalize	Off
Load to stamp segments	Off	Raw filter	Off
Load images to graphic	Off	Elliptical filter	Off
segments		Hamming	Off
Auto open inline display	Off		
Start measurement without	On	Geometry	
further preparation	<b>.</b>	Multi-slice mode	Interleaved
Wait for user to start	Off	Series	Ascending
			······
Start measurements	single	Special sat.	Parallel F
Routine		Gap	25.0 mm
		Thickness	100 mm
Slab group 1			
Slabs	1	Table position	Н
Dist. factor	50 %	Table position	0 mm
Position	R37.6 A15.2 H22.2	Inline Composing	Off
Orientation	T > S36.1		
Phase enc. dir.	P >> A	System	
Rotation	180.00 deg	V32	Off
Phase oversampling	0 %	A32	On
Slice oversampling	9.1 %	Positioning mode	FIX
Slices per slab	22	MSMA	S - C - T
FoV read	127.0 mm	Sagittal	R >>> L
FoV phase	100.0 %	Coronal	A >> P
Slice thickness	0.99 mm	Transversal	F >> H
TR	2222.50 ms		
TE TE	32 ms	Save uncombined	Off
		Coil Combine Mode	Sum of Squares
Averages	1	AutoAlign	
Concatenations	1	Auto Coil Select	Default
Filter	None		
Coil elements	A32	Shim mode	Standard
Contract		Adjust with body coil	Off
Contrast		Confirm freq. adjustment	Off
Perfusion mode	SS-SI VASO	Assume Silicone	Off
TI2	700 ms	! Ref. amplitude 1H	220.000 V
TI1	50 ms	Adjustment Tolerance	Auto
TI1s	50 ms		Auto
Flip angle	4 deg	Adjust volume	DOE 0 440 0 1100 0
Fat suppr.	Fat sat.	! Position	R35.2 A13.3 H20.8
Fat sat. mode	Weak	! Orientation	T > C-2.0 > S0.9
r at sat. mode	vveak	! Rotation	0.08 deg
Averaging mode	Long term	!R>>L	94 mm
Reconstruction	Magnitude	! A >> P	136 mm
Measurements	903	! F >> H	58 mm
		1	
Delay in TR	0 ms	Physio	
Multiple series	Off	1st Signal/Mode	None
Perfusion mode	PICORE Q2T	DOLD.	
		BOLD	
Inversion time 1	50 ms	Motion correction	Off
Saturation stop time	50 ms	Spatial filter	Off
Inversion time 2	700.0 ms	1	
Flow limit	100 cm/s	Sequence	
Deschrier		Introduction	On
Resolution		Dimension	3D
Base resolution	162	Reordering	Linear
Phase resolution	100 %	Contrasts	1
Slice resolution	100 %	Bandwidth	1234 Hz/Px
Phase partial Fourier	Off		Off
Slice partial Fourier	Off	Free echo spacing	_
Interpolation	Off	Echo spacing	0.98 ms
		EPI factor	162
		Li i idoloi	104

## SIEMENS MAGNETOM Investigational\_Device\_7T syngo MR B17

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

Ampl 150 BWDTH 150 3.1kHz

ph.skip 4 Robert (the one) 30
use Ernst angle Off
Maxwell Correction Off
log physio files Off
FFT scale 2.00
dummy prepscan time 3 s

0.00 mT/m\*ms z shim RF duration 1900 us **RF BWTP** 25.0 Renzo: Delta TI 63 ms **EFFECTIVE TR** 53340 ms **PatPartitions** 24 EPI phase correction local PAT refscan mode Flash FlashRef BaseRes 162 FlashRef BW 100 Hz/px FlashRef TE 10000 us FlashRef FA 5 deg use CAIPI Off

additional Parameters:

<sup>\*</sup>GrappaKernel 2x3

<sup>\*</sup>Improved GRAPPA on