Table of contents

\\USER

CAMRIS_BackedUP_UseTHIS

PECSOK

855756_GluCEST_TMS

localizer
anat-T1_acq-mprage
cest-none_run-L__none
cest-b1_run-L__b1
cest-mp2rage_run-L__mp2rage
cest-b0_run-L__wassr
cest-cest_run-L__cest
cest-mtr_run-L__mtr
cest-none_run-R__none
cest-b1_run-R__b1
cest-mp2rage_run-R__mp2rage
cest-b0_run-R__wassr
cest-cest_run-R__cest
cest-mtr_run-R__mtr
func-bold_task-rest__bold
fmap-topup_dir-PA__topup
svs_refvolt_230V_dacc
svsglu_wref_260V_8avg_dacc
svsglu_ws_260V_128avg_dacc

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\localizer

TA: 0:12 PM: REF Voxel size: 1.0×1.0×5.0 mmPAT: 3 Rel. SNR: 1.00 : qfl

Properties

Prio recon	On
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	Off
Wait for user to start	Off
Start measurements	Single measurement

Routine

Slice group	1
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.0 ms
TE	3.00 ms
Averages	2
Concatenations	9
Filter	Elliptical filter
Coil elements	A32

Contrast - Common

TR	7.0 ms
TE	3.00 ms
TD	0 ms
MTC	Off
Magn. preparation	None
Flip angle	15 deg
Fat suppr.	None
Water suppr.	None
SWI	Off

Contrast - Dynamic

Averages	2
Averaging mode	Short term
Reconstruction	Magnitude
Measurements	1

Contrast - Dynamic

Multiple series	Each measurement

Resolution - Common

FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
Base resolution	256
Phase resolution	100 %
Phase partial Fourier	6/8
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	3
Ref. lines PE	24
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	On

Geometry - Common

Slice group	1
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P
Slice group	2
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Slices	3
Dist. factor	200 %
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
FoV read	250 mm
FoV phase	100.0 %
Slice thickness	5.0 mm
TR	7.0 ms
Multi-slice mode	Sequential
Series	Interleaved
Concatenations	9

Geometry - AutoAlign

Slice group	1
Position	Isocenter
Orientation	Sagittal
Phase enc. dir.	A >> P

Geometry - AutoAlign

Slice group	2
Position	Isocenter
Orientation	Transversal
Phase enc. dir.	A >> P
Slice group	3
Position	Isocenter
Orientation	Coronal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	Isocenter
L	0.0 mm
P	0.0 mm
H	0.0 mm
Initial Rotation	0.00 deg
Initial Orientation	Sagittal

Geometry - Saturation

Saturation mode	Standard
Fat suppr.	None
Water suppr.	None
Special sat.	None

Geometry - Tim Planning Suite

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

Geometry - Tim CT

Tim CT mode	Off
Slices	3
Slice thickness	5.0 mm
Dist. factor	200 %
FoV read	250 mm
FoV phase	100.0 %
Segments	1

System - Miscellaneous

Positioning mode	REF
Table position	F
Table position	0 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	Off - AutoCoilSelect

System - Adjustments

B0 Shim mode	Tune up
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	Isocenter
Orientation	Transversal
Rotation	0.00 deg
A >> P	263 mm

System - Adjust Volume

R >> L	350 mm
F >> H	350 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 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	7.0 ms
Concatenations	9
Segments	1

Physio - Cardiac

Tagging	None
Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	250 mm
FoV phase	100.0 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	9

Inline - Common

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	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	15 deg
Measurements	1
Contrasts	1

Inline - MapIt

TR	7.0 ms
TE	3.00 ms

Sequence - Part 1

Introduction	On
Dimension	2D
Phase stabilisation	Off
Asymmetric echo	Allowed
Contrasts	1
Flow comp.	No
Multi-slice mode	Sequential
Bandwidth	320 Hz/Px

Sequence - Part 2

Segments	1
Acoustic noise reduction	Active
RF pulse type	Normal
Gradient mode	Normal
Excitation	Slice-sel.
RF spoiling	On

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\anat-T1_acq-mprage

TA: 4:06 PM: REF Voxel size: 0.9×0.9×1.0 mmPAT: 2 Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H11.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	160
FoV read	240 mm
FoV phase	75.0 %
Slice thickness	1.00 mm
TR	2300.0 ms
TE	3.71 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	2300.0 ms
TE	3.71 ms
Magn. preparation	Non-sel. IR
TI	1100 ms
Flip angle	7.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	75.0 %
Slice thickness	1.00 mm
Base resolution	256
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	L0.0 A20.0 H11.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
Slice oversampling	0.0 %
Slices per slab	160
FoV read	240 mm
FoV phase	75.0 %
Slice thickness	1.00 mm
TR	2300.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	L0.0 A20.0 H11.5 mm
Orientation	Transversal
Phase enc. dir.	R >> L
AutoAlign	---
Initial Position	L0.0 A20.0 H11.5
L	0.0 mm
A	20.0 mm
H	11.5 mm
Initial Rotation	90.00 deg
Initial Orientation	Transversal

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T

System - Miscellaneous

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	Brain
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	L0.0 A20.0 H11.5 mm
Orientation	Transversal
Rotation	90.00 deg
R >> L	180 mm
A >> P	240 mm
F >> H	160 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 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	2300.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI	1100 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	75.0 %
Phase resolution	100 %

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

Inline - MIP

Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	7.0 deg
Measurements	1
TR	2300.0 ms
TE	3.71 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	7.8 ms
Bandwidth	200 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	160

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-none_run-L__none

TA: 0:24 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflref

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

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

Inline - MIP

MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	1
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	SAT100PPM
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	1
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm
PPMEND	4.20 ppm
PPMSTEP	0.300 ppm

Sequence - Special

FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-b1_run-L__b1

TA: 0:48 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflb1

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

Resolution - Common

Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	3
StdDev	Off
Save original images	On

Inline - MIP

MIP-Sag	Off

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	3
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	B1MAP
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	3
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm

Sequence - Special

PPMEND	4.20 ppm
PPMSTEP	0.300 ppm
FFTSC	1.00
AVGPOW	3.56 W
STPOW	0.37 W

Sequence - Assistant

Mode	Off

PPMEND 4.20 ppm
PPMSTEP 0.300 ppm
FFTSC 1.00
AVGPOW 3.56 W
STPOW 0.37 W

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-mp2rage_run-L__mp2rage
TA: 2:00 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: Off Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	5000.0 ms
TE	2.19 ms
Averages	2
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	5000.0 ms
TE	2.19 ms
Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	5000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	290.000 V

Physio - Signal1

1st Signal/Mode	None
TR	5000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

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	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	T1 map
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Measurements	1
TR	5000.0 ms
TE	2.19 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear rot.
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.6 ms
Bandwidth	530 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	210

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-b0_run-L__wassr

TA: 4:36 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

---

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	22
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s

Contrast - Dynamic

Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0

Geometry - AutoAlign

Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	22
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	22
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2

Sequence - Special

SHOTTR	6000 ms
REQREPS	1
ACTREPS	22
SATDUR	200 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	20 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	0.00 ppm
PPMEND	1.50 ppm
PPMSTEP	0.150 ppm
FFTSC	1.00
AVGPOW	3.52 W
STPOW	0.12 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-cest_run-L__cest

TA: 3:48 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	18
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s

Contrast - Dynamic

Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm

Geometry - AutoAlign

A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off

Physio - Cardiac

FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	18
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	18
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	18

Sequence - Special

SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm
PPMEND	4.20 ppm
PPMSTEP	0.300 ppm
FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-mtr_run-L__mtr

TA: 1:00 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

---

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	4
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off

Resolution - Common

Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	4
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	4
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	4
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	20.00 ppm

Sequence - Special

PPMEND	100.00 ppm
PPMSTEP	80.000 ppm
FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-none_run-R__none

TA: 0:24 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflref

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

Positioning mode	FIX
Table position	H

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

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

Inline - MIP

MIP-Time	Off
Save original images	On

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	1
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	SAT100PPM
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	1
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm
PPMEND	4.20 ppm
PPMSTEP	0.300 ppm

Sequence - Special

FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-b1_run-R__b1

TA: 0:48 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflb1

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	3
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off

Resolution - Common

Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	3
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	3
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	B1MAP
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	3
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm

Sequence - Special

PPMEND	4.20 ppm
PPMSTEP	0.300 ppm
FFTSC	1.00
AVGPOW	3.56 W
STPOW	0.37 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-mp2rage_run-R__mp2rage
TA: 2:00 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: Off Rel. SNR: 1.00 : tfl

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	5000.0 ms
TE	2.19 ms
Averages	2
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	5000.0 ms
TE	2.19 ms
Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

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

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %

Resolution - Common

Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	None

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	5000.0 ms
Multi-slice mode	Single shot
Series	Interleaved
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	290.000 V

Physio - Signal1

1st Signal/Mode	None
TR	5000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	Non-sel. IR
TI 1	700 ms
TI 2	2700 ms
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

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	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	T1 map
Flip angle 1	4.0 deg
Flip angle 2	5.0 deg
Measurements	1
TR	5000.0 ms
TE	2.19 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	Off
Reordering	Linear rot.
Asymmetric echo	Off
Flow comp.	No
Multi-slice mode	Single shot
Echo spacing	4.6 ms
Bandwidth	530 Hz/Px

Sequence - Part 2

RF pulse type	Fast
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	210

Sequence - Nuclei

TX/RX Nucleus	1H
TX/RX delta frequency	0 Hz
TX Nucleus	None
TX delta frequency	0 Hz
Coil elements	A32

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-b0_run-R__wassr

TA: 4:36 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	22
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s

Contrast - Dynamic

Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Pause after meas. 18	0.0 s
Pause after meas. 19	0.0 s
Pause after meas. 20	0.0 s
Pause after meas. 21	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0

Geometry - AutoAlign

Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	22
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	22
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2

Sequence - Special

SHOTTR	6000 ms
REQREPS	1
ACTREPS	22
SATDUR	200 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	20 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	0.00 ppm
PPMEND	1.50 ppm
PPMSTEP	0.150 ppm
FFTSC	1.00
AVGPOW	3.52 W
STPOW	0.12 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-cest_run-R__cest

TA: 3:48 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	18
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s
Pause after meas. 6	0.0 s
Pause after meas. 7	0.0 s
Pause after meas. 8	0.0 s
Pause after meas. 9	0.0 s
Pause after meas. 10	0.0 s
Pause after meas. 11	0.0 s
Pause after meas. 12	0.0 s
Pause after meas. 13	0.0 s

Contrast - Dynamic

Pause after meas. 14	0.0 s
Pause after meas. 15	0.0 s
Pause after meas. 16	0.0 s
Pause after meas. 17	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm

Geometry - AutoAlign

A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off

Physio - Cardiac

FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	18
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	18
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	18

Sequence - Special

SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	1.80 ppm
PPMEND	4.20 ppm
PPMSTEP	0.300 ppm
FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\cest-mtr_run-R__mtr

TA: 1:00 PM: FIX Voxel size: 1.0×1.0×2.0 mmPAT: 2 Rel. SNR: 1.00 : tflcest

Properties

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

Routine

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
TE	1.79 ms
Averages	1
Concatenations	1
Filter	None
Coil elements	A32

Contrast - Common

TR	6000.0 ms
TE	1.79 ms
Magn. preparation	None
Flip angle	6.0 deg
Fat suppr.	None
Water suppr.	None

Contrast - Dynamic

Averages	1
Averaging mode	Long term
Reconstruction	Magnitude
Measurements	4
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Multiple series	Off

Resolution - Common

FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
Base resolution	240
Phase resolution	100 %
Slice resolution	100 %
Phase partial Fourier	Off
Slice partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Accel. factor 3D	1
Reference scan mode	Integrated

Resolution - Filter Image

Image Filter	Off
Distortion Corr.	Off
Prescan Normalize	Off
Normalize	Off
B1 filter	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off

Geometry - Common

Slab group	1
Slabs	1
Dist. factor	50 %
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
Slice oversampling	0.0 %
Slices per slab	12
FoV read	240 mm
FoV phase	87.5 %
Slice thickness	2.00 mm
TR	6000.0 ms
Multi-slice mode	Sequential
Series	Ascending
Concatenations	1

Geometry - AutoAlign

Slab group	1
Position	R19.8 A12.1 F10.7 mm
Orientation	S > C1.0
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	R19.8 A12.1 F10.7
R	19.8 mm
A	12.1 mm
F	10.7 mm
Initial Rotation	0.00 deg
Initial Orientation	S > C
S > C	1.0
> T	0.0

Geometry - Navigator

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

B0 Shim mode	Standard
B1 Shim mode	TrueForm
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R19.8 A12.1 F10.7 mm
! Orientation	S > C1.0
! Rotation	0.00 deg
! A >> P	196 mm
! F >> H	240 mm
! R >> L	24 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.500
Reset	Off
! Ref. amplitude 1H	220.000 V

Physio - Signal1

1st Signal/Mode	None
TR	6000.0 ms
Concatenations	1

Physio - Cardiac

Magn. preparation	None
Fat suppr.	None
Dark blood	Off
FoV read	240 mm
FoV phase	87.5 %
Phase resolution	100 %

Physio - PACE

Resp. control	Off
Concatenations	1

Inline - Common

Subtract	Off
Measurements	4
StdDev	Off
Save original images	On

Inline - MIP

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

Inline - Composing

Inline Composing	Off
Distortion Corr.	Off

Inline - MapIt

Save original images	On
MapIt	None
Flip angle	6.0 deg
Measurements	4
TR	6000.0 ms
TE	1.79 ms

Sequence - Part 1

Introduction	Off
Dimension	3D
Elliptical scanning	On
Reordering	Spiral
Asymmetric echo	Allowed
Flow comp.	No
Multi-slice mode	Sequential
Echo spacing	3.9 ms
Bandwidth	690 Hz/Px

Sequence - Part 2

RF pulse type	Normal
Gradient mode	Fast
Excitation	Slab-sel.
RF spoiling	On
Incr. Gradient spoiling	Off
Turbo factor	702

Sequence - Special

ACQTYPE	GRE
PREPTYPE	CESTZ2
PREPTI	800 ms
FSFLIP	90 deg
FSPPM	-60 x.1ppm
SHOTS	2
DUMMY SHOTS	2
SHOTTR	6000 ms
REQREPS	1
ACTREPS	4
SATDUR	800 ms
SATPW1	100 ms
MAXSL/TE	50 ms
PREPB1	210 Hz
B1HIGH	500 Hz
B1LOW	100 Hz
SL90PW	250 us
FLCRPW	80 us
MTOFFSET	6000 Hz
DELTE	1000 us
MP2RTI1	300 ms
MP2RTI2	1000 ms
VERSION	1 VE12U
T1DELAYMS	0 ms
DUTYCYC	99.0
B1MAPFLIP	20 deg
PPMBEG	20.00 ppm

Sequence - Special

PPMEND	100.00 ppm
PPMSTEP	80.000 ppm
FFTSC	1.00
AVGPOW	12.42 W
STPOW	53.52 W

Sequence - Assistant

Mode	Off

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\func-bold_task-rest__bold

TA: 10:28 PM: FIX Voxel size: 1.5×1.5×1.5 mmPAT: 2 Rel. SNR: 1.00 : epfid

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	84
Dist. factor	0 %
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	1000 ms
TE	30.00 ms
Multi-band accel. factor	6
Filter	None
Coil elements	A32

Contrast - Common

TR	1000 ms
TE	30.00 ms
MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	600
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	144
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	84
Dist. factor	0 %
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	1000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	6

Geometry - AutoAlign

Slice group	1
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L1.2 A0.7 F7.8
L	1.2 mm
A	0.7 mm
F	7.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R0.6 A1.4 F18.8 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	208 mm
! F >> H	250 mm
! R >> L	158 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 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	1000 ms
Multi-band accel. factor	6

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	600
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.62 ms
Bandwidth	2170 Hz/Px

Sequence - Part 2

EPI factor	144
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	5000 us
EPI noise scans	0
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	Off
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Physio recording	File
Triggering scheme	Standard

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\fmap-topup_dir-PA__topup

TA: 0:33 PM: FIX Voxel size: 1.5×1.5×1.5 mmPAT: 2 Rel. SNR: 1.00 : epfid

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	84
Dist. factor	0 %
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Phase oversampling	0 %
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	1000 ms
TE	30.00 ms
Multi-band accel. factor	6
Filter	None
Coil elements	A32

Contrast - Common

TR	1000 ms
TE	30.00 ms
MTC	Off
Magn. preparation	None
Flip angle	45 deg
Fat suppr.	Fat sat.

Contrast - Dynamic

Averaging mode	Long term
Reconstruction	Magnitude
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Resolution - Common

FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
Base resolution	144
Phase resolution	100 %
Phase partial Fourier	Off
Interpolation	Off

Resolution - iPAT

PAT mode	GRAPPA
Accel. factor PE	2
Ref. lines PE	24
Reference scan mode	Single-shot

Resolution - Filter Image

Distortion Corr.	Off
Prescan Normalize	Off

Resolution - Filter Rawdata

Raw filter	Off
Elliptical filter	Off
Hamming	Off

Geometry - Common

Slice group	1
Slices	84
Dist. factor	0 %
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
FoV read	220 mm
FoV phase	100.0 %
Slice thickness	1.50 mm
TR	1000 ms
Multi-slice mode	Interleaved
Series	Interleaved
Multi-band accel. factor	6

Geometry - AutoAlign

Slice group	1
Position	L1.2 A0.7 F7.8 mm
Orientation	Transversal
Phase enc. dir.	A >> P
AutoAlign	---
Initial Position	L1.2 A0.7 F7.8
L	1.2 mm
A	0.7 mm
F	7.8 mm
Initial Rotation	0.00 deg
Initial Orientation	Transversal

Geometry - Saturation

Fat suppr.	Fat sat.
Special sat.	None

Geometry - Tim Planning Suite

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

System - Miscellaneous

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

System - Adjustments

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

System - Adjust Volume

! Position	R0.6 A1.4 F18.8 mm
! Orientation	Sagittal
! Rotation	0.00 deg
! A >> P	208 mm
! F >> H	250 mm
! R >> L	158 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 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	1000 ms
Multi-band accel. factor	6

BOLD

GLM Statistics	Off
Dynamic t-maps	Off
Ignore meas. at start	0
Ignore after transition	0
Model transition states	On
Temp. highpass filter	On
Threshold	4.00
Paradigm size	20
Meas[1]	Baseline
Meas[2]	Baseline
Meas[3]	Baseline
Meas[4]	Baseline
Meas[5]	Baseline
Meas[6]	Baseline
Meas[7]	Baseline
Meas[8]	Baseline
Meas[9]	Baseline
Meas[10]	Baseline
Meas[11]	Active
Meas[12]	Active
Meas[13]	Active
Meas[14]	Active
Meas[15]	Active
Meas[16]	Active
Meas[17]	Active
Meas[18]	Active
Meas[19]	Active
Meas[20]	Active
Motion correction	Off
Spatial filter	Off
Measurements	5
Delay in TR	0 ms
Multiple series	Off

Sequence - Part 1

Introduction	Off
Contrasts	1
Flow comp.	No
Multi-slice mode	Interleaved
Free echo spacing	Off
Echo spacing	0.62 ms
Bandwidth	2170 Hz/Px

Sequence - Part 2

EPI factor	144
Gradient mode	Fast
RF spoiling	Off

Sequence - Special

Excite pulse duration	5000 us
EPI noise scans	0
Single-band images	Off
MB LeakBlock kernel	On
MB dual kernel	Off
MB RF phase scramble	Off
SENSE1 coil combine	Off
Invert RO/PE polarity	On
Disable freq. update	Off
Force equal slice timing	Off
Online multi-band recon.	Online
FFT scale factor	1.00
Fat saturation FA	110.0 deg
Physio recording	File
Triggering scheme	Standard

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\svs_refvolt_230V_dacc
TA: 1:12 PM: REF Vol: 10 ×40 ×15 mmRel. SNR: 1.00 : svs_refvolt

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

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol A >> P	40 mm
Vol F >> H	15 mm
TR	12000 ms
TE	24.0 ms
Averages	1
Filter	None
Coil elements	A32

Contrast

TR	12000 ms
TE	24.0 ms
TM	15 ms
Averages	1
Flip angle	90 deg
Water suppr.	None
Measurements	6
Pause after meas. 1	0.0 s
Pause after meas. 2	0.0 s
Pause after meas. 3	0.0 s
Pause after meas. 4	0.0 s
Pause after meas. 5	0.0 s

Resolution - Common

Prescan Normalize	Off
Vector size	1024

Geometry - Common

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol R >> L	10 mm
Vol F >> H	15 mm

Geometry - AutoAlign

AutoAlign	---
Initial Position	R6.9 A41.7 H33.7
R	6.9 mm
A	41.7 mm
H	33.7 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C

Geometry - AutoAlign

T > C	22.9
> S	0.0

System - Miscellaneous

Positioning mode	REF
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Save single averages	Off
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adj. water suppr.	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90.00 deg
R >> L	10 mm
A >> P	40 mm
F >> H	15 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	230.000 V

Sequence - Common

Preparation scans	0
Delta frequency	0.0 ppm
Ref. scan mode	Off
Phase cycling	Auto
Bandwidth	2000 Hz
Acquisition duration	512 ms
Remove oversampling	Off
Freq. corr. accumulation	Off

Sequence - Special

FLIPBEG	30.0 deg
FLIPEND	180.0 deg
FLIPSTEP	30.0 deg
NREPS	6

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\svsglu_wref_260V_8avg_da cc
TA: 0:36 PM: FIX Vol: 10 ×40 ×15 mmRel. SNR: 1.00 : svs_wref

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

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol A >> P	40 mm
Vol F >> H	15 mm
TR	3000 ms
TE	23.0 ms
Averages	8
Filter	None
Coil elements	A32

Contrast

TR	3000 ms
TE	23.0 ms
Averages	8
Flip angle	90 deg
Water suppr.	Only RF off
Water suppr. BW	150 Hz
Spectral suppr.	None
Measurements	1

Resolution - Common

Prescan Normalize	Off
Vector size	2048

Geometry - Common

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol R >> L	10 mm
Vol F >> H	15 mm

Geometry - AutoAlign

AutoAlign	---
Initial Position	R6.9 A41.7 H33.7
R	6.9 mm
A	41.7 mm
H	33.7 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	22.9
> S	0.0

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Save single averages	On
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adj. water suppr.	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R6.9 A41.7 H33.7 mm
! Orientation	T > C22.9
! Rotation	90.00 deg
! R >> L	10 mm
! A >> P	40 mm
! F >> H	10 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3000 ms

Physio - PACE

Resp. control	Off

Sequence - Common

Preparation scans	4
Delta frequency	2.35 ppm
Ref. scan mode	Off
Phase cycling	Auto
Bandwidth	2000 Hz
Acquisition duration	1024 ms
Remove oversampling	Off
Freq. corr. accumulation	Off

Sequence - Special

ACQTYPE	WATREF
WSSCALE	1.00
WATERT1	1500 ms
RFPUL	SLR
DIRT1LOW	1000 ms
DIRT1HI	2000 ms
RISETIME	20.0 us
IRPULCTR	0.0 ppm

ACQTYPE	WATREF
WSSCALE	1.00
WATERT1	1500 ms
RFPUL	SLR
DIRT1LOW	1000 ms
DIRT1HI	2000 ms
RISETIME	20.0 us
IRPULCTR	0.0 ppm

\\USER\CAMRIS_BackedUP_UseTHIS\PECSOK\855756_GluCEST_TMS\svsglu_ws_260V_128avg_da cc
TA: 6:36 PM: FIX Vol: 10 ×40 ×15 mmRel. SNR: 1.00 : svs_ws

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

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol A >> P	40 mm
Vol F >> H	15 mm
TR	3000 ms
TE	23.0 ms
Averages	128
Filter	None
Coil elements	A32

Contrast

TR	3000 ms
TE	23.0 ms
Averages	128
Flip angle	90 deg
Water suppr.	Only RF off
Water suppr. BW	150 Hz
Spectral suppr.	None
Measurements	1

Resolution - Common

Prescan Normalize	Off
Vector size	2048

Geometry - Common

Position	R6.9 A41.7 H33.7 mm
Orientation	T > C22.9
Rotation	90 deg
Vol A >> P	40 mm
Vol R >> L	10 mm
Vol F >> H	15 mm

Geometry - AutoAlign

AutoAlign	---
Initial Position	R6.9 A41.7 H33.7
R	6.9 mm
A	41.7 mm
H	33.7 mm
Initial Rotation	90.00 deg
Initial Orientation	T > C
T > C	22.9
> S	0.0

Geometry - Navigator

System - Miscellaneous

Positioning mode	FIX
Table position	H
Table position	0 mm
MSMA	S - C - T
Sagittal	R >> L
Coronal	A >> P
Transversal	F >> H
Save uncombined	Off
Save single averages	On
AutoAlign	---
Coil Select Mode	Default

System - Adjustments

B0 Shim mode	Advanced
B1 Shim mode	TrueForm
Adj. water suppr.	Off
Confirm freq. adjustment	Off
Assume Dominant Fat	Off
Assume Silicone	Off
Adjustment Tolerance	Auto

System - Adjust Volume

! Position	R6.9 A41.7 H33.7 mm
! Orientation	T > C22.9
! Rotation	90.00 deg
! R >> L	10 mm
! A >> P	40 mm
! F >> H	10 mm
Reset	Off

System - Tx/Rx

Frequency 1H	296.940714 MHz
Correction factor	1
Gain	High
Img. Scale Cor.	1.000
Reset	Off
! Ref. amplitude 1H	260.000 V

Physio - Signal1

1st Signal/Mode	None
TR	3000 ms

Physio - PACE

Resp. control	Off

Sequence - Common

Preparation scans	4
Delta frequency	2.35 ppm
Ref. scan mode	Off
Phase cycling	Auto
Bandwidth	2000 Hz
Acquisition duration	1024 ms
Remove oversampling	Off
Freq. corr. accumulation	Off

Sequence - Special

ACQTYPE	METAB_MM
WSSCALE	1.00
WATERT1	1500 ms
RFPUL	SLR
DIRT1LOW	1000 ms
DIRT1HI	2000 ms
RISETIME	20.0 us
IRPULCTR	0.0 ppm

Sequence - Special

ACQTYPE	METAB_MM
WSSCALE	1.00
WATERT1	1500 ms
RFPUL	SLR
DIRT1LOW	1000 ms