Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

3 plane localiser - 3 plane localiser

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*Seq, EDR, Fast, SS, ARC*
Phase	*2.50*

SCAN RANGE	
FOV	*50.0*
Slice Thickness	*6.00*
Slice Spacing	*5.0*
Overlap Locations	*0*

ACQ TIMING	
Freq	*256*
Phase	*128*
Freq DIR	*Unswap*
# of Acq. Before Pause	*0*
Phase FOV	*1.00*
Auto Shim	*On*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*Off*

SCAN TIMING	
TE	*100.0*
Number of Echoes	*1*
TR	*Minimum*
Receiver Bandwidth	*83.33*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV2	*240.00*
User CV13	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

3 plane localiser - 3 plane localiser

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

ARDL H Cor SSFSE 3mm TE 60 ARDLHi - ARDL H Cor SSFSE 3mm TE 60 ARDLHi

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*EDR, TRF, Fast, SS, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*40.0*
Slice Thickness	*3.00*
Slice Spacing	*0.3*
Overlap Locations	*0*
Number of Slices	*50*

ACQ TIMING	
Freq	*288*
Phase	*224*
Freq DIR	*S/I*
NEX	*1.00*
# of Acq. Before Pause	*25*
Phase FOV	*1.00*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
TE	*62.0*
Number of Echoes	*1*
TR	*Minimum*
Receiver Bandwidth	*83.33*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV1	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

ARDL H Cor SSFSE 3mm TE 60 ARDLHi - ARDL H Cor SSFSE 3mm TE 60 ARDLHi

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

ARDL H Ax Dual Echo ARDL ZIP 512 H - ARDL H Ax Dual Echo ARDL ZIP 512 H

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*SPGR*
Imaging Options	*EDR, Fast, ZIP512, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*40.0*
Slice Thickness	*5.00*
Slice Spacing	*0.6*
Overlap Locations	*0*
Number of Slices	*36*

ACQ TIMING	
Freq	*224*
Phase	*224*
Freq DIR	*R/L*
NEX	*1.00*
# of Acq. Before Pause	*1*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

USER CVS	
User CV20	*1.00*
TR Min	*120.0*
TR Max	*250.0*
User CV Mask2	*0*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Number of Diffusion Directions	*0*
Dual Spin Echo	*Off*
Diffusion Tenser Processing Output	*No Selection*
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

SCAN TIMING	
Flip Angle	*60*
Number of Echoes	*2*
TR	*120.0*

IMAGE ENHANCE	
Filter Choice	*None*

GATING/TRIGGER	
Pause After Navigator Prescan	*0*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
SAT Location	*S*
SAT Location	*I*
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

ARDL H Ax Dual Echo ARDL ZIP 512 H - ARDL H Ax Dual Echo ARDL ZIP 512 H

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax LAVA ASPIR ardl med pre - Ax LAVA ASPIR ardl med pre

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, ARC, HS*
PSD Name	*efgre3d_aspir*
Phase	*2.00*
Slice	*1.30*
HyperSense	*1.10*

SCAN RANGE	
FOV	*44.0*
Slice Thickness	*2.20*
Location per Slab	*112*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*288*
Phase	*200*
Freq DIR	*R/L*
NEX	*1.00*
Phase FOV	*0.70*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12.0*
Number of Echoes	*1*
TI	*24*
Receiver Bandwidth	*50.00*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV4	*10.20*
User CV6	*1.00*
User CV34	*90.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*10.2*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

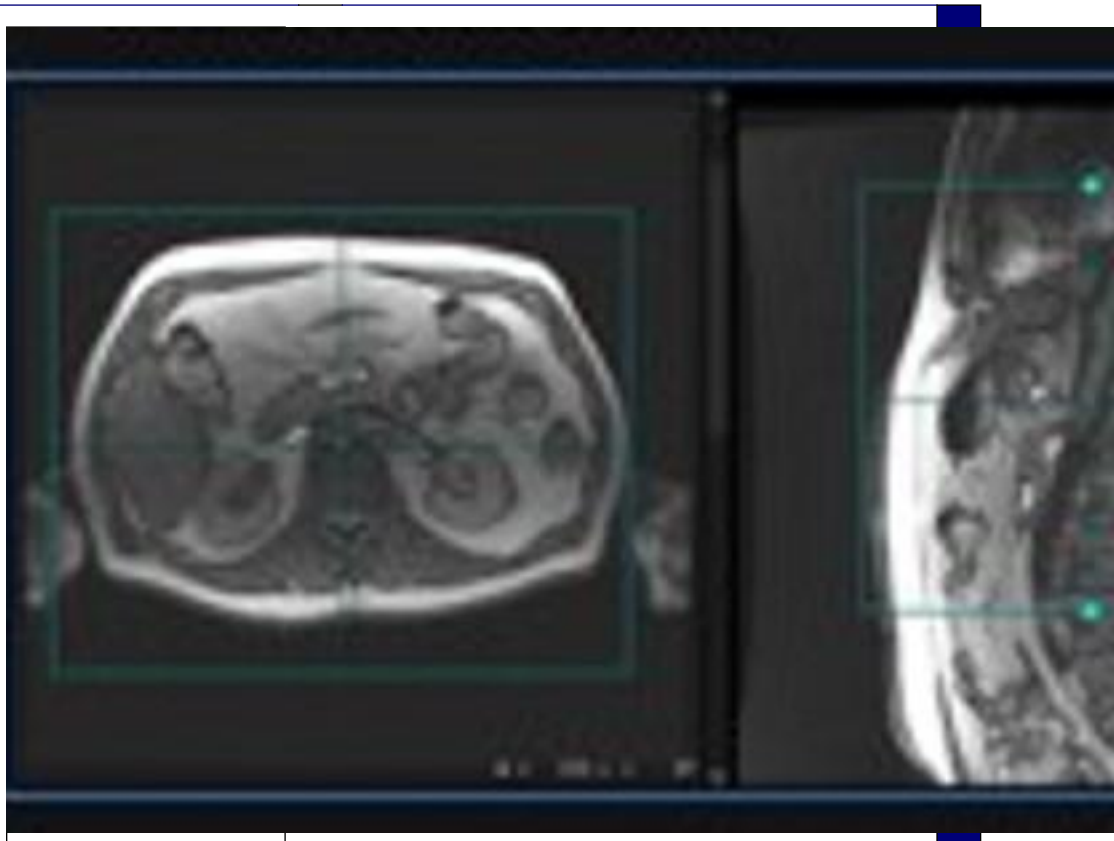
DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

Ax LAVA ASPIR ardl med pre - Ax LAVA ASPIR ardl med pre

OTHERS

Protocol Notes



LAVA Considerations:
-Use LAVA for abdominal scanning, in particular, liver imaging
-LAVA automatically turns on the ARC Imaging Option. If you deselect ARC and select ASSET, you must have acquired a calibration scan prior to acquiring the LAVA san. If any or all of these scan parameters are selected (ASSET, Hyperband, PURE), and if you select ON from the Calibration in Prescan menu, which is located on the Details tab, a calibration scan is acquired during Auto Prescan
Consider the following with Fat/Water SAT:
-The overall SNR of Improved Fat SAT images may slightly decrease. Consider adjusting parameters with affect SNR, e.g. increase NEX, increase the FOV, decrease matrix size, decrease the Recieve Bandwidth
-Uneven saturation can still occur as a result of local inhomogeneities, e.g. at air/tissue interfaces when the anatomy of interest is non-uniform
-Site or patient specific inhomogeneities may be unavoidable even at isocenter. The result can be uneven suppression. Techniques for Fat Saturation include: Chemical Fat SAT, STIR, ASPIR, and Flex.
-Consider using shom volumes to increase Fat SAT homogeneity.
Localized TG is used to improve the accuracy of the TG for a specifically designated area, such as cardiac, pelvis or prostate imaging, or when an anatomy is positioned at a patient's side. Localize TG can be used wth any pulse sequence to improve signal homogeneity and is found under the Shim Volume menu

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax LAVA ASPIR Mph ardl MED - Ax LAVA ASPIR Mph ardl MED

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, MPh, SmartPrep, ARC, HS*
PSD Name	*efgre3d_aspir*
Phase	*2.00*
Slice	*1.30*
HyperSense	*1.10*

SCAN RANGE	
FOV	*44.0*
Slice Thickness	*2.20*
Location per Slab	*112*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*288*
Phase	*200*
Freq DIR	*R/L*
NEX	*1.00*
# of Acq. Before Pause	*1*
Phase FOV	*0.70*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*7*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12.0*
Number of Echoes	*1*
TI	*24*
Receiver Bandwidth	*50.00*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV2	*40.00*
User CV4	*4.00*
User CV6	*1.00*
User CV34	*90.00*
User CV Mask2	*8*

MULTI-PHASE	
Slice per Location	*3*
Delay after Acquisition	*Minimum*
Seperate Series	*0*
Delay after Acquisition without AV	*17*
Trigger Delay without AV	*4*
Mask Phase	*0*
Mask Pause	*0*

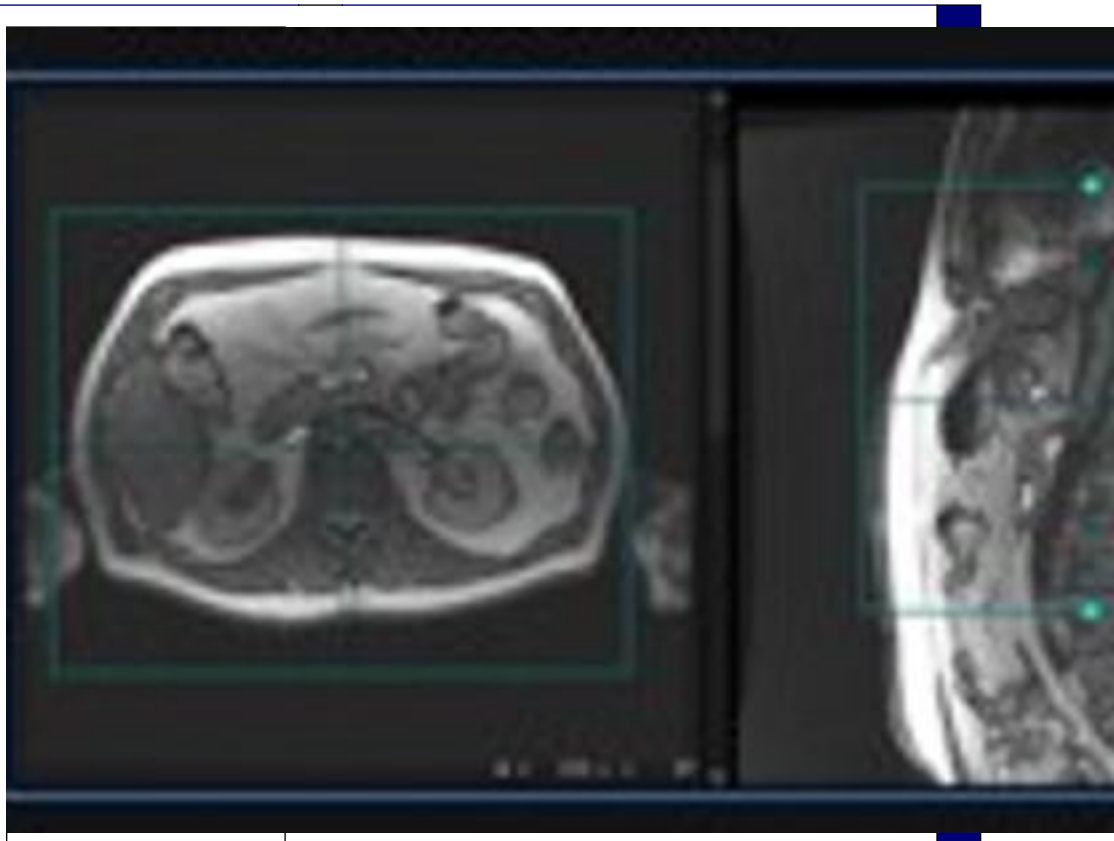
DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

Ax LAVA ASPIR Mph ardl MED - Ax LAVA ASPIR Mph ardl MED

OTHERS

Protocol Notes



LAVA Considerations:
-Use LAVA for abdominal scanning, in particular, liver imaging
-LAVA automatically turns on the ARC Imaging Option. If you deselect ARC and select ASSET, you must have acquired a calibration scan prior to acquiring the LAVA san. If any or all of these scan parameters are selected (ASSET, Hyperband, PURE), and if you select ON from the Calibration in Prescan menu, which is located on the Details tab, a calibration scan is acquired during Auto Prescan
Consider the following with Fat/Water SAT:
-The overall SNR of Improved Fat SAT images may slightly decrease. Consider adjusting parameters with affect SNR, e.g. increase NEX, increase the FOV, decrease matrix size, decrease the Recieve Bandwidth
-Uneven saturation can still occur as a result of local inhomogeneities, e.g. at air/tissue interfaces when the anatomy of interest is non-uniform
-Site or patient specific inhomogeneities may be unavoidable even at isocenter. The result can be uneven suppression. Techniques for Fat Saturation include: Chemical Fat SAT, STIR, ASPIR, and Flex.
-Consider using shom volumes to increase Fat SAT homogeneity.
Localized TG is used to improve the accuracy of the TG for a specifically designated area, such as cardiac, pelvis or prostate imaging, or when an anatomy is positioned at a patient's side. Localize TG can be used wth any pulse sequence to improve signal homogeneity and is found under the Shim Volume menu

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

ADRL Ax SSFSE TE 160 5mm ARDL med - ADRL Ax SSFSE TE 160 5mm ARDL med

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*EDR, Fast, SS, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*42.0*
Slice Thickness	*5.00*
Slice Spacing	*0.3*
Overlap Locations	*0*
Number of Slices	*37*

ACQ TIMING	
Freq	*260*
Phase	*224*
Freq DIR	*R/L*
NEX	*1.00*
# of Acq. Before Pause	*16*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
TE	*162.0*
Number of Echoes	*1*
TR	*Minimum*
Receiver Bandwidth	*90.91*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV1	*1.00*
User CV2	*240.00*
User CV13	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*Yes*

ADRL Ax SSFSE TE 160 5mm ARDL med - ADRL Ax SSFSE TE 160 5mm ARDL med

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

ARDL Ax SSFSE FS TE 90 3mm ARDL HIGH - ARDL Ax SSFSE FS TE 90 3mm ARDL HIGH

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*EDR, Fast, SS, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*42.0*
Slice Thickness	*5.00*
Slice Spacing	*0.5*
Overlap Locations	*0*
Number of Slices	*36*

ACQ TIMING	
Freq	*260*
Phase	*256*
Freq DIR	*R/L*
NEX	*1.00*
# of Acq. Before Pause	*16*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
TE	*90.0*
Number of Echoes	*1*
TR	*Minimum*
TI	*130*
Receiver Bandwidth	*83.33*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV1	*1.00*
User CV2	*240.00*
User CV13	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Number of Diffusion Directions	*0*
Dual Spin Echo	*Off*
Diffusion Tenser Processing Output	*No Selection*
Recon All Images	*On*
Multi b-values	*1000.0;*
Multi NEX Values	*1.0;*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*Yes*

ARDL Ax SSFSE FS TE 90 3mm ARDL HIGH - ARDL Ax SSFSE FS TE 90 3mm ARDL HIGH

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

DWI DL Ax Nav high - DWI DL Ax Nav high

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*EDR, EPI, DIFF, Asset, Nav*
Phase	*2.00*

SCAN RANGE	
FOV	*40.0*
Slice Thickness	*5.00*
Slice Spacing	*0.4*
Overlap Locations	*0*
Number of Slices	*37*

ACQ TIMING	
Freq	*90*
Phase	*100*
Freq DIR	*R/L*
Phase FOV	*1.00*
Auto Shim	*Auto*
Phase Correction	*Yes*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

USER CVS	
User CV0	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Optimized TE	*Yes*
Diffusion Directions	*All*
Number of Diffusion Directions	*3*
Number of T2 Images	*0*
Dual Spin Echo	*Off*
Recon All Images	*On*
Multi b-values	*100.0;600.0;*
Multi NEX Values	*2.0;4.0;*
Real Time Field Adjustment	*1*
# Synthetic b-values	*1*
Synthetic b-value	*800.0;*

TRACKER	
Tracker Length	*120.0*
Tracker Thickness	*20.0*

SCAN TIMING	
TE	*Minimum*
Number of Echoes	*1*
Number of Shots	*1*

IMAGE ENHANCE	
Filter Choice	*None*

GATING/TRIGGER	
Resp. Trigger Window	*30*
Acceptance Window	*2.0*
Run RR Measurement	*1*
Auto Trigger Time	*5*
Navigator Pre Scan Time	*10*
Max RR Measurement Time	*20*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

CONTRAST	
Contrast Yes/No	*Yes*

DWI DL Ax Nav high - DWI DL Ax Nav high

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

3D Ax LAVA Star - 3D Ax LAVA Star

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, ARC, Star*
PSD Name	*efgre3d_aspir*
Phase	*1.50*
Slice	*2.00*

SCAN RANGE	
FOV	*40.0*
Slice Thickness	*2.20*
Location per Slab	*100*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*288*
Freq DIR	*R/L*
NEX	*1.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

OTHERS	
Protocol Notes	*Streak artifacts can increase from arm movement and incomplete fat suppression* *To decrease streak artifacts:* *Increase NEX* *Decrease phase acceleration* *Raise arms above head* *Increase number of spokes=less streaks*

SCAN TIMING	
Flip Angle	*12*
Number of Echoes	*1*
TI	*23*
Receiver Bandwidth	*62.50*

IMAGE ENHANCE	
Filter Choice	*A*

USER CVS	
User CV30	*1.00*
User CV34	*70.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

3D Ax LAVA Star - 3D Ax LAVA Star

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax IDEAL IQ - Ax IDEAL IQ

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*IDEAL IQ*
Imaging Options	*EDR, Fast, IDEAL, ARC*
IDEAL	*207*
Phase	*2.00*
Slice	*1.00*

SCAN RANGE	
FOV	*40.0*
Slice Thickness	*6.0*
Location per Slab	*32*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*224*
Phase	*192*
Freq DIR	*R/L*
NEX	*0.50*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
Slice Order	*Interleaved*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*Off*

SCAN TIMING	
Flip Angle	*8*
TE	*Min Full*
Number of Echoes	*6*
Echo Train Length	*6*
Number of Shots	*1*
Receiver Bandwidth	*100.00*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV4	*8.70*
User CV30	*1.00*
User CV Mask2	*0*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*8.7*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

Ax IDEAL IQ - Ax IDEAL IQ

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax LAVA ASPIR ardl med delayed - Ax LAVA ASPIR ardl med delayed

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, ARC, HS*
PSD Name	*efgre3d_aspir*
Phase	*2.00*
Slice	*1.30*
HyperSense	*1.10*

SCAN RANGE	
FOV	*44.0*
Slice Thickness	*2.20*
Location per Slab	*112*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*288*
Phase	*200*
Freq DIR	*R/L*
NEX	*1.00*
Phase FOV	*0.70*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12.0*
Number of Echoes	*1*
TI	*24*
Receiver Bandwidth	*50.00*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV4	*10.20*
User CV6	*1.00*
User CV34	*90.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*10.2*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

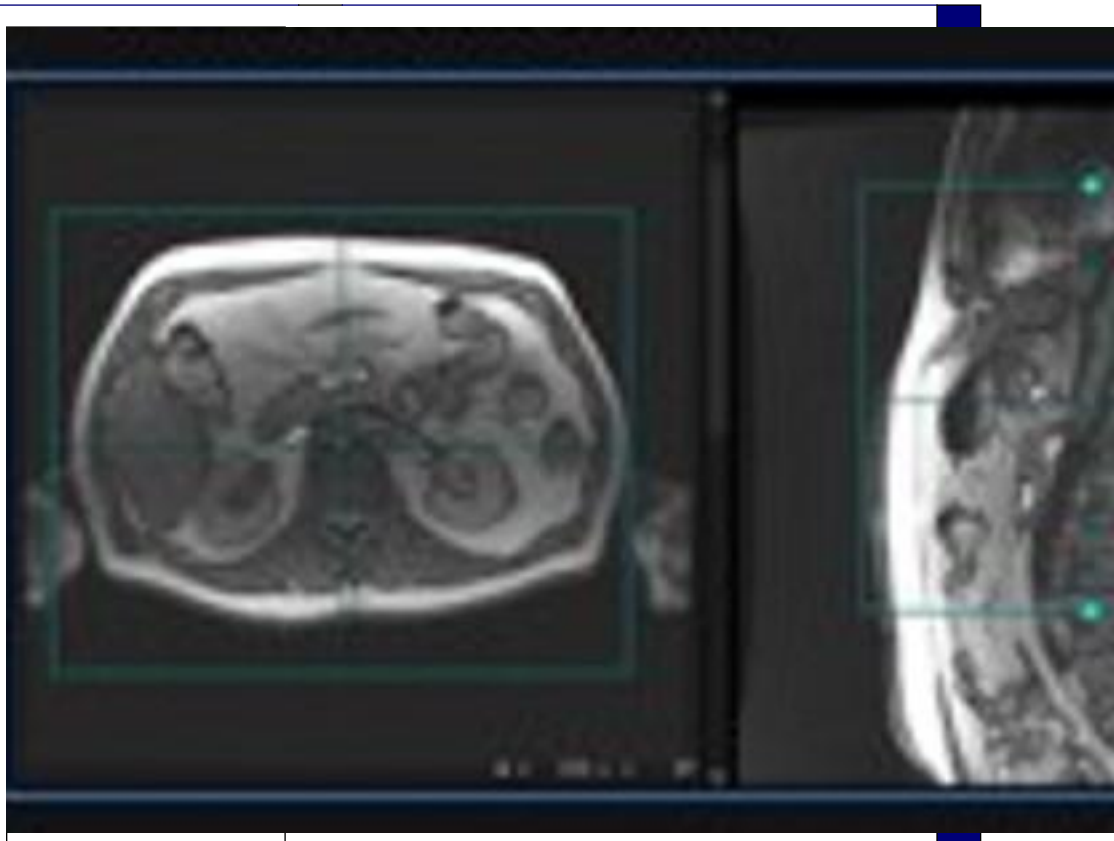
DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

Ax LAVA ASPIR ardl med delayed - Ax LAVA ASPIR ardl med delayed

OTHERS

Protocol Notes



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Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

COR LAVA ASPIR ardl med - COR LAVA ASPIR ardl med

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, ARC, HS*
PSD Name	*efgre3d_aspir*
Phase	*2.00*
Slice	*1.40*
HyperSense	*1.20*

SCAN RANGE	
FOV	*45.0*
Slice Thickness	*2.30*
Location per Slab	*112*
Overlap Locations	*0*

ACQ TIMING	
Freq	*300*
Phase	*192*
Freq DIR	*S/I*
NEX	*1.00*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12.0*
Number of Echoes	*1*
TI	*24*
Receiver Bandwidth	*62.50*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV4	*10.20*
User CV6	*1.00*
User CV34	*90.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*10.2*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

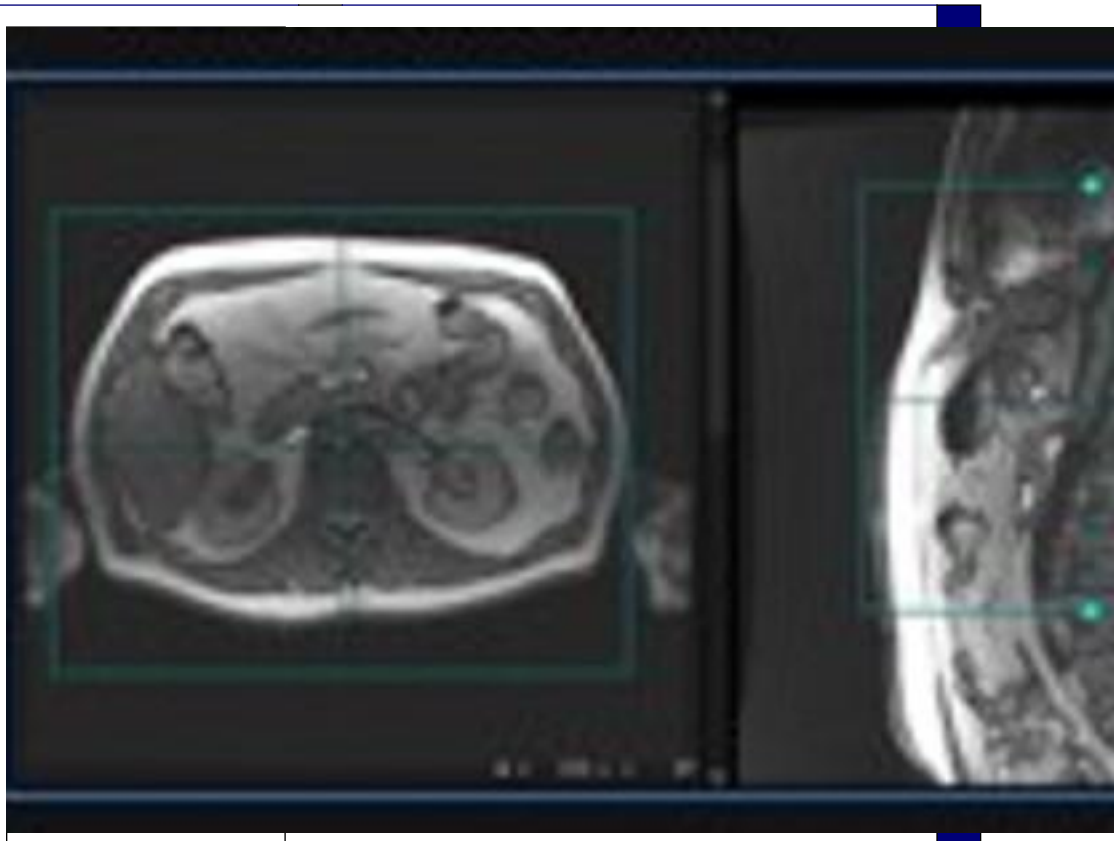
DIFFUSION	
Recon All Images	*On*
Multi b-values	*1000.0;*
Multi NEX Values	*1.0;*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

COR LAVA ASPIR ardl med - COR LAVA ASPIR ardl med

OTHERS

Protocol Notes



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Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

---option--- ---option---

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*Seq, EDR, TRF, Fast, SS, FR, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*48.0*
Slice Thickness	*8.0*
Slice Spacing	*10.0*

ACQ TIMING	
Freq	*384*
Phase	*160*
Freq DIR	*Unswap*
# of Acq. Before Pause	*0*
Phase FOV	*1.00*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Quadrature*
Excitation Mode	*Selective*

USER CVS	
User CV1	*1.00*
User CV39	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
Multi b-values	*1000.0;*
Multi NEX Values	*1;*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

SCAN TIMING	
TE	*80.0*
Number of Echoes	*1*
TR	*700.0*
Receiver Bandwidth	*83.33*

IMAGE ENHANCE	
Filter Choice	*None*

GATING/TRIGGER	
Auto Trigger Type	*Off*

FMRI	
PSD Trigger	*Internal*
Slice Order	*Interleaved*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*Off*

---option--- ---option---

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

sag SSFSE BH - sag SSFSE BH

IMAGING PARAMETERS	
Imaging Mode	*2D*
Pulse Sequence	*Spin Echo*
Imaging Options	*EDR, Fast, SS, ARC*
Phase	*2.00*

SCAN RANGE	
FOV	*50.0*
Slice Thickness	*4.00*
Slice Spacing	*1.0*
Overlap Locations	*0*
Number of Slices	*20*

ACQ TIMING	
Freq	*256*
Phase	*256*
Freq DIR	*S/I*
NEX	*1.00*
# of Acq. Before Pause	*15*
Phase FOV	*1.00*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
TE	*90.0*
Number of Echoes	*1*
TR	*1000.0*
Receiver Bandwidth	*90.91*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV1	*1.00*
User CV2	*240.00*
User CV13	*1.00*
User CV Mask2	*256*

MULTI-PHASE	
Seperate Series	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

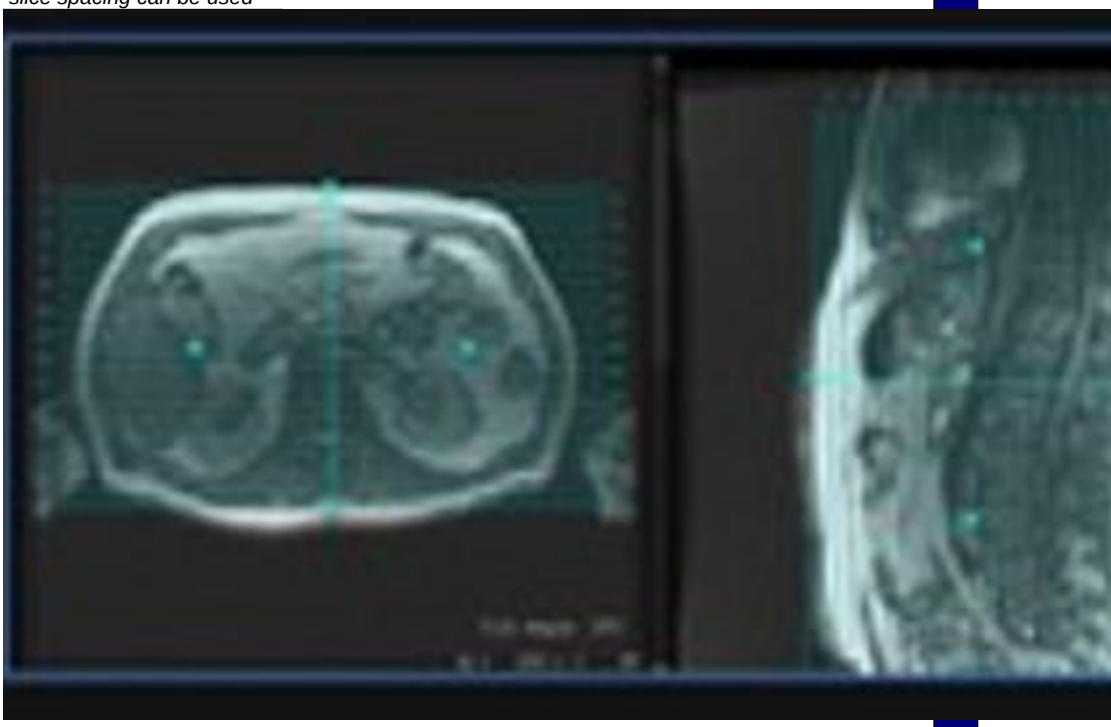
CONTRAST	
Contrast Yes/No	*No*

sag SSFSE BH - sag SSFSE BH

OTHERS

Protocol Notes

General Considerations:
-To avoid contrast signal differences between contiguous slices, use a slice spacing >20% of slice thickness. If number of acquisitions is >1, then 0 slice spacing can be used



SSFSE Considerations:
-Use SSFSE:
-to reduce motion artifact and imaging time
-to scan uncooperative patients in short scan times
-for breath hold abdominal and cardiac imagin
-with long TE values (300-1300 ms) to image the gallbladder and biliary tree
No Phase Wrap Considerations:
-When No Phase Wrap factor is set to a value greater than 1.0, it allows the patient to have arms at the side, which may increase patient comfort
-A larger NPW value increases the ETL, which may increase image blurring. To preserve image sharpness decrease the value
-A slight increase in SNR may occur due to more noise averaging that occurs with NPW

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

3D cor LAVA ASPIR BH - 3D cor LAVA ASPIR BH

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, ARC, HS*
PSD Name	*efgre3d_aspir*
Phase	*2.00*
Slice	*1.25*
HyperSense	*1.20*

SCAN RANGE	
FOV	*42.0*
Slice Thickness	*1.30*
Location per Slab	*112*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*300*
Phase	*200*
Freq DIR	*S/I*
NEX	*1.00*
Phase FOV	*1.00*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*
Fat/Water Saturation	*Fat Special*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12.0*
Number of Echoes	*1*
TI	*24*
Receiver Bandwidth	*62.50*

IMAGE ENHANCE	
Filter Choice	*None*

USER CVS	
User CV6	*1.00*
User CV34	*90.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*0*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

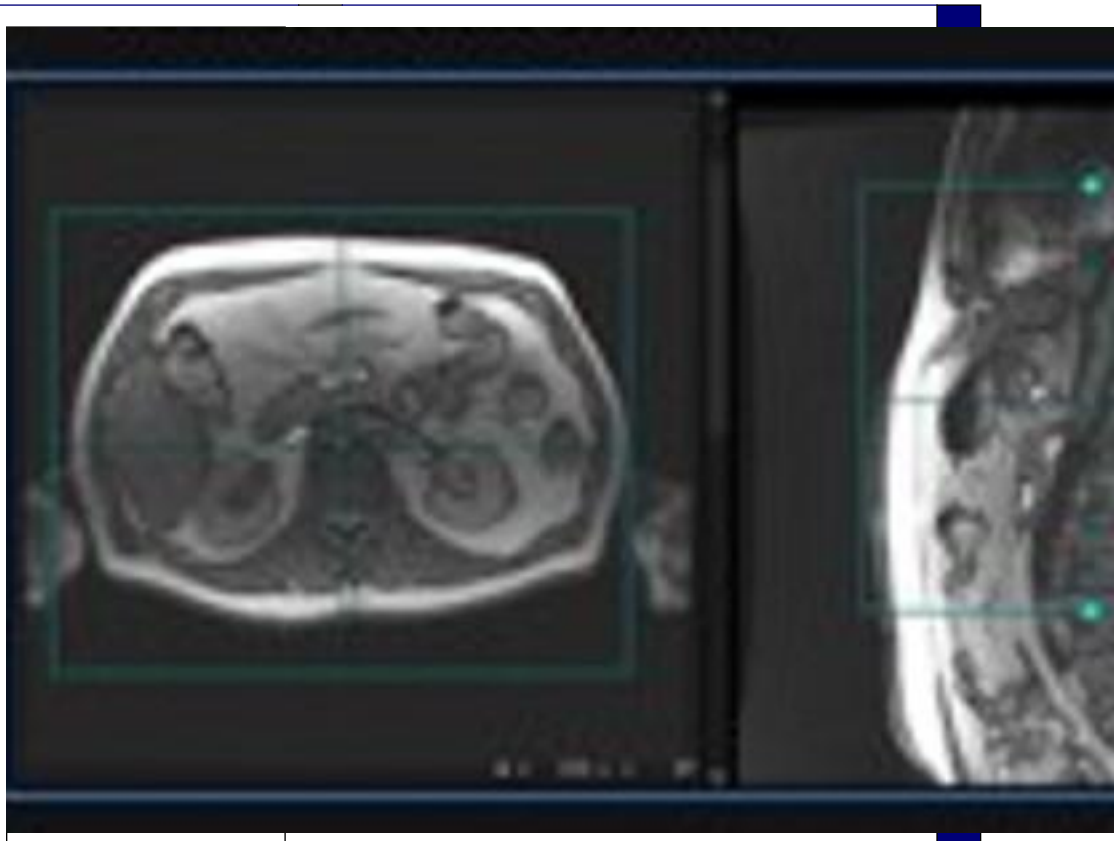
DIFFUSION	
Recon All Images	*On*
Multi b-values	*1000.0;*
Multi NEX Values	*1.0;*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

3D cor LAVA ASPIR BH - 3D cor LAVA ASPIR BH

OTHERS

Protocol Notes



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Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax LAVA Flex Pre - Ax LAVA Flex Pre

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, Fluoro, ARC, Flex*
IDEAL	*15*
Phase	*2.00*
Slice	*1.20*

SCAN RANGE	
FOV	*42.0*
Slice Thickness	*2.30*
Location per Slab	*80*
Overlap Locations	*0*
Number of Slices	*1*

ACQ TIMING	
Freq	*288*
Phase	*200*
Freq DIR	*R/L*
NEX	*1.00*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*

FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*

SAT	
Tag Type	*None*

TRICKS	
Pause On/Off	*On*
Auto Subtract	*0*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12*
TE	*Min Full*
Number of Echoes	*2*
Receiver Bandwidth	*62.50*

IMAGE ENHANCE	
Filter Choice	*A*

USER CVS	
User CV4	*3.00*
User CV6	*1.00*
User CV30	*1.00*
User CV34	*70.00*
User CV Mask2	*8*

MULTI-PHASE	
Seperate Series	*0*
Trigger Delay without AV	*3*
Mask Phase	*0*
Mask Pause	*0*
Preserve	*0*

DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*

CONTRAST	
Contrast Yes/No	*No*

Ax LAVA Flex Pre - Ax LAVA Flex Pre

Protocol: adult_abdomen_BOD -Gad Liver STANDARD aspir protocol - ARDL smartprep

Ax LAVA Flex Multiphase - Ax LAVA Flex Multiphase

IMAGING PARAMETERS	
Imaging Mode	*3D*
Pulse Sequence	*LAVA*
Imaging Options	*EDR, Fast, MPh, Fluoro, ARC, Flex*
IDEAL	*3*
Phase	*2.00*
Slice	*1.20*
SCAN RANGE	
FOV	*40.0*
Slice Thickness	*2.30*
Location per Slab	*80*
Overlap Locations	*0*
Number of Slices	*1*
ACQ TIMING	
Freq	*288*
Phase	*200*
Freq DIR	*R/L*
NEX	*1.00*
# of Acq. Before Pause	*1*
Phase FOV	*0.80*
Auto Shim	*Auto*
Phase Correction	*No*
RF Drive Mode	*Single*
Excitation Mode	*Selective*
FMRI	
PSD Trigger	*Internal*
View Order	*Bottom/Up*
# of Repetitions REST	*0*
# of Repetitions ACTIVE	*0*
SAT	
Tag Type	*None*
TRICKS	
Pause On/Off	*On*
Auto Subtract	*7*
Auto SCIC	*2*

SCAN TIMING	
Flip Angle	*12*
TE	*Min Full*
Number of Echoes	*2*
Receiver Bandwidth	*62.50*
IMAGE ENHANCE	
Filter Choice	*A*
USER CVS	
User CV4	*3.00*
User CV6	*1.00*
User CV30	*1.00*
User CV34	*70.00*
User CV Mask2	*8*
MULTI-PHASE	
Slice per Location	*3*
Delay after Acquisition	*Minimum*
Seperate Series	*0*
Trigger Delay without AV	*3*
Mask Phase	*0*
Mask Pause	*0*
DIFFUSION	
Recon All Images	*On*
# Synthetic b-values	*1*
Synthetic b-value	*1000.0;*
CONTRAST	
Contrast Yes/No	*Yes*

Ax LAVA Flex Multiphase - Ax LAVA Flex Multiphase