


McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

3Plane Loc FIESTA	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		3Plane Loc FIESTA
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>	
	Coil Configuration	<i>Body</i>	Imaging Options	<i>Seq, Fast</i>	
	Plane	<i>3-PLANE</i>	<b>SCAN RANGE</b>		
	Series Description	<i>3Plane Loc FIESTA</i>	FOV	<i>48.0</i>	
	<b>SCAN TIMING</b>		Slice Thickness	<i>10.0</i>	
	Flip Angle	<i>45</i>	Slice Spacing	<i>5.0</i>	
	TE	<i>Minimum</i>	<b>ACQ TIMING</b>		
	Number of Echoes	<i>1</i>	Freq	<i>160</i>	
	Receiver Bandwidth	<i>100.00</i>	Phase	<i>140</i>	
	<b>IMAGE ENHANCE</b>		Freq DIR	<i>Unswap</i>	
	Filter Choice	<i>None</i>	NEX	<i>1.00</i>	
	<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>0</i>	
	Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>	
	<b>MULTI-PHASE</b>		Auto Shim	<i>Auto</i>	
	Seperate Series	<i>0</i>	Phase Correction	<i>No</i>	
	Mask Phase	<i>0</i>	<b>FMRI</b>		
	Mask Pause	<i>0</i>	PSD Trigger	<i>Internal</i>	
	<b>DIFFUSION</b>		View Order	<i>Bottom/Up</i>	
Recon All Images	<i>On</i>	# of Repetitions REST	<i>0</i>		
<b>CONTRAST</b>		# of Repetitions ACTIVE	<i>0</i>		
Contrast Yes/No	<i>No</i>	<b>SAT</b>			
		Tag Type	<i>None</i>		
		<b>TRICKS</b>			
		Pause On/Off	<i>On</i>		
		Auto Subtract	<i>0</i>		
		Auto SCIC	<i>Off</i>		
		<b>OTHERS</b>			
		Protocol Notes	<i>USE LARGE AA COIL AND USE BODY 36 2</i>		

McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

Ax FIESTA BH Loc	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		Ax FIESTA BH Loc
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>	
	Coil Configuration	<i>Body</i>	Imaging Options	<i>Seq, EDR, Fast, ZIP512, Asset</i>	
	Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>		
	Series Description	<i>Ax FIESTA BH Loc</i>	FOV	<i>36.0</i>	
	<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>	
	Flip Angle	<i>45</i>	Slice Spacing	<i>0.0</i>	
	TE	<i>Min Full</i>	<b>ACQ TIMING</b>		
	Number of Echoes	<i>1</i>	Freq	<i>132</i>	
	Receiver Bandwidth	<i>100.00</i>	Phase	<i>132</i>	
	<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>	
	Filter Choice	<i>A</i>	NEX	<i>1.00</i>	
	<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>0</i>	
	Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>	
	<b>FMRI</b>		Auto Shim	<i>Auto</i>	
	PSD Trigger	<i>Internal</i>	Phase Correction	<i>No</i>	
	View Order	<i>Bottom/Up</i>	<b>USER CVS</b>		
	# of Repetitions REST	<i>0</i>	User CV20	<i>1.00</i>	
	# of Repetitions ACTIVE	<i>0</i>	<b>MULTI-PHASE</b>		
<b>SAT</b>		Seperate Series	<i>0</i>		
Tag Type	<i>None</i>	Mask Phase	<i>0</i>		
<b>TRICKS</b>		Mask Pause	<i>0</i>		
Pause On/Off	<i>On</i>	<b>DIFFUSION</b>			
Auto Subtract	<i>0</i>	Optimized TE	<i>Yes</i>		
Auto SCIC	<i>2</i>	Recon All Images	<i>On</i>		
<b>OTHERS</b>		<b>CONTRAST</b>			
Protocol Notes	<i>cover above the arch to below heart</i>	Contrast Yes/No	<i>No</i>		
					
TAKE OFF AUTO CAL					

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

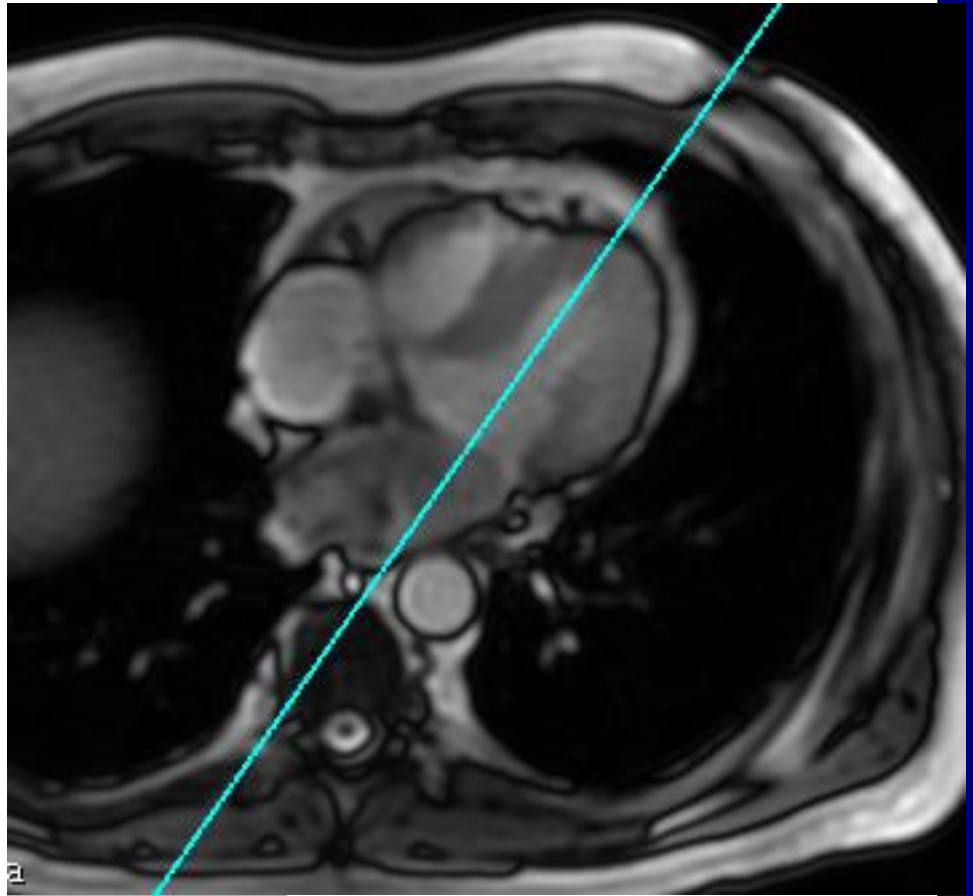
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Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>2Ch LOC BH</i>	FOV	<i>41.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>50</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>100.00</i>	Phase	<i>224</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>Unswap</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		Phase FOV	<i>1.00</i>
Auto Trigger Type	<i>On</i>	Auto Shim	<i>On</i>
Trigger Type	<i>0</i>	Phase Correction	<i>No</i>
Views per Segment	<i>20</i>	<b>FMRI</b>	
<b>MULTI-PHASE</b>		PSD Trigger	<i>Internal</i>
Seperate Series	<i>0</i>	Slice Order	<i>Interleaved</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
<b>DIFFUSION</b>		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	<b>SAT</b>	
<b>CINE</b>		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

2Ch LOC BH

2Ch LOC BH

OTHERS

Protocol Notes



2 CHAMBER LOC  
PRESCRIPTION

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

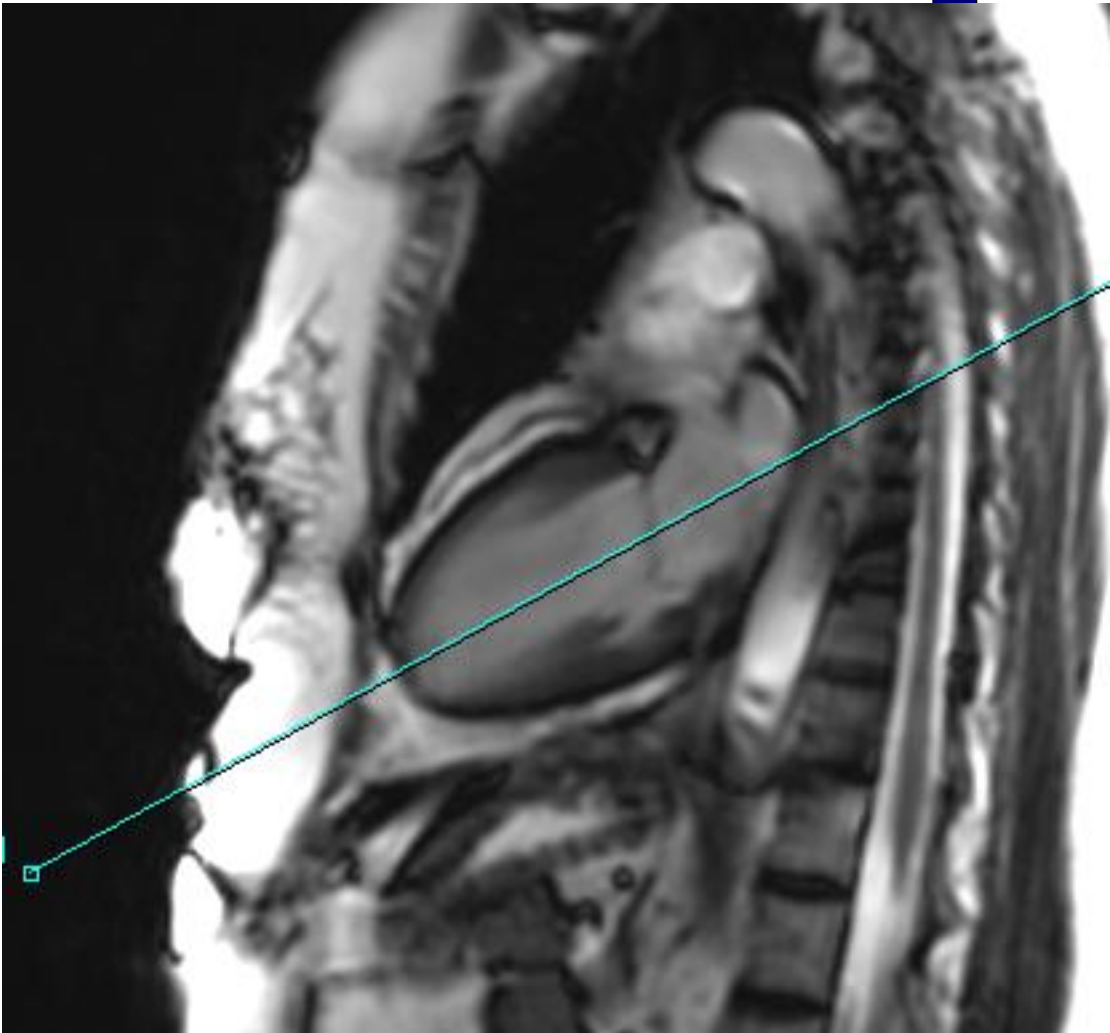
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Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	SCAN RANGE	
Series Description	<i>SEMI 4CH LOC BH</i>	FOV	<i>41.0</i>
SCAN TIMING		Slice Thickness	<i>7.0</i>
Flip Angle	<i>50</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	ACQ TIMING	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>100.00</i>	Phase	<i>224</i>
IMAGE ENHANCE		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
GATING/TRIGGER		Phase FOV	<i>0.90</i>
Auto Trigger Type	<i>Off</i>	Auto Shim	<i>On</i>
Trigger Type	<i>1</i>	Phase Correction	<i>No</i>
Views per Segment	<i>20</i>	FMRI	
MULTI-PHASE		PSD Trigger	<i>Internal</i>
Seperate Series	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Phase	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Pause	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
DIFFUSION		SAT	
Recon All Images	<i>On</i>	Tag Type	<i>None</i>
CINE		TRICKS	
# of Cardiac Phases to Reconstruct	<i>20</i>	Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		CONTRAST	
		Contrast Yes/No	<i>No</i>

SEMI 4CH LOC BH

SEMI 4CH LOC BH

OTHERS

Protocol Notes



McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

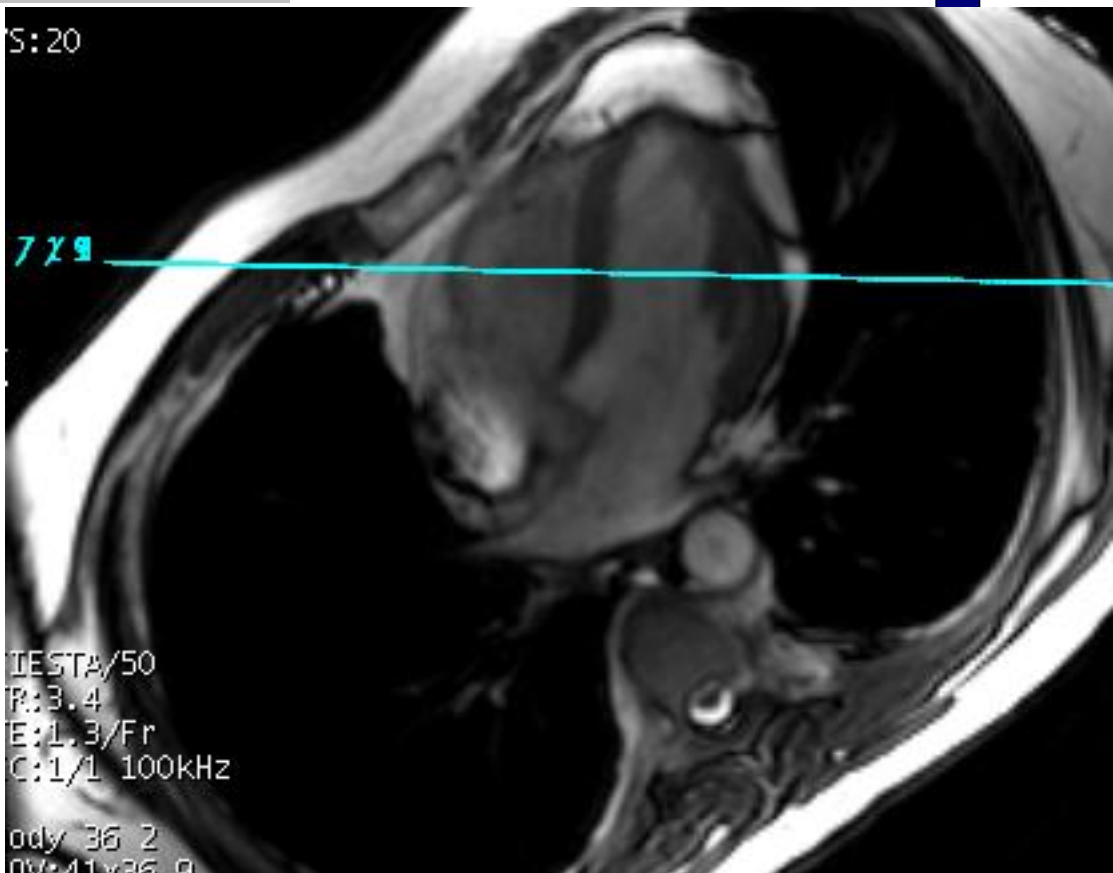
PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	SCAN RANGE	
Series Description	<i>SA LOC BH</i>	FOV	<i>41.0</i>
SCAN TIMING		Slice Thickness	<i>8.0</i>
Flip Angle	<i>50</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	ACQ TIMING	
Number of Echoes	<i>1</i>	Freq	<i>160</i>
Receiver Bandwidth	<i>100.00</i>	Phase	<i>160</i>
IMAGE ENHANCE		Freq DIR	<i>S/I</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
GATING/TRIGGER		Phase FOV	<i>0.80</i>
Auto Trigger Type	<i>Off</i>	Auto Shim	<i>On</i>
Trigger Type	<i>1</i>	Phase Correction	<i>No</i>
Views per Segment	<i>20</i>	FMRI	
MULTI-PHASE		PSD Trigger	<i>Internal</i>
Seperate Series	<i>0</i>	Slice Order	<i>Interleaved</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
DIFFUSION		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	SAT	
CINE		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	TRICKS	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		CONTRAST	
		Contrast Yes/No	<i>No</i>

SA LOC BH

SA LOC BH

OTHERS

Protocol Notes



RX SLICE OFF OF PEAK  
DIASTOLIC



McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	SCAN RANGE	
Series Description	<i>4CH LOC BH</i>	FOV	<i>41.0</i>
SCAN TIMING		Slice Thickness	<i>7.0</i>
Flip Angle	<i>50</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	ACQ TIMING	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>100.00</i>	Phase	<i>224</i>
IMAGE ENHANCE		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
GATING/TRIGGER		Phase FOV	<i>0.90</i>
Auto Trigger Type	<i>Off</i>	Auto Shim	<i>On</i>
Trigger Type	<i>1</i>	Phase Correction	<i>No</i>
Views per Segment	<i>20</i>	FMRI	
MULTI-PHASE		PSD Trigger	<i>Internal</i>
Seperate Series	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Phase	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Pause	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
DIFFUSION		SAT	
Recon All Images	<i>On</i>	Tag Type	<i>None</i>
CINE		TRICKS	
# of Cardiac Phases to Reconstruct	<i>20</i>	Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		CONTRAST	
		Contrast Yes/No	<i>No</i>

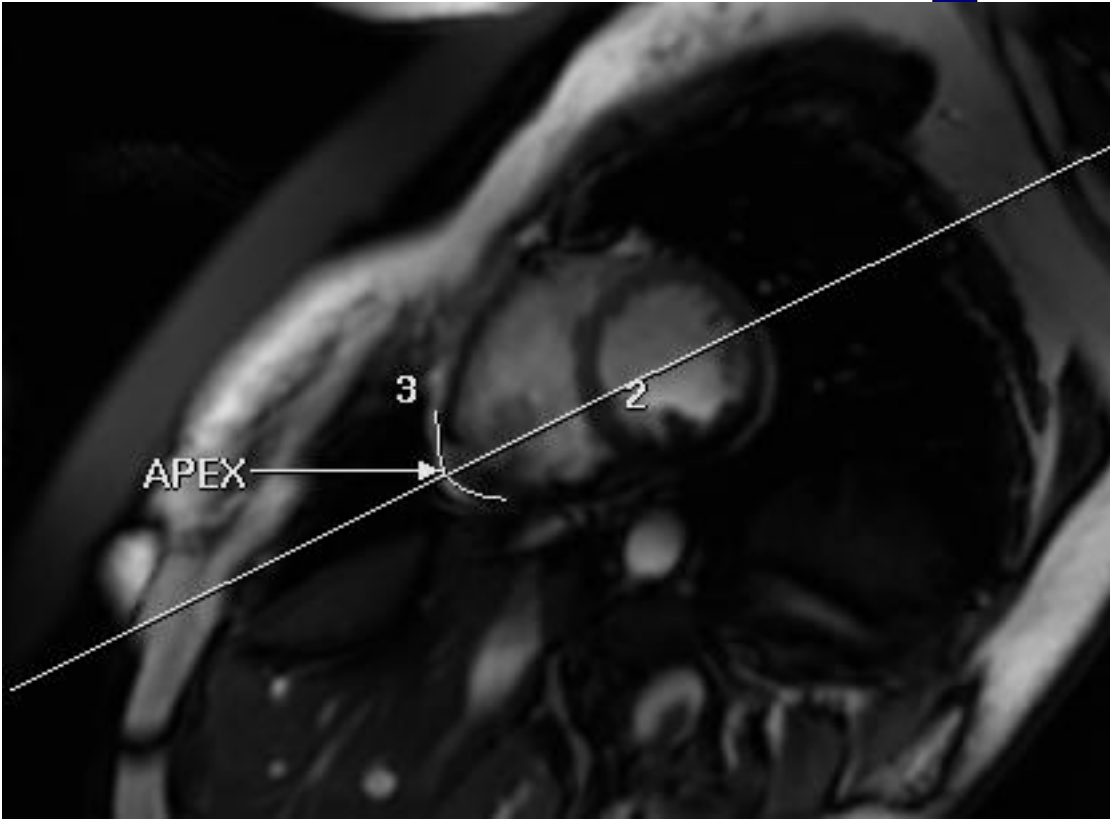
4CH LOC BH

4CH LOC BH

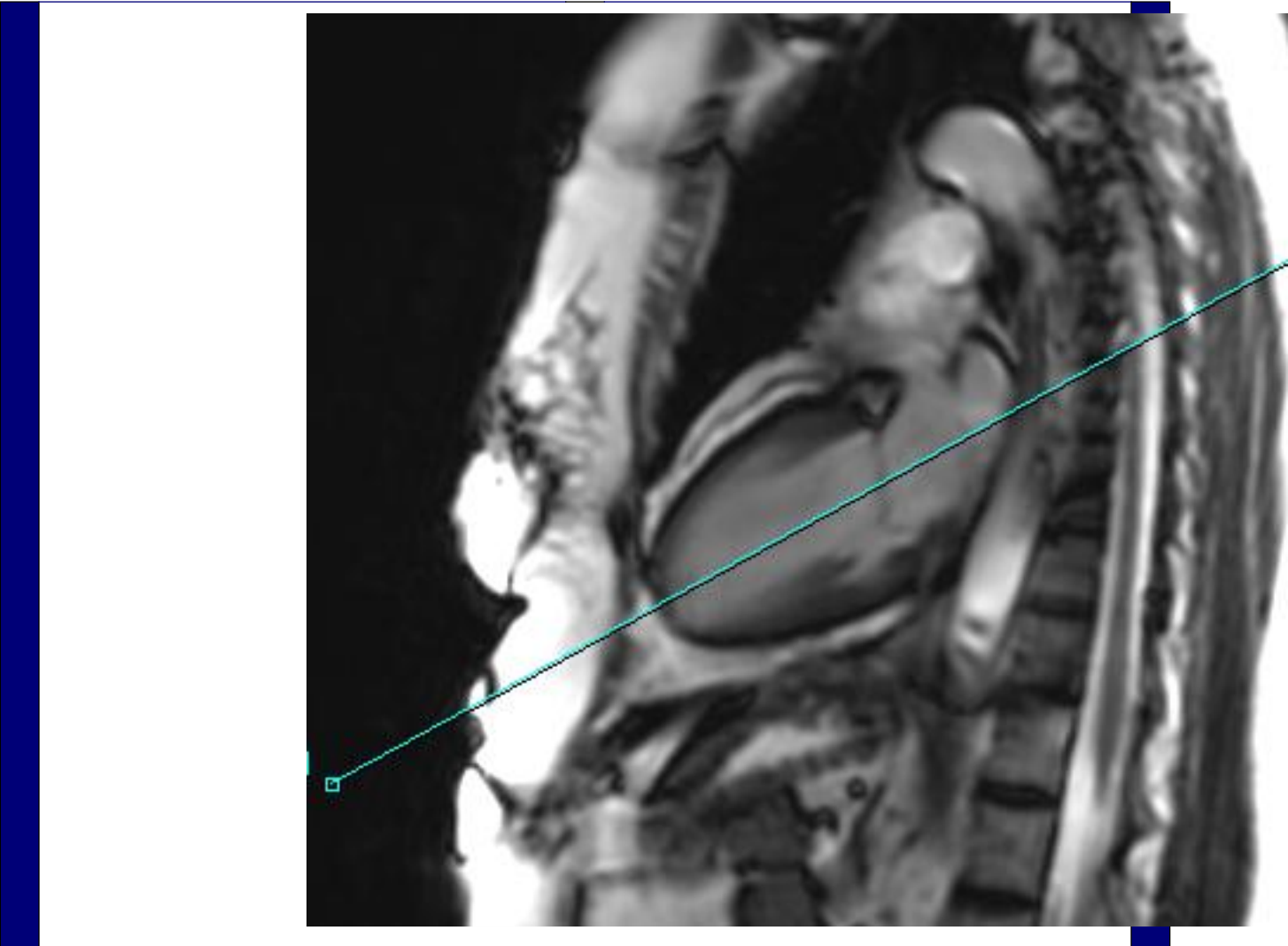
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<p>OTHERS</p>	
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Protocol Notes



*4 CHAMBER LOC. ANGLE  
THROUGH APEX  
SPLITTING THE APEX IN  
HALF*



McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Seq, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SA LOC FREE BREATH</i>	FOV	<i>41.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>50</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>160</i>
Receiver Bandwidth	<i>100.00</i>	Phase	<i>160</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>0</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.80</i>
<b>MULTI-PHASE</b>		Auto Shim	<i>On</i>
Seperate Series	<i>0</i>	Phase Correction	<i>No</i>
Mask Phase	<i>0</i>	<b>FMRI</b>	
Mask Pause	<i>0</i>	PSD Trigger	<i>Internal</i>
<b>DIFFUSION</b>		View Order	<i>Bottom/Up</i>
Recon All Images	<i>On</i>	# of Repetitions REST	<i>0</i>
<b>CONTRAST</b>		# of Repetitions ACTIVE	<i>0</i>
Contrast Yes/No	<i>No</i>	<b>SAT</b>	
		Tag Type	<i>None</i>
		<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>

SA LOC FREE BREATH

SA LOC FREE BREATH

OTHERS

Protocol Notes

h: 2/20

S: 20

/ 1 5

/ 1 3

/ 1 1

9 / 9

9 / 7

9 / 5

9 / 3

9 / 1

IESTA/50

R: 3.5

E: 1.3/Fr

C: 1/1 100kHz

*RX OFF 4 CH  
This is done so we can  
angle our FOV box*

McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SA FIESTA CINE BH</i>	FOV	<i>44.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>45</i>	Slice Spacing	<i>1.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>142.86</i>	Phase	<i>256</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>1</i>
Auto Trigger Type	<i>On</i>	Phase FOV	<i>0.80</i>
Trigger Type	<i>0</i>	Auto Shim	<i>On</i>
Views per Segment	<i>20</i>	Phase Correction	<i>No</i>
<b>MULTI-PHASE</b>		<b>FMRI</b>	
Seperate Series	<i>0</i>	PSD Trigger	<i>Internal</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
<b>DIFFUSION</b>		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	<b>SAT</b>	
<b>CINE</b>		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

SA FIESTA CINE BH

SA FIESTA CINE BH

OTHERS



Protocol Notes

scan from base to apex RX  
OFF 4 CH

Im: 2  
QA: 59.6  
67 bpm  
TD: 54  
Ph: 2/20

VS: 20

9 / 15

9 / 13

9 / 11

9 / 9

I 9 / 7

R 9 / 5

A 9 / 3

9 / 1

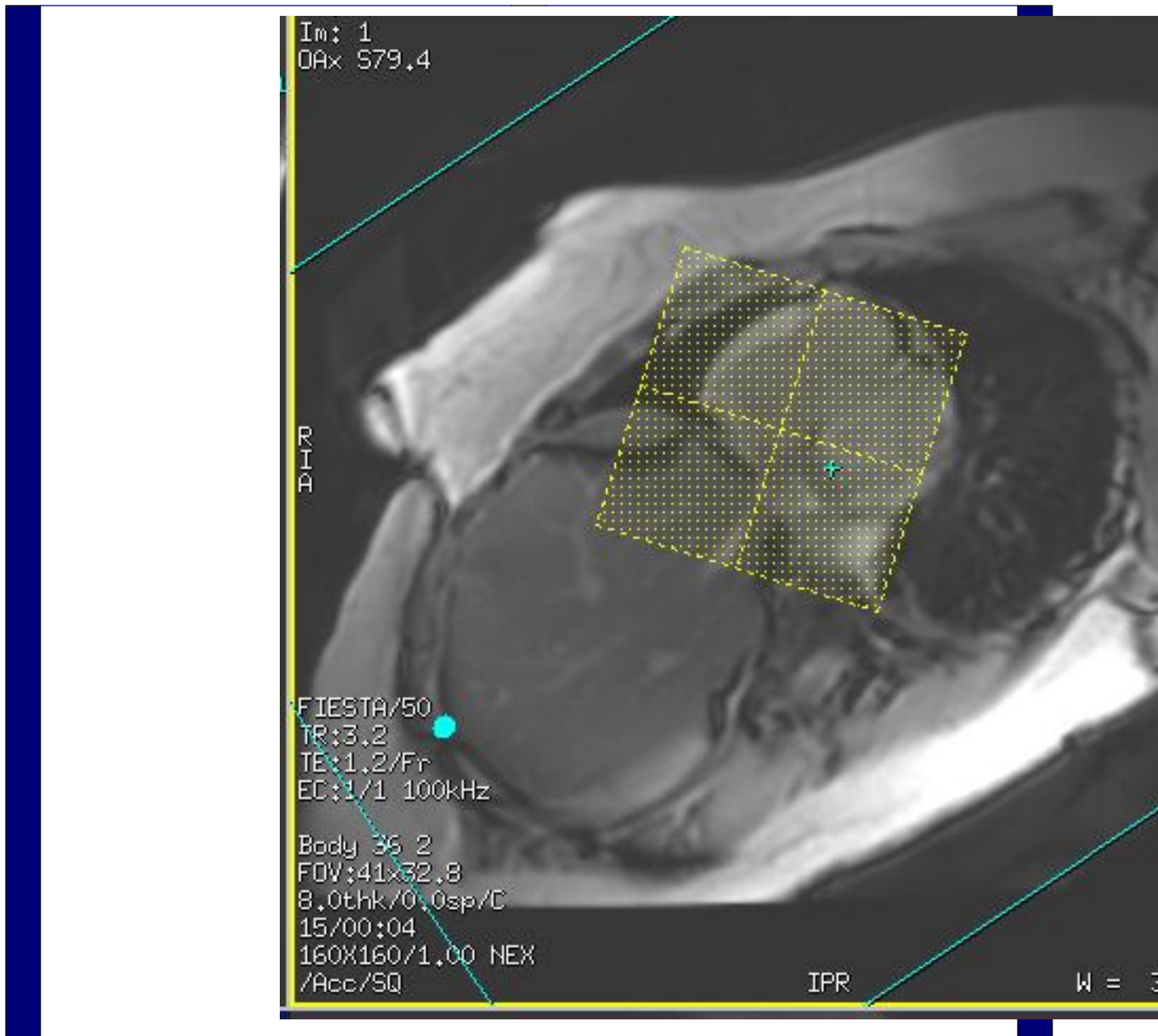
FIESTA/50  
TR: 3.5  
TE: 1.3/Fr  
EC: 1/1 100kHz

Body 36 2  
FOV: 45x40.5  
7.0thk/0.0sp/C  
20/00:12  
192X224/1.00 NEX  
EG/ACC/ED/SQ

SPR

W =

*rx 2-3 slices posterior to  
mitral valve. extend 3-4  
slices beyond apex of heart.  
Stop scan when you are  
through the heart.*



McLeod Pavilion

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<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>4CH FIESTA BH</i>	FOV	<i>42.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>45</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>142.86</i>	Phase	<i>192</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>1</i>
Auto Trigger Type	<i>On</i>	Phase FOV	<i>0.90</i>
Trigger Type	<i>0</i>	Auto Shim	<i>On</i>
Views per Segment	<i>20</i>	Phase Correction	<i>No</i>
<b>MULTI-PHASE</b>		<b>FMRI</b>	
Seperate Series	<i>0</i>	PSD Trigger	<i>Internal</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
<b>DIFFUSION</b>		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	<b>SAT</b>	
<b>CINE</b>		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

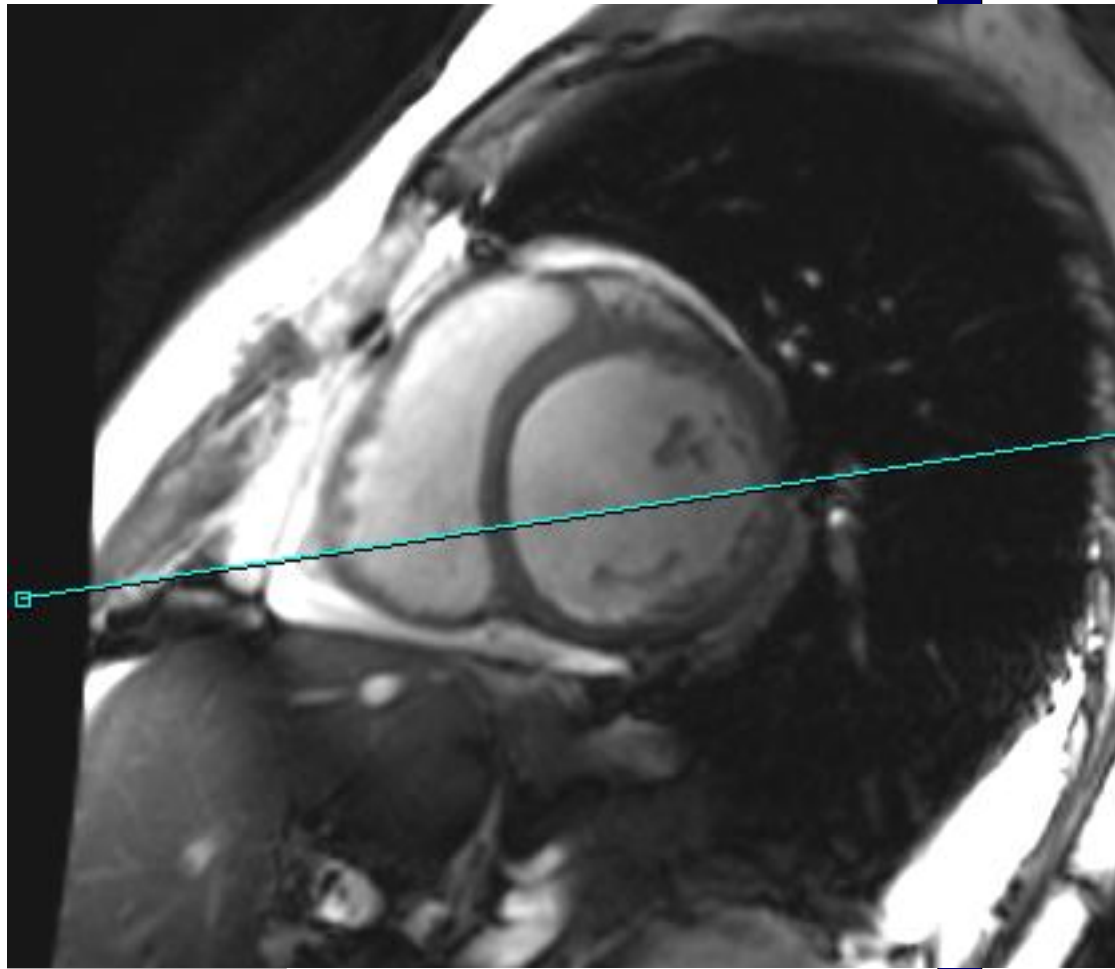
4CH FIESTA BH

4CH FIESTA BH

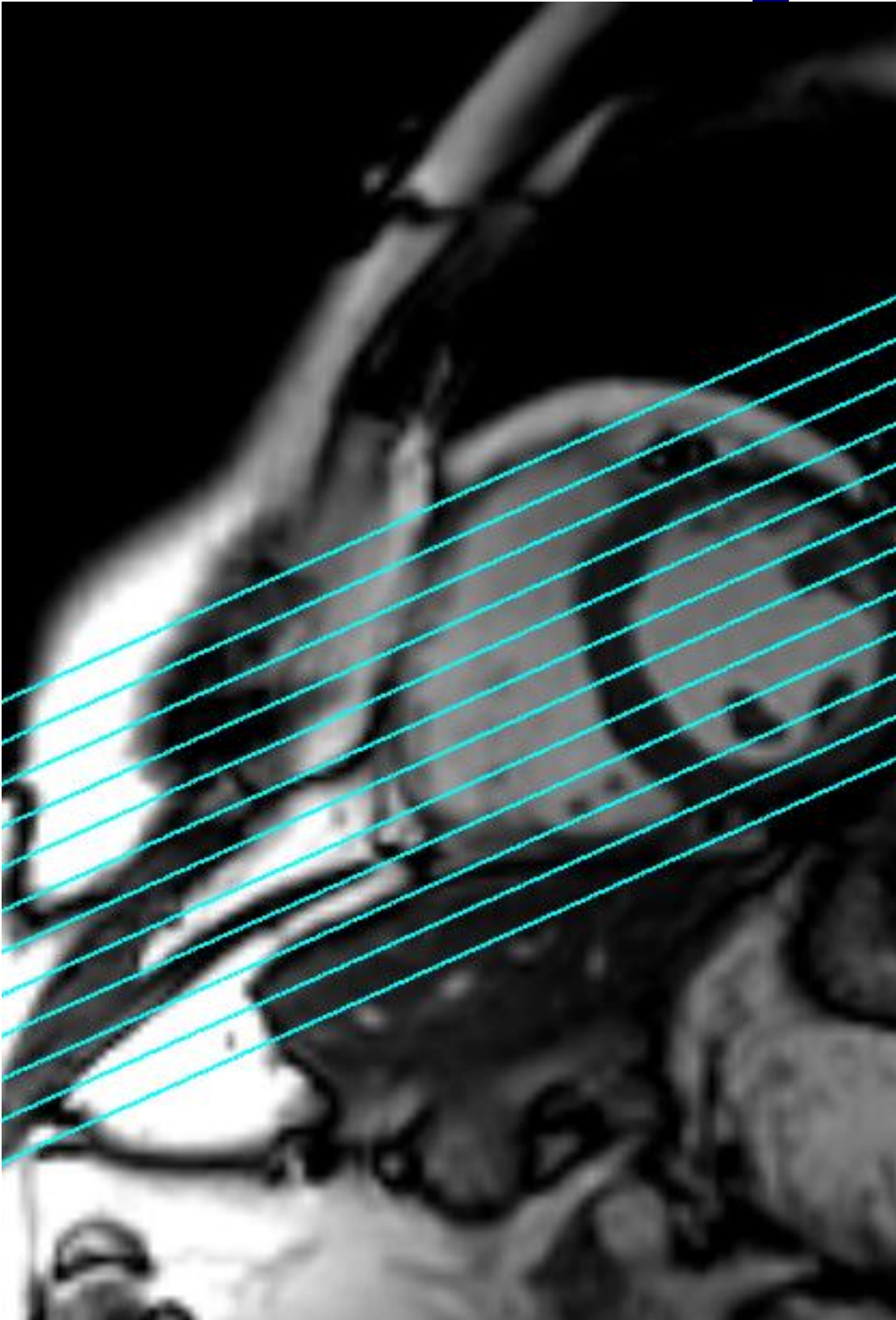
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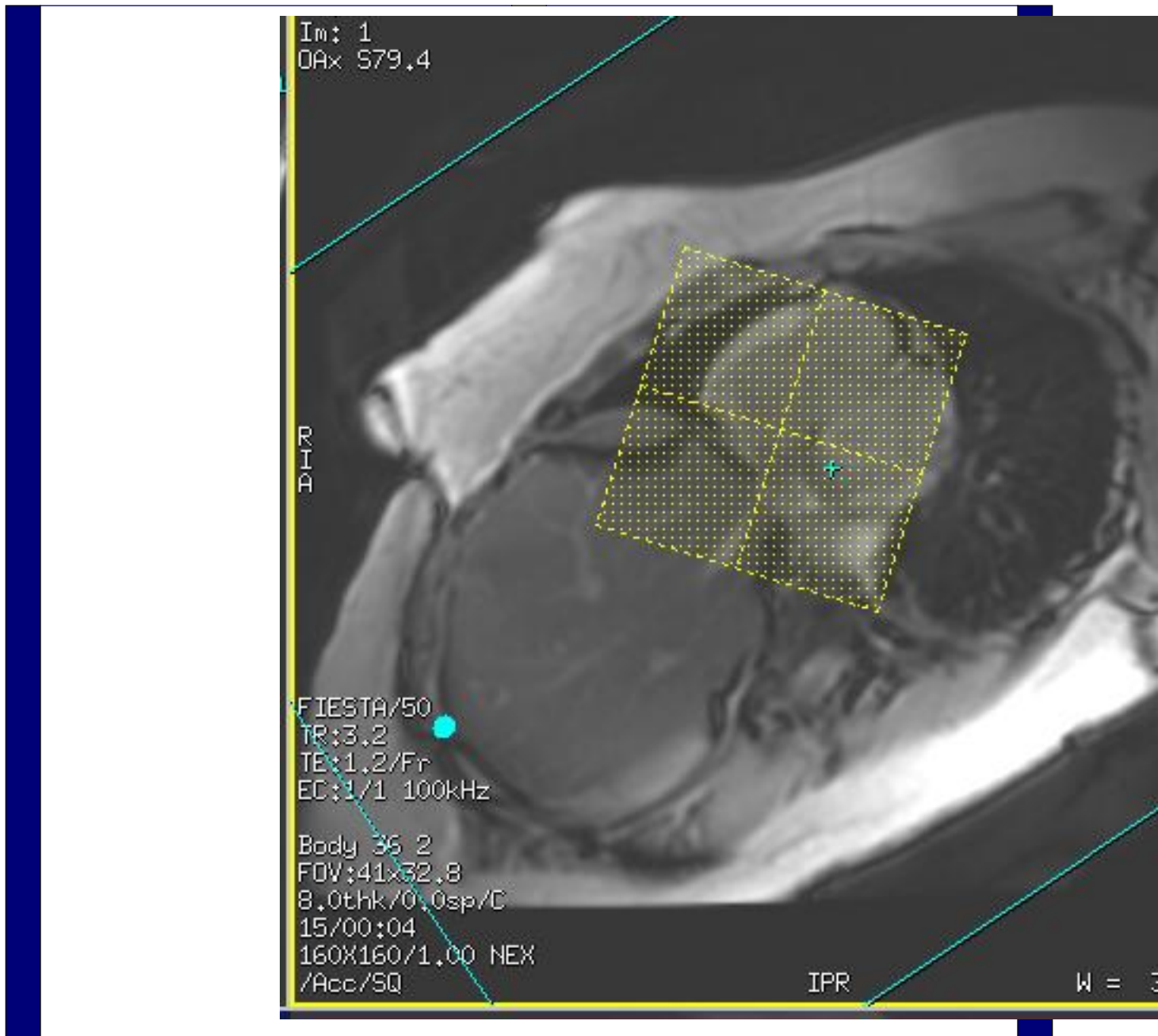
<p>OTHERS</p>	
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Protocol Notes



*Scan through entire heart  
RX OFF SA FIESTA*





Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>3CH FIESTA BH</i>	FOV	<i>38.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>45</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>142.86</i>	Phase	<i>192</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>1</i>
Auto Trigger Type	<i>On</i>	Phase FOV	<i>1.00</i>
Trigger Type	<i>0</i>	Auto Shim	<i>On</i>
Views per Segment	<i>30</i>	Phase Correction	<i>No</i>
<b>MULTI-PHASE</b>		<b>FMRI</b>	
Seperate Series	<i>0</i>	PSD Trigger	<i>Internal</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
<b>DIFFUSION</b>		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	<b>SAT</b>	
<b>CINE</b>		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

3CH FIESTA BH

3CH FIESTA BH



OTHERS

Protocol Notes

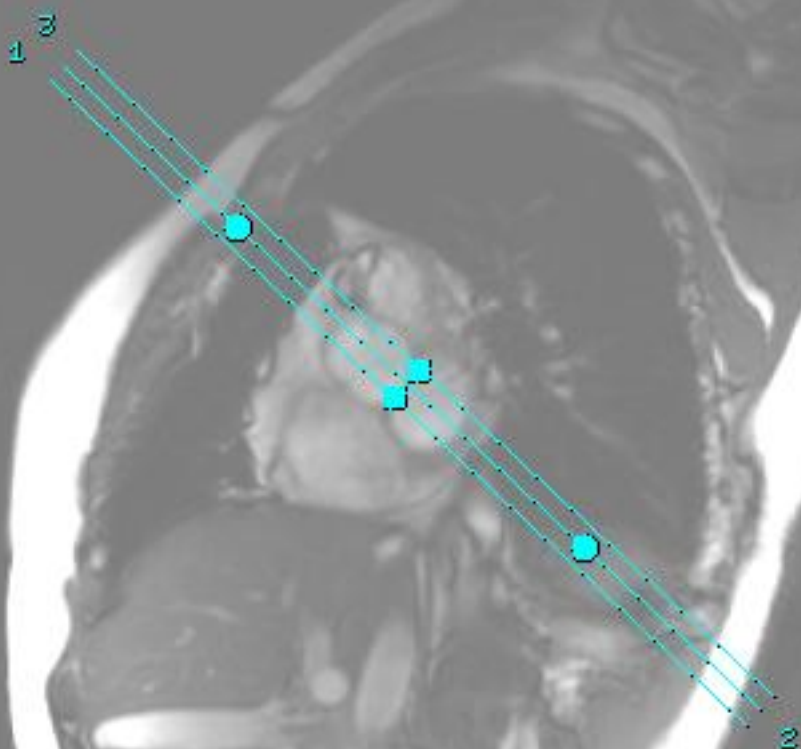
314  
7/20

20

BTA/45  
3.3  
1.3/Fr  
1/1 100kHz

38 2  
:44x35.2  
thk/1.0sp  
07-01-10-17

RX 1 SLICE THROUGH  
SNOWMAN USING  
SHORT AXIS VIEW, THEN  
ENTER 3 IN THE # OF  
SLICES BOX



Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Fiesta</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, Asset</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>2CH LA FIESTA BH</i>	FOV	<i>42.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>45</i>	Slice Spacing	<i>0.0</i>
TE	<i>Minimum</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>192</i>
Receiver Bandwidth	<i>142.86</i>	Phase	<i>192</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>1</i>
Auto Trigger Type	<i>On</i>	Phase FOV	<i>0.90</i>
Trigger Type	<i>0</i>	Auto Shim	<i>On</i>
Views per Segment	<i>30</i>	Phase Correction	<i>No</i>
<b>MULTI-PHASE</b>		<b>FMRI</b>	
Seperate Series	<i>0</i>	PSD Trigger	<i>Internal</i>
Mask Phase	<i>0</i>	View Order	<i>Bottom/Up</i>
Mask Pause	<i>0</i>	# of Repetitions REST	<i>0</i>
<b>DIFFUSION</b>		# of Repetitions ACTIVE	<i>0</i>
Recon All Images	<i>On</i>	<b>SAT</b>	
<b>CINE</b>		Tag Type	<i>None</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	<b>TRICKS</b>	
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

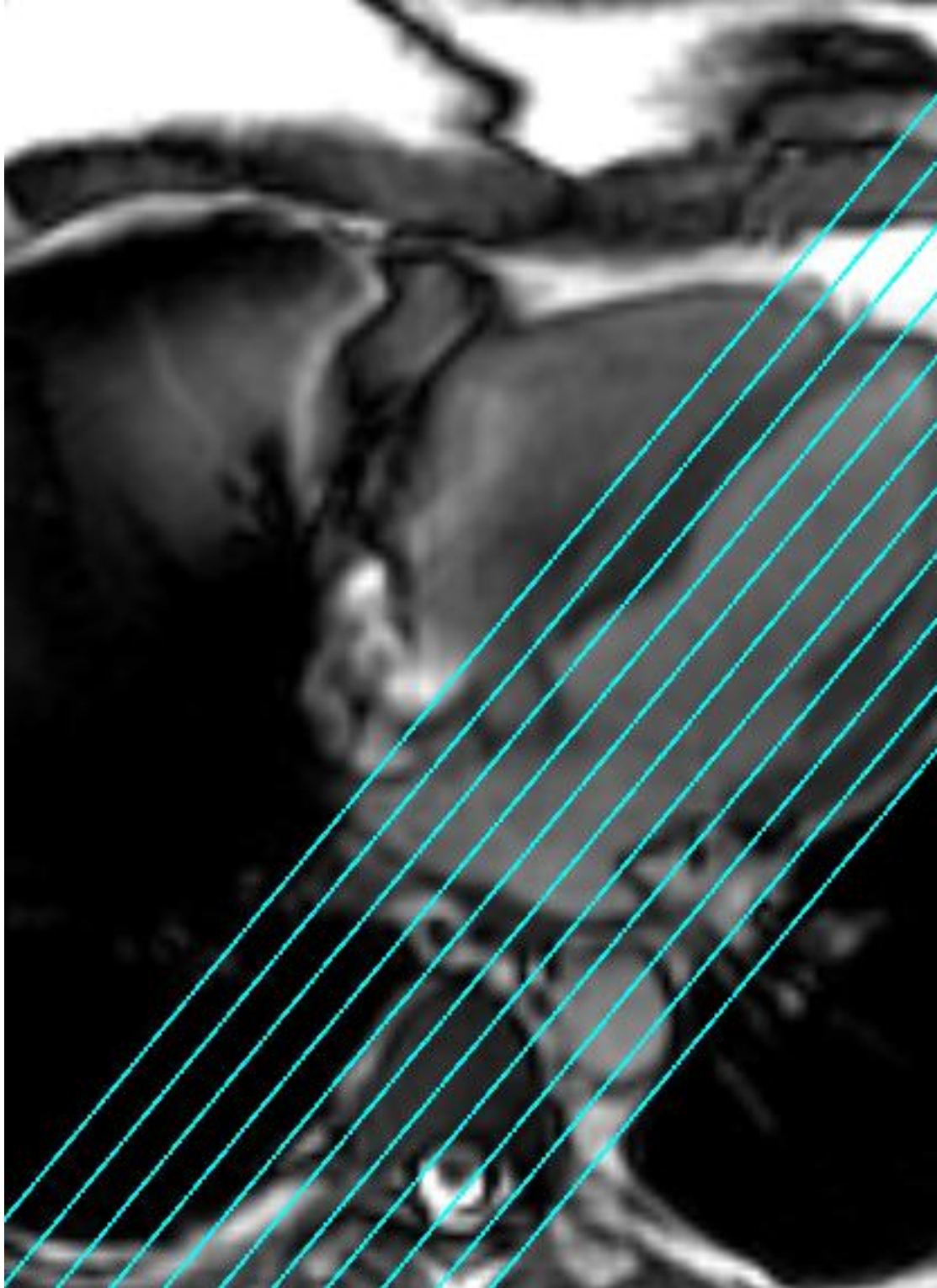
2CH LA FIESTA BH

2CH LA FIESTA BH

OTHERS

Protocol Notes

*RX OFF 4 CH VIEW*



McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

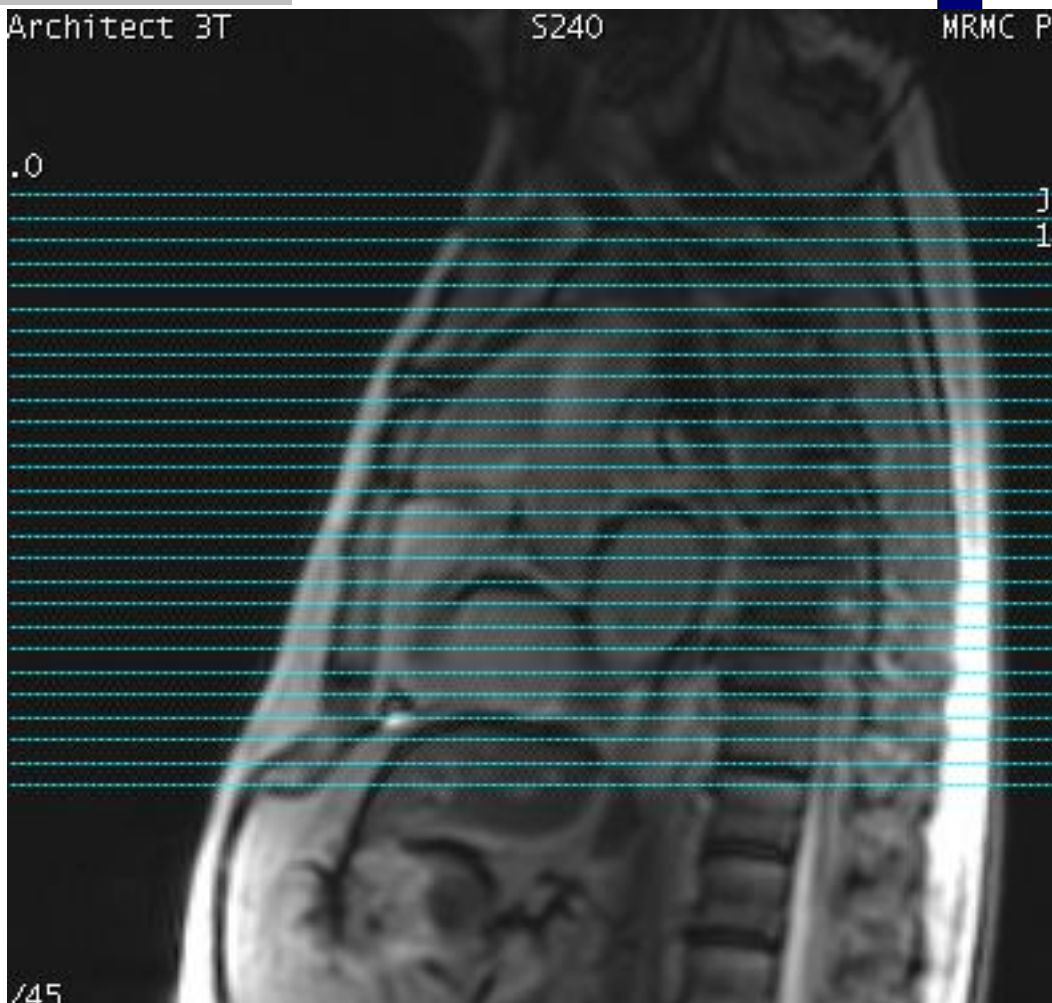
PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Spin Echo</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, ZIP512, SS, BSP, Asset</i>
Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>	
Series Description	<i>AX T2 FB BLACK BLOOD SSFSE</i>	FOV	<i>36.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
TE	<i>50.0</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
Blood Suppression TI	<i>737</i>	Freq	<i>212</i>
Receiver Bandwidth	<i>83.33</i>	Phase	<i>150</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>
Filter Choice	<i>A</i>	# of Acq. Before Pause	<i>0</i>
<b>GATING/TRIGGER</b>		Phase FOV	<i>0.90</i>
Auto Trigger Type	<i>On</i>	Auto Shim	<i>Auto</i>
Trigger Type	<i>0</i>	Phase Correction	<i>No</i>
Minimum Trigger Delay	<i>2</i>	<b>USER CVS</b>	
Cardiac Phase	<i>1</i>	User CV2	<i>240.00</i>
Cardiac Slices	<i>1</i>	User CV13	<i>1.00</i>
<b>FMRI</b>		<b>MULTI-PHASE</b>	
PSD Trigger	<i>Internal</i>	Seperate Series	<i>0</i>
View Order	<i>Bottom/Up</i>	Mask Phase	<i>0</i>
# of Repetitions REST	<i>0</i>	Mask Pause	<i>0</i>
# of Repetitions ACTIVE	<i>0</i>	<b>DIFFUSION</b>	
<b>SAT</b>		Recon All Images	<i>On</i>
Tag Type	<i>None</i>	<b>CONTRAST</b>	
<b>TRICKS</b>		Contrast Yes/No	<i>No</i>
# of RR Intervals	<i>2</i>		
Trigger Delay	<i>748</i>		
Pause On/Off	<i>On</i>		
Auto Subtract	<i>0</i>		
Auto SCIC	<i>2</i>		

AX T2 FB BLACK BLOOD SSFSE

AX T2 FB BLACK BLOOD SSFSE

OTHERS

Protocol Notes



RX OFF SAG 3 PLANE  
LOC.  
SCAN FROM ABOVE  
ARCH TO BELOW HEART

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

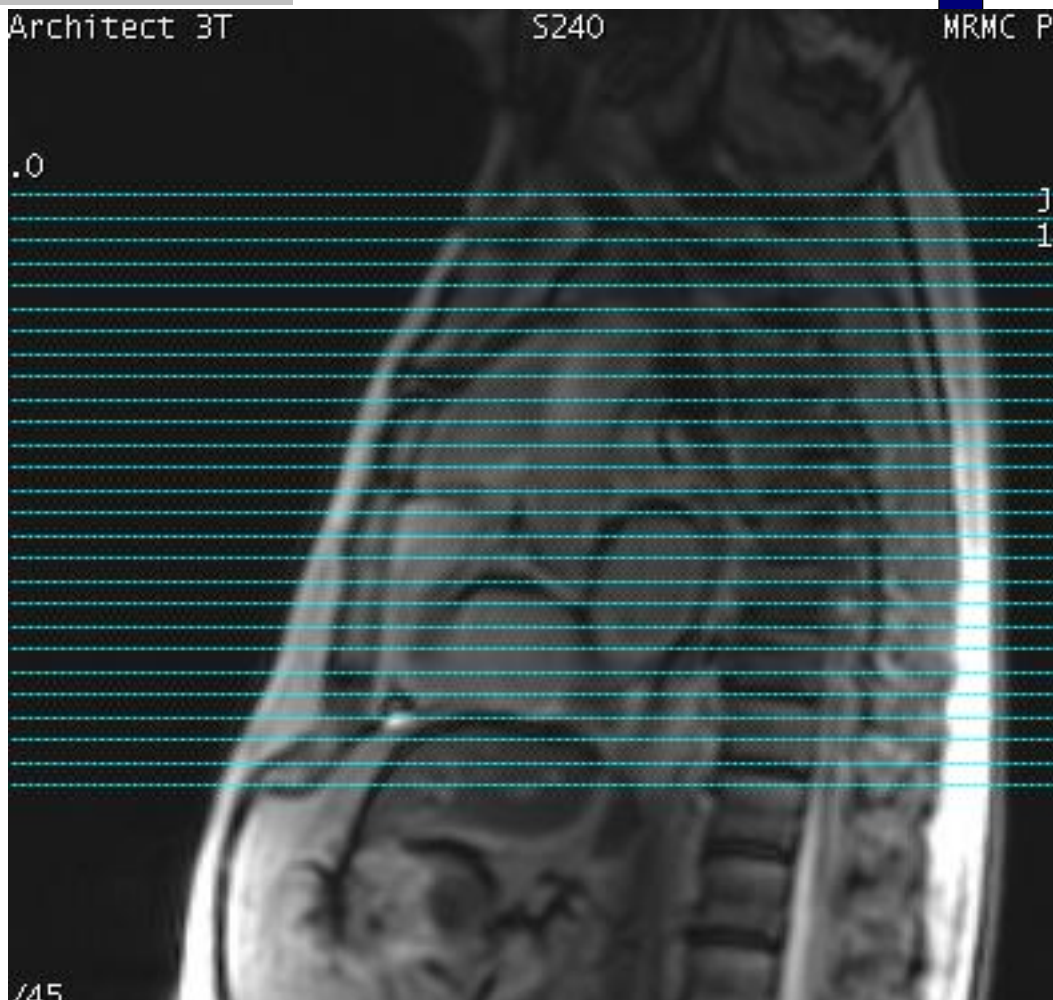
PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>FSE-XL</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, EDR, Fast, ZIP512, BSP, Asset, IrP</i>
Plane	<i>AXIAL</i>	PSD Name	<i>FSE-XL</i>
Series Description	<i>AX Triple IR FB BLACK BLOOD</i>	<b>SCAN RANGE</b>	
<b>SCAN TIMING</b>		FOV	<i>36.0</i>
Flip Angle	<i>107</i>	Slice Thickness	<i>8.0</i>
TE	<i>65.0</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>220</i>	Freq	<i>224</i>
Echo Train Length	<i>23</i>	Phase	<i>192</i>
Blood Suppression TI	<i>1053</i>	Freq DIR	<i>R/L</i>
Receiver Bandwidth	<i>50.00</i>	Fat Shift DIR	<i>Normal (L)</i>
<b>IMAGE ENHANCE</b>		NEX	<i>1.00</i>
Filter Choice	<i>A</i>	# of Acq. Before Pause	<i>0</i>
<b>GATING/TRIGGER</b>		Phase FOV	<i>1.00</i>
Auto Trigger Type	<i>On</i>	Auto Shim	<i>Auto</i>
Trigger Type	<i>0</i>	Phase Correction	<i>No</i>
Minimum Trigger Delay	<i>2</i>	<b>USER CVS</b>	
Cardiac Phase	<i>1</i>	User CV14	<i>3.33</i>
Cardiac Slices	<i>1</i>	User CV22	<i>1.00</i>
<b>FMRI</b>		<b>MULTI-PHASE</b>	
PSD Trigger	<i>Internal</i>	Seperate Series	<i>0</i>
View Order	<i>Bottom/Up</i>	Mask Phase	<i>0</i>
# of Repetitions REST	<i>0</i>	Mask Pause	<i>0</i>
# of Repetitions ACTIVE	<i>0</i>	<b>DIFFUSION</b>	
<b>SAT</b>		Recon All Images	<i>On</i>
Tag Type	<i>None</i>	<b>CONTRAST</b>	
<b>TRICKS</b>		Contrast Yes/No	<i>No</i>
# of RR Intervals	<i>2</i>		
Trigger Delay	<i>1065</i>		
Pause On/Off	<i>On</i>		
Auto Subtract	<i>0</i>		
Auto SCIC	<i>2</i>		

AX Triple IR FB BLACK BLOOD

AX Triple IR FB BLACK BLOOD

OTHERS

Protocol Notes



*RX OFF SAG 3 PLANE  
LOC.  
SCAN FROM ABOVE  
ARCH TO BELOW HEART*

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>4CH SS PS MDE PRE</i>	FOV	<i>36.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>600</i>	Freq	<i>156</i>
Receiver Bandwidth	<i>62.50</i>	Phase	<i>140</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>
Filter Choice	<i>A</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>4</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.80</i>
Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>
Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Pause	<i>0</i>	<b>SAT</b>	
<b>DIFFUSION</b>		Tag Type	<i>None</i>
Recon All Images	<i>On</i>	<b>TRICKS</b>	
<b>CINE</b>		# of RR Intervals	<i>2</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>605</i>
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

4CH SS PS MDE PRE

4CH SS PS MDE PRE



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Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>Gradient Echo</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, MPh, Asset, SrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SA PERFUSION FB SCOUT</i>	FOV	<i>36.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>10.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>1.0</i>
TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>144</i>
TI	<i>150</i>	Phase	<i>132</i>
Receiver Bandwidth	<i>62.50</i>	Freq DIR	<i>S/I</i>
<b>IMAGE ENHANCE</b>		NEX	<i>0.75</i>
Filter Choice	<i>None</i>	Phase FOV	<i>0.80</i>
<b>GATING/TRIGGER</b>		Auto Shim	<i>Auto</i>
Auto Trigger Type	<i>On</i>	Phase Correction	<i>No</i>
Trigger Type	<i>0</i>	<b>USER CVS</b>	
Minimum Trigger Delay	<i>2</i>	User CV16	<i>1.00</i>
Cardiac Phase	<i>1</i>	<b>MULTI-PHASE</b>	
Cardiac Slices	<i>1</i>	Slice per Location	<i>1</i>
<b>FMRI</b>		Seperate Series	<i>0</i>
PSD Trigger	<i>Internal</i>	Mask Phase	<i>0</i>
View Order	<i>Bottom/Up</i>	Mask Pause	<i>0</i>
# of Repetitions REST	<i>0</i>	<b>TRICKS</b>	
# of Repetitions ACTIVE	<i>0</i>	# of RR Intervals	<i>2</i>
<b>DIFFUSION</b>		Trigger Delay	<i>10</i>
Recon All Images	<i>On</i>	Pause On/Off	<i>On</i>
<b>CONTRAST</b>		Auto Subtract	<i>0</i>
Contrast Yes/No	<i>No</i>	Auto SCIC	<i>Off</i>

SA PERFUSION FB SCOUT

SA PERFUSION FB SCOUT

McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	Feet First	Imaging Mode	2D
Patient Position	Supine	Pulse Sequence	Gradient Echo
Coil Configuration	Body	Imaging Options	Gat, EDR, Fast, MPh, Asset, SrP
Plane	OBLIQUE		
Series Description	SA PERFUSION BH +C		
SCAN TIMING		SCAN RANGE	
Flip Angle	20	FOV	36.0
TE	Min Full	Slice Thickness	10.0
Number of Echoes	1	Slice Spacing	4.0
TI	150		
Receiver Bandwidth	62.50	ACQ TIMING	
		Freq	144
		Phase	132
		Freq DIR	S/I
		NEX	0.75
		Phase FOV	0.80
		Auto Shim	Auto
		Phase Correction	No
IMAGE ENHANCE		USER CVS	
Filter Choice	None	User CV16	1.00
GATING/TRIGGER		MULTI-PHASE	
Auto Trigger Type	On	Slice per Location	30
Trigger Type	0	Seperate Series	0
Minimum Trigger Delay	2	Mask Phase	0
Cardiac Phase	1	Mask Pause	0
Cardiac Slices	1		
FMRI		DIFFUSION	
PSD Trigger	Internal	Recon All Images	On
View Order	Bottom/Up		
# of Repetitions REST	0	CONTRAST	
# of Repetitions ACTIVE	0	Contrast Yes/No	Yes
SAT			
Tag Type	None		
TRICKS			
# of RR Intervals	2		
Trigger Delay	10		
Pause On/Off	On		
Auto Subtract	0		
Auto SCIC	Off		
OTHERS			
Protocol Notes	<p>pt is instructed to take breath in, blow out then take breath in. (app. 40 sec scan)                      inject 1/2 dose w/ power injector after 1st set of images reconstruct injector flow 3ml/sec</p>		

SA PERFUSION BH +C

SA PERFUSION BH +C

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

4CH SS PS MDE BH+C	<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>		4CH SS PS MDE BH+C
	Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>	
	Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>	
	Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>	
	Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>		
	Series Description	<i>4CH SS PS MDE BH+C</i>	FOV	<i>36.0</i>	
	<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>	
	Flip Angle	<i>20</i>	Slice Spacing	<i>0.0</i>	
	Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>		
	TI	<i>600</i>	Freq	<i>156</i>	
	Receiver Bandwidth	<i>62.50</i>	Phase	<i>140</i>	
	<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>	
	Filter Choice	<i>A</i>	NEX	<i>1.00</i>	
	<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>4</i>	
	Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.80</i>	
	Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>	
	Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>	
	Cardiac Phase	<i>1</i>	<b>FMRI</b>		
	Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>	
	<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>	
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>		
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>		
Mask Pause	<i>0</i>	<b>SAT</b>			
<b>DIFFUSION</b>		Tag Type	<i>None</i>		
Recon All Images	<i>On</i>	<b>TRICKS</b>			
<b>CINE</b>		# of RR Intervals	<i>2</i>		
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>605</i>		
		Pause On/Off	<i>On</i>		
		Auto Subtract	<i>0</i>		
		Auto SCIC	<i>Off</i>		
		<b>CONTRAST</b>			
		Contrast Yes/No	<i>Yes</i>		

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>LVOT SS PS MDE BH +C</i>	FOV	<i>42.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>600</i>	Freq	<i>156</i>
Receiver Bandwidth	<i>62.50</i>	Phase	<i>140</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>A</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>0</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.90</i>
Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>
Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Pause	<i>0</i>	<b>SAT</b>	
<b>DIFFUSION</b>		Tag Type	<i>None</i>
Recon All Images	<i>On</i>	<b>TRICKS</b>	
<b>CINE</b>		# of RR Intervals	<i>2</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>605</i>
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>Yes</i>

LVOT SS PS MDE BH +C

LVOT SS PS MDE BH +C

McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

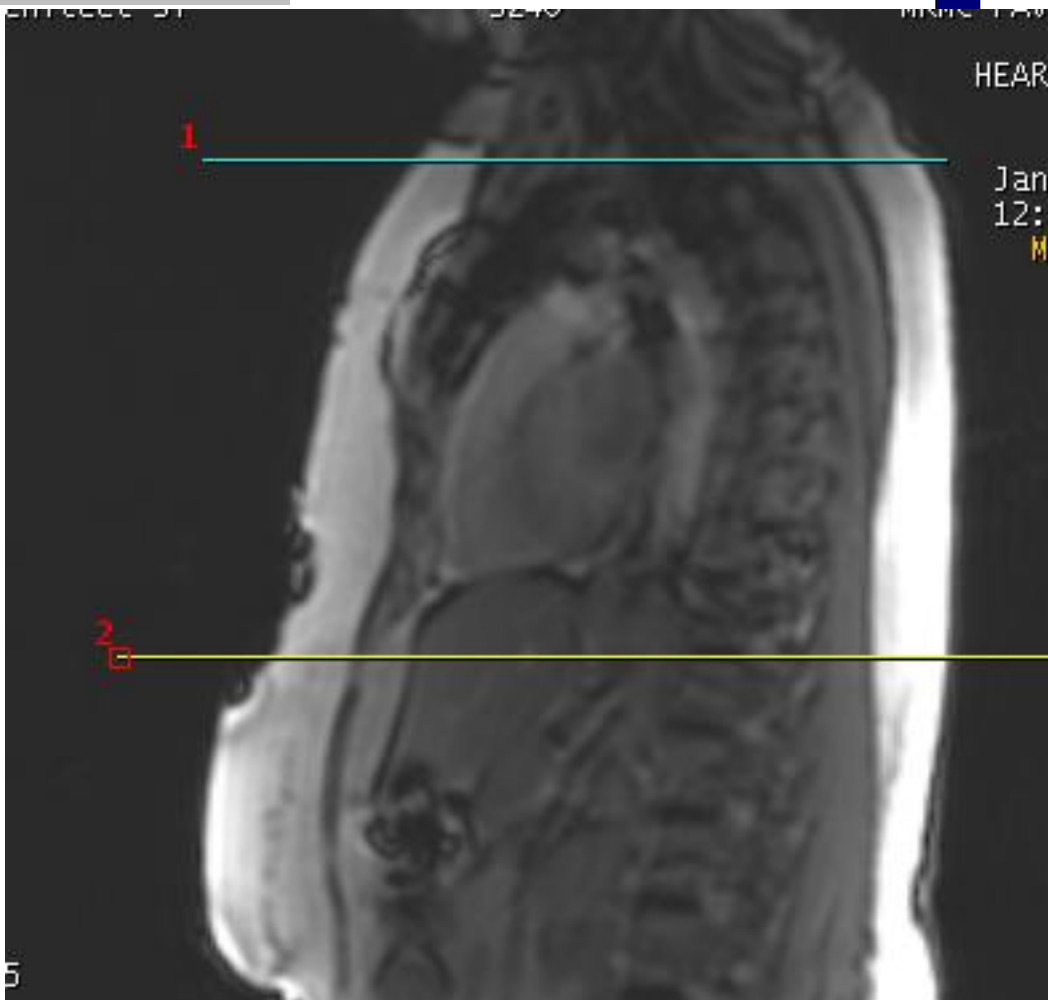
<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>3D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>4DFLOW</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, ZIP2, ARC</i>
Plane	<i>AXIAL</i>	<b>SCAN RANGE</b>	
Series Description	<i>Ax 4DFLOW postCE FB TRY</i>	FOV	<i>44.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>2.8</i>
Flip Angle	<i>15</i>	Location per Slab	<i>72</i>
TE	<i>Min Full</i>	Overlap Locations	<i>0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
Receiver Bandwidth	<i>62.50</i>	Freq	<i>200</i>
<b>IMAGE ENHANCE</b>		Phase	<i>200</i>
Filter Choice	<i>None</i>	Freq DIR	<i>R/L</i>
<b>GATING/TRIGGER</b>		NEX	<i>4.00</i>
Auto Trigger Type	<i>On</i>	Phase FOV	<i>0.75</i>
Trigger Type	<i>0</i>	Auto Shim	<i>Auto</i>
Views per Segment	<i>3</i>	Phase Correction	<i>No</i>
# of Acq Phases	<i>16</i>	<b>USER CVS</b>	
<b>FMRI</b>		User CV3	<i>1.00</i>
PSD Trigger	<i>Internal</i>	User CV5	<i>65.00</i>
View Order	<i>Bottom/Up</i>	User CV6	<i>2.00</i>
# of Repetitions REST	<i>0</i>	User CV16	<i>10.00</i>
# of Repetitions ACTIVE	<i>0</i>	<b>MULTI-PHASE</b>	
<b>VASCULAR</b>		Seperate Series	<i>0</i>
Flow Analysis	<i>All</i>	Mask Phase	<i>0</i>
Velocity Encoding	<i>300.0</i>	Mask Pause	<i>0</i>
<b>ASSET</b>		<b>DIFFUSION</b>	
Hyperkat Value	<i>8</i>	Recon All Images	<i>On</i>
<b>CINE</b>		<b>TRICKS</b>	
# of Cardiac Phases to Reconstruct	<i>20</i>	Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>No</i>

Ax 4DFLOW postCE FB TRY

Ax 4DFLOW postCE FB TRY

OTHERS

Protocol Notes



3D SLAB SCAN FROM  
ABOVE ARCH TO BELOW  
HEART.  
KEEP SCAN TIME  
AROUND 10 MINUTES.  
TO REDUCE SCAN TIME  
REDUCE PHASE FOV.  
YOU MAY HAVE TO  
INCREASE FREQUENCY  
FOV IF REDUCING PHASE  
FOV CUTS OFF  
ANATOMY  
inject other 1/2 of contrast.

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

<b>PATIENT POSITION</b>		<b>IMAGING PARAMETERS</b>	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>CINE IR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, Seq, Fast, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>CINE IR 2RR BH</i>	FOV	<i>40.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>5</i>	Slice Spacing	<i>0.0</i>
TE	<i>Min Full</i>	<b>ACQ TIMING</b>	
Number of Echoes	<i>1</i>	Freq	<i>128</i>
Receiver Bandwidth	<i>50.00</i>	Phase	<i>128</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>Unswap</i>
Filter Choice	<i>None</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		Phase FOV	<i>0.80</i>
Auto Trigger Type	<i>On</i>	Auto Shim	<i>Auto</i>
Trigger Type	<i>0</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
Views per Segment	<i>14</i>	View Order	<i>Bottom/Up</i>
<b>MULTI-PHASE</b>		# of Repetitions REST	<i>0</i>
Seperate Series	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Phase	<i>0</i>	<b>DIFFUSION</b>	
Mask Pause	<i>0</i>	Recon All Images	<i>On</i>
<b>TRICKS</b>		<b>CINE</b>	
# of RR Intervals	<i>2</i>	# of Cardiac Phases to Reconstruct	<i>30</i>
Pause On/Off	<i>On</i>		
Auto Subtract	<i>0</i>		
Auto SCIC	<i>Off</i>		
<b>CONTRAST</b>			
Contrast Yes/No	<i>Yes</i>		

CINE IR 2RR BH

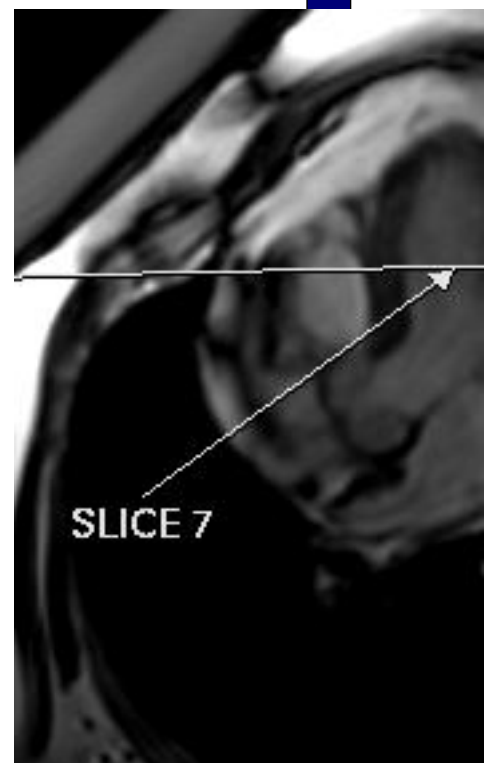
CINE IR 2RR BH

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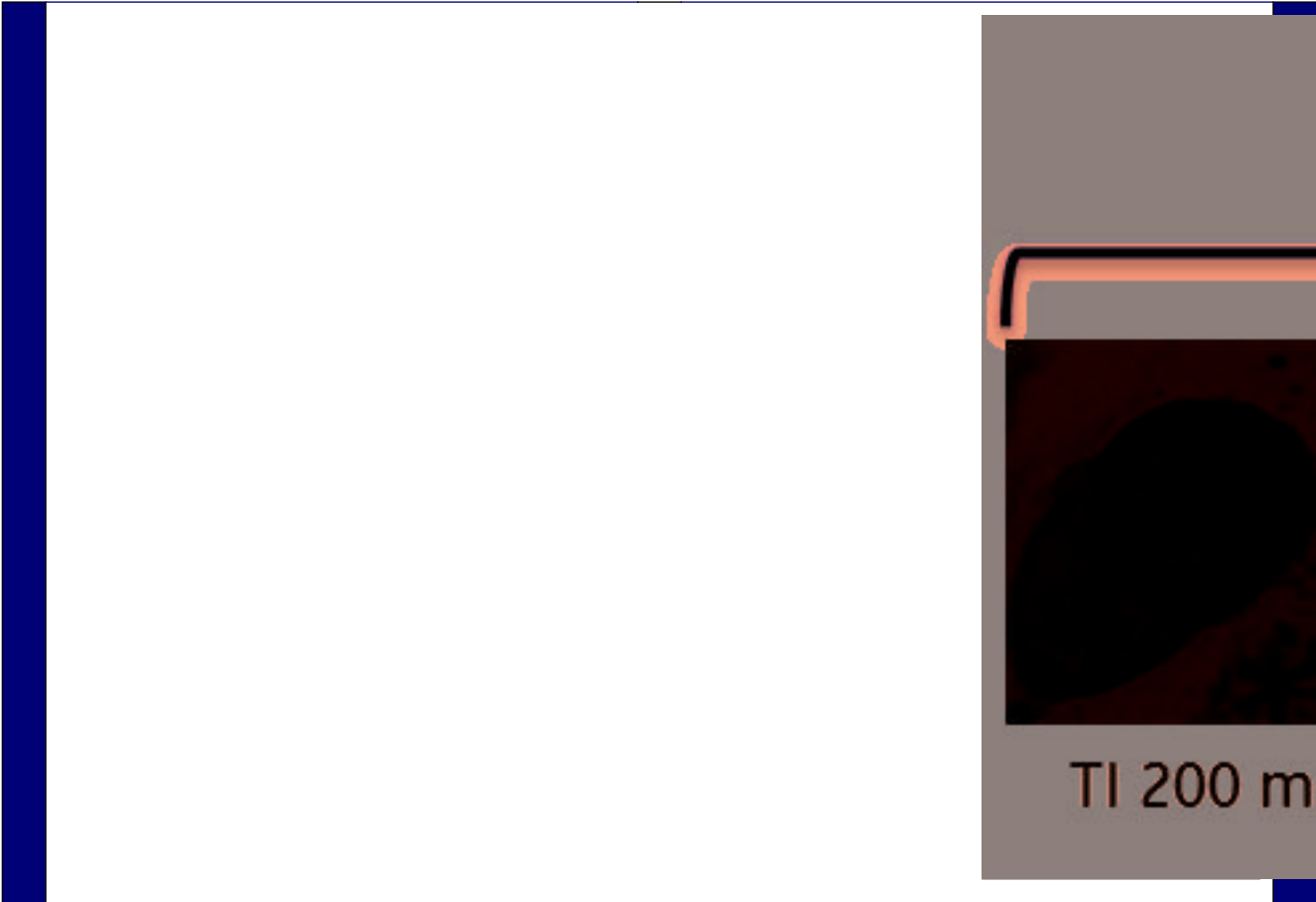
OTHERS



Protocol Notes



*RX 1 SLICE OFF 4 CH TO DETERMINE PROPER PREP TIME. CHOOSE THE BEST T1 TIME OFF THE VIEWER(LOOKING FOR DARKEST MYOCARDIUM)*



McLeod Pavilion

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>SA SS PS MDE BH</i>	FOV	<i>44.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>1.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>400</i>	Freq	<i>200</i>
Receiver Bandwidth	<i>62.50</i>	Phase	<i>200</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>A</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>4</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.80</i>
Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>
Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Pause	<i>0</i>	<b>SAT</b>	
<b>DIFFUSION</b>		Tag Type	<i>None</i>
Recon All Images	<i>On</i>	<b>TRICKS</b>	
<b>CINE</b>		# of RR Intervals	<i>2</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>405</i>
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>Yes</i>

SA SS PS MDE BH

SA SS PS MDE BH

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>2 CH SS PS MDE SPGR</i>	FOV	<i>41.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>400</i>	Freq	<i>156</i>
Receiver Bandwidth	<i>62.50</i>	Phase	<i>140</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>S/I</i>
Filter Choice	<i>A</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>6</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>1.00</i>
Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>
Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Pause	<i>0</i>	<b>SAT</b>	
<b>DIFFUSION</b>		Tag Type	<i>None</i>
Recon All Images	<i>On</i>	<b>TRICKS</b>	
<b>CINE</b>		# of RR Intervals	<i>2</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>405</i>
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>Yes</i>

2 CH SS PS MDE SPGR

2 CH SS PS MDE SPGR

Protocol: adult\_chest\_CARDIAC STRUCTURE W/ 4D FLOW

PATIENT POSITION		IMAGING PARAMETERS	
Patient Entry	<i>Feet First</i>	Imaging Mode	<i>2D</i>
Patient Position	<i>Supine</i>	Pulse Sequence	<i>SPGR</i>
Coil Configuration	<i>Body</i>	Imaging Options	<i>Gat, EDR, Fast, PS, Asset, IrP</i>
Plane	<i>OBLIQUE</i>	<b>SCAN RANGE</b>	
Series Description	<i>4CH SS PS MDE SPGR</i>	FOV	<i>38.0</i>
<b>SCAN TIMING</b>		Slice Thickness	<i>8.0</i>
Flip Angle	<i>20</i>	Slice Spacing	<i>0.0</i>
Number of Echoes	<i>1</i>	<b>ACQ TIMING</b>	
TI	<i>425</i>	Freq	<i>156</i>
Receiver Bandwidth	<i>62.50</i>	Phase	<i>140</i>
<b>IMAGE ENHANCE</b>		Freq DIR	<i>R/L</i>
Filter Choice	<i>A</i>	NEX	<i>1.00</i>
<b>GATING/TRIGGER</b>		# of Acq. Before Pause	<i>6</i>
Auto Trigger Type	<i>Off</i>	Phase FOV	<i>0.90</i>
Trigger Type	<i>1</i>	Auto Shim	<i>Auto</i>
Minimum Trigger Delay	<i>2</i>	Phase Correction	<i>No</i>
Cardiac Phase	<i>1</i>	<b>FMRI</b>	
Cardiac Slices	<i>1</i>	PSD Trigger	<i>Internal</i>
<b>MULTI-PHASE</b>		View Order	<i>Bottom/Up</i>
Seperate Series	<i>0</i>	# of Repetitions REST	<i>0</i>
Mask Phase	<i>0</i>	# of Repetitions ACTIVE	<i>0</i>
Mask Pause	<i>0</i>	<b>SAT</b>	
<b>DIFFUSION</b>		Tag Type	<i>None</i>
Recon All Images	<i>On</i>	<b>TRICKS</b>	
<b>CINE</b>		# of RR Intervals	<i>2</i>
# of Cardiac Phases to Reconstruct	<i>20</i>	Trigger Delay	<i>430</i>
		Pause On/Off	<i>On</i>
		Auto Subtract	<i>0</i>
		Auto SCIC	<i>Off</i>
		<b>CONTRAST</b>	
		Contrast Yes/No	<i>Yes</i>

4CH SS PS MDE SPGR

4CH SS PS MDE SPGR