

# Gated Thoracic Aorta Fast 64 Siemens

## Used when HR above 100

<b>Indications</b>	trauma, acute aortic syndrome, suspected aneurysm/dissection					
<b>Diagnostic Task</b>	Detect aneurysms, aortic dissections and					
<b>Scan mode</b>	Prospective 300s					
<b>Position/Landmark</b>	first-Supine-inspiration					
<b>Topogram</b>	AP 120kV 35mA Lat 120kV 35mA					
<b>kVp/Reference mass</b>	wo contrast scan 100kv, 200mA//gated 120kV 400mA					
<b>Rotation time/pitch</b>	wo contrast 0.5/0.8//gated 0.33s/0.3 pitch					
<b>Detector Configuration</b>	24x1.2//24x1.2					
<b>Dose reduction</b>	without-care dose on//gated off					
<b>Allowed CTDI ranges*</b>	7mGy-50mGy					
<b>XR29 Dose Notification value</b>	50mGy					
<b>NC scan</b>	1.5mm x 1.5mm, B20f, Mediastinum					
<b>Helical Set</b>		body	thickness		recon	
		part	spacing	algorithm	destination	
	1	Gated Aorta	300ms	1.5mmx 1.5mm	b20f/mediastinum	pacS/TR
	2	Gated Aorta	300ms	2mm x 2mm	b20f/mediastinum	pacS/TR
	3	coronal	chest	2mmx 2mm	b20f/mediastinum	pacS
	4	sagittal	chest	2mmx 2mm	b20f/mediastinum	pacS
	5	lung		1.5mmx1.5mm	b60f/lung	pacS
	6	axial mip	lung	10mmx2mm	lung	pacS
	7	Cor MIP	Aorta	5mm x 2mm	b20f/mediastinum	pacS
8	Sag MIP	Aorta	5mm x 2mm	b20f/mediastinum	pacS	
<b>Scan Start/end location</b>	Scan caudocranial from liver dome to thoracic inlet (top of lung)					
<b>DFOV recon 1 thins</b>	275mm-aorta and heart					
<b>recon 2 and NC scan</b>	Full Chest					
<b>IV contrast volume/type</b>	100ml Isovue 370 at 4cc/sec					
<b>Scan delay</b>	Bolus Tracking at descending aorta(level just inferior to carina) Trigger is +50HU					

Approximate Values for CTDIvol			
Patient size	weight(kg)	weight(lbs)	CTDIvol(mGy)
SMALL	50-70	110-155	4-10
AVERAGE	70-90	155-200	8-16
LARGE	90-120	200-265	14-22

**NOTE\*** \*The AAPM recommended NEMA XR29 Dose Notification Value for an adult torso is 50mGy. Dose Notification levels less than the AAPM recommended can be set. The maximum CTDI vol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless approved by a radiologist.

