

INDICATION		Chest pain, Coronary Atherosclerosis: Aortic valve disorders, A-Fib, Nonspecific abnormal results of function study of cardiovascular system, Preoperative cardiovascular examinations, Coronary Artery Anomaly, Chronic Ischemic heart disease					
POSITION / LANDMARK		Supine Raise patients arms above head (document if unable) Lead Position: White on Right, Grass (green) under Snow (white), Smoke (Black) over Fire (Red)					
START/END LOCATIONS		Scan Superior to Inferior. Carina through bottom of heart. Check range from Calcium Heart Score and add 5 images above and 5 images below for CTA scan. **If patient had prior CABG start scan above clavicle to include entire subclavian**					
CONTRAST PARAMETERS		Minimum 5cc's per second, 100ml contrast, 100cc saline, 18 gauge angiocath in RT AC no exceptions. 18 sec delay (5cc's per second for 55 ml then 5cc's per second, 60/40% mix with 40 cc's NACL then 5cc's per second of 30 cc's NACL					
RESPIRATORY PHASE		Inspiration					
SCAN DELAY		SMART prep track in ascending/descending aorta					
SCAN TYPE		Helical					
KV	mA	Rot Time (sec)	Pitch	Speed (mm/rot)	Noise Index	ASiR	Detector Configuration
120	Smart mA 100-560	0.3				50%	128x0.625
120	Smart mA 100-560	0.35				50%	128x0.625
SINGLE SOURCE SCANNER		Target HR < 60bpm HR<60bpm and steady (+/- 4 bpm), BMI<30, no calcium visualized on Calcium Score = Prospective (acquisition phase 65%-85%) HR>60bpm and steady (+/- 4 bpm) = Retrospective (acquisition phase 35%-85%) HR<75bpm, steady (+/- 4 bpm), and patient maxed out on medication = proceed with Retrospective scan HR>75bpm = Call Cardiothoracic Radiologist					
TECHNIQUE		Using automated exposure control and adjustment of the mA and/or kV according to patient size, radiation dose to be kept as low as reasonably achievable to obtain optimal diagnostic quality images.					

*Please note, recons are displayed as thickness X spacing

Scans						
Series #	Series	Body Part	DFOV	Thick/Space	Algorithm	Notes
1	Loc					AP/Lat
2	Source data	Ca Score Heart	See note	2.5X2.5	STND	FOV to include entire heart
3	Source data	CTA Heart	See note	0.625x0.625	STND	Scanning acquisition should begin 3-5 minutes post Nitroglycerin dose FOV to include entire heart
Recons						
Recon source Series #	Recon	Body Part	Thick / Space	Algorithm	W/L	Notes
3	Axial	CHEST	2.5x2.5	LUNG	2000/-400	FOV to cover bilateral axilla area
3	Axial	HEART	0.625 x 0.625	STND	600/200	Best Diastolic phase
3	Axial	HEART	0.625 x 0.625	STND	600/200	Multi-phase 30%-70%
3D Processing						
RECON: TREE VR AND TRANSPARENT HEART RECON: LAD LUMEN, LAD CURVE RECON: LCX LUMEN, LCX CURVE RECON: RCA LUMEN, RCA CURVE RECON: PDA LUMEN, PDA CURVE *NO REFORMATS ON CALCIUM HEART SCORE						
Series required in PACS						
Loc, Dose Report, Source data, ALL recons, ALL Ca Scoring, ALL 3D recons						

ADDITIONAL INSTRUCTIONS:

*Please note, recons are displayed as thickness X spacing