RIH – HIGH RESOLUTION CHEST GE LIGHTSPEED VCT PROTOCOL

Indications - interstitial lung disease, emphysema, bronchiectasis, asbestosis, restrictive lung disease

Position/Landmark	Head first or feet first Sternal Notch	
Topogram Direction	Craniocaudal	
Respiratory Phase	Inspiration and Expiration	
Scan Type	Helical and Axial	
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index / ASiR / Dose Reduction Detector width x Rows = Beam	Helical 120kv / smart mA (80-450) / 0.5 sec 1.375:1 , 55.00mm 30.0 / 30 / 30% 0.625mm x 64 = 40mm	Axial 120kv / smart mA (80-450) / 0.5 sec 1i 24.0 / 30 / 30% 0.625mm x 2 = 1.25mm
Collimation		
Average Tube Output	Helical: ctdi – 9 mGy E dlp – 336 mGy.cm	ach Axial: ctdi – .8 mGy dlp – 22 mGy.cm
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	body thickness econ part spacing 1 chest 5mm x 5m 2 thin chest .6mm x .6m 3 supine hi res lungs 1.25mm x 2 inspiratory	s/ recon algorithm destination . nm standard pacs nm standard for dmpr 20mm bone+ pacs
	4 lungs 5mm x 5m	nm lung pacs
First Axial Set Slice Thickness/ Spacing Algorithm Recon Destination	body thickness econ part spacing 1 supine hi res lungs 1.25mm x 2 ovningtory	s/ recon algorithm destination . 0mm bone+ pacs
Second Axial Set Slice Thickness/ Spacing Algorithm Recon Destination	body thickness econ part spacing 1 prone hi res lungs 1.25mm x 20 inspiratory	s/ recon algorithm destination . 0mm bone+ pacs
Scan Start / End Locations DFOV	lung apices costophrenic angles 35cm decrease appropriately	
IV Contrast Volume / Type / Rate		
2D/3D Technique Used	DMPR of 5mm x 5mm coronal chest series (auto-batch on), average mode, auto-transferred to PACS.	
Comments: There are three scans in this protocol: supine inspiration helical, supine expiration axials, and prone inspiration axials. Every effort must be made to acquire prone images. If the patient cannot hold their breath, please consult a radiologist. A breast shield is used on the supine images.		
Images required in PACS	Scouts, 5mm x 5mm axial chest, 5mm x 5mm coronal chest, 5mm x 5mm axial lungs, 1.25mm x 20mm axial supine inspiration hi res lung, 1.25mm x 20mm axial supine expiration hi res lung, 1.25mm x 20mm axial prone inspiration hi res lung, Dose Report	