RIH – GATED AORTA AND ABDOMEN PELVIS CTA (TAVI)
GE LIGHTSPEED VCT PROTOCOL

Position/Landmark	Feet first-Supine Sternal Notch
Topogram Direction	Craniocaudal
Respiratory Phase	Inspiration
Scan Type	Helical
KV / mA / Rotation time (sec) **Pitch / Speed (mm/rotation)** **Noise Index / ASiR / Dose Reduction**	120kv / smart mA (160-650) / 0.4 sec .20:1 , 10.4mm -- / 20 / 20%
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm
Average Tube Output	Gated Chest CTA: ctdi – 31.5 mGy; dlp – 796.4 mGy.cm Abd/Pelvis CTA: ctdi – 7mGy; dlp – 255.3 mGy.cm
First Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon 1: body part: thin gated cta; thickness/spacing: .6mm x .6mm; algorithm: standard; recon destination: terarecon/riha recon 2: body part: **gated chest cta**; thickness/spacing: 2.5mm x 2.5mm; algorithm: standard; recon destination: pacs recon 3: body part: **lungs**; thickness/spacing: 2.5mm x 2.5mm; algorithm: lung; recon destination: pacs
Second Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	recon 1: body part: thin abd/pelvis cta; thickness/spacing: .6mm x .6mm; algorithm: standard; recon destination: terarecon/riha recon 2: body part: **abd/pelvis cta**; thickness/spacing: 2.5mm x 2.5mm; algorithm: standard; recon destination: pacs
Scan Start / End Locations **DFOV**	lung apices lesser trochanters 38cm
IV Contrast Volume / Type / Rate	60mL Iohexol (Omnipaque 350) / 4.5mL per second 70mL Iohexol (Omnipaque 350) / 3mL per second 50mL saline / 3mL per second
Scan Delay	smart prep at aortic arch
2D/3D Technique Used	**.6mm, 25% - 45% r to r retro-recon, 5% increment, of only the chest cta. Send these retro-recons to TeraRecon (RITRAQGT_AE)**
Comments: The ct angiogram will be in two groups. The first is the gated scan from the lung apices to the bottom of the heart. The max mA is set to occur at 25% to 45% of r to r. The second is a routine helical from the bottom of the heart to the lesser trochanters. A breast shield is not needed for this scan. • The cardiac monitor leads should be below the clavicles and just below the curvature of the left ribs. **There cannot be a gap between the start and stop points of the two scans. The two scans should have the same centering and field of view.**	
Images required in PACS	From CT scanner: Scouts, 2.5mm axial chest abd pelvis cta, lung windows, Dose Report From 3d lab: Aortic valve measurements, Aorta/Iliac measurements, Curved reformats of aorta/iliacs.

updated Jan 23, 2017