

**RIH – PREGNANT PATIENT PE CTA
GE LIGHTSPEED 16 / OPTIMA CT580 PROTOCOL**

Indications: Evaluation for suspected pulmonary artery embolism

Position/Landmark	Head first or feet first-Supine Sternal Notch				
Topogram Direction	Craniocaudal				
Respiratory Phase	Suspension of Respiration (not Inspiration)				
Scan Type	Helical				
KV / mA / Rotation time (sec) Pitch / Speed (mm/rotation) Noise Index	120kv / smart mA (100-440) / 0.5 sec 1.75:1 , 35.00mm 24.00				
Detector width x Rows = Beam Collimation	1.25mm x 16 = 20mm				
Average Tube Output	ctdi – 9.9 mGy dlp – 320 mGy.cm				
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<u>recon</u>	<u>body part</u>	<u>thickness/ spacing</u>	<u>algorithm</u>	<u>recon destination</u>
	1	thin chest	1.25mm x .6mm	standard	for dmpr
	2	pe cta	2.5mm x 2.5mm	standard	pacs
	3	lung	5mm x 5mm	lung	pacs
Scan Start / End Locations DFOV	1cm superior to aortic arch 1cm inferior to the base of the heart 38cm decrease appropriately				
IV Contrast Volume / Type / Rate	100mL Iopamidol (Isovue 370) / 4 mL per second				
Scan Delay	22 seconds				
2D/3D Technique Used	DMPR of 5mm x 5mm coronal chest series (auto-batch on), average mode, auto-transferred to PACS.				
Comments:	This protocol is used for pregnant patients needing a pe cta scan. It uses a reduced scan area and a faster rotation time. Helical scan direction for pe cta is from top to bottom. Recon 1 is a single thin helical group of the chest for direct mpr. Recon 2 is a standard 2.5mm algorithm for vasculature. Recon 3 is a lung algorithm.				
Images required in PACS	Scouts, 2.5mm x 2.5mm axial pe cta, 5mm x 5mm coronal chest, 5mm x 5mm axial lungs, Dose Report				