UT Southwestern Department of Radiology

Protocol Name: Pulmonary Embolism
Epic Button: Pulmonary Embolism
Indications: Shortness of breath, elevated d-dimer, chest pain, hypoxia

Orderable Name: CT ANGIOGRAPHY CHEST PULMONARY ARTERIES WO/ W IV CONTRAST

Adult Only

CTDIvol < 60 mGy
DLP < 7500 mGycm

 # Acquisitions: 1-2

Active Protocol

Oral Contrast: None

IV Contrast: Link to Contrast Information
Rate (ml/sec): 5
Volume (ml): See Notes
IV Access:
Power injection: 18-20g or larger in large vein (AC or more central)

Notes:

	Volume (ml)
Single Energy	90
Dual Energy	75

Other Contrast: None

Airway
Respiratory pause

Other Notes
Read by Cardiothoracic division

Consult body habitus kVp selection chart.

If pt>280 lb: don't use dual energy mode on Force/Flash scanners.

Bolus tracking: Trigger at 120 HU in pulmonary artery, wait 5 sec to start scan.

Last Change: 2/6/2025 **Last Review:** 2/25/2025 **Links:** kVp Body Chart General Statements

Special Instructions	Send to TeraRecon & Syngovia (volume) If no prior, Use FOV Targeted, including rib cage, ~1cm clearance.		Do not repeat CT scan, recon lung from 1st acquisition		If pt has known congenital heart disease, add 60 sec delay. CONSULT RAD TO OK.
Acq # / Series Name	**1**	Pulmonary Arterial	**N/A**	Pulmonary Arterial	**2** 60 Sec Delayed
Phase Timing	Bolus tracking		N/A		60 sec delay
Acquisition Protocol	Chest PE		Recon Only		Chest PE
Coverage	Base of neck through L1		Same		Base of neck through L1
FOV	Match prior PE study FOV, if available		Same		Same
Algorithm	Soft Tissue		Lung		Soft Tissue
Axial Recons	3 mm, 1 mm		3 mm		3 mm
Other Planar Recons	2 mm coronal and sagittal				2 mm coronal and sagittal
MIP Recons	7x2mm axial				
†DECT Philips	Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial				Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial
†DECT Siemens	Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial				Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial
†PC-CT Siemens					

† When dual energy (DE) or photon counting (PC) CT is used