

UT Southwestern Department of Radiology

Protocol Name: Pulmonary Embolism

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

Adult Only

Epic Button: Pulmonary Embolism

CTDIvol < 60 mGy
DLP < 7500 mGycm

Indications: Shortness of breath, elevated d-dimer, chest pain, hypoxia

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: <table style="width: 100%; border: none;"> <tr> <td></td> <td style="text-align: right;">Volume (ml)</td> </tr> <tr> <td>Single Energy</td> <td style="text-align: right;">90</td> </tr> <tr> <td>Dual Energy</td> <td style="text-align: right;">75</td> </tr> </table>		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.
	Volume (ml)								
Single Energy	90								
Dual Energy	75								

Last Change: 11/15/2022

Last Review: 11/17/2022

Links: [kVp Body Chart](#) [General Statements](#)

Special Instructions	Send to TeraRecon & Syngovia (volume)	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	Targeted, including rib cage, ~1cm clearance	Same	Same
Algorithm	Soft Tissue	Lung	Soft Tissue
Primary Axial Recon	3 mm, 1 mm	3 mm	3 mm
Other Recons	2 mm coronal and sagittal		2 mm coronal and sagittal
MIP Recons	7x2mm axial		
*Dual Energy Philips	Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial		Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial
*Dual Energy Siemens	Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial		Mono-50keV 1mm axial, VNC, Iodine Map 3mm axial



* When dual energy or spectral CT is used