

# UT Southwestern Department of Radiology

**Protocol Name:** CTA Chest/Abd/Pel-Endograft (single source)

**Orderable Name:** CT ANGIOGRAM AORTA ENTIRE W AND/OR WO IV CONTRAST

Adult Only

**Epic Button:** CTA Chest/Abd/Pel-Endograft (single source)

CTDIvol < 60 mGy

**Indications:** Post-op for Thoracic and/or Abdominal aortic aneurysm (EVAR, TEVAR, FEVAR, or surgical graft) repaired or unrepaired, chronic aortic dissection.

**# Acquisitions:** 4

Active Protocol

|                            |  |                             |   |
|----------------------------|--|-----------------------------|---|
| <b>Oral Contrast:</b> None | <b>IV Contrast:</b> <a href="#">Link to Contrast Information</a><br><b>Rate (ml/sec):</b> 4<br><b>Volume (ml):</b> 100<br><b>IV Access:</b><br>Power injection: 20g or larger in large vein (prefer AC fossa or forearm)<br><br><b>Notes:</b><br>Bolus tracking: 150 HU in abdominal aorta @ supra-renal level, initiate scan 8 sec after trigger. (send bolus tracker to PACS). | <b>Other Contrast:</b> None | <b>Airway</b><br>Full inspiration<br><br><b>Other Notes</b><br>Read by VIR division<br>Consult body habitus kVp selection chart.<br><br>UTSW: Check attenuation of the suprarenal aorta (same location as bolus tracking) on the arterial phase at the time of scan. If HU< 250 HU, call radiologist to determine next steps and document in tech note. |
|----------------------------|--|-----------------------------|---|

Last Change: 2/21/2025

Last Review: 2/21/2025

Links: [kVp Body Chart](#)

[General Statements](#)

[CTA aorta parameter table 8-22 update](#)

|                             |   |   |   |
|-----------------------------|---|---|---|
| <b>Special Instructions</b> | Send volume to TeraRecon and Syngo Via    | Send volume to TeraRecon and Syngo Via    | Send volume to TeraRecon and Syngo Via    |
| <b>Acq # / Series Name</b>  | <b>1</b> Noncontrast                      | <b>2</b> Early Arterial                   | <b>3</b> Delayed                          |
| <b>Phase Timing</b>         |   | Bolus tracking                            | 40 sec after arterial phase               |
| <b>Acquisition Protocol</b> | <a href="#">Abdominal Standard 5mm</a>    | <a href="#">Vascular</a>                  | <a href="#">Vascular</a>                  |
| <b>Coverage</b>             | Base of neck to lesser trochanters        | Base of neck to lesser trochanters        | Base of neck to lesser trochanters        |
| <b>FOV</b>                  | Skin to skin at widest portion of patient | Skin to skin at widest portion of patient | Skin to skin at widest portion of patient |
| <b>Algorithm</b>            | Soft Tissue                               | Soft Tissue                               | Soft Tissue                               |
| <b>Axial Recons</b>         | 2 mm, 0.5 mm                              | 2 mm, 0.5 mm                              | 2 mm, 0.5 mm                              |
| <b>Other Planar Recons</b>  | 2 mm coronal and sagittal                 | 2 mm coronal and sagittal                 | 2 mm coronal and sagittal                 |
| <b>MIP Recons</b>           |   | 7x2mm axial, sagittal and coronal         | 7x2mm axial, sagittal and coronal         |
| <b>†DECT Philips</b>        |   | mono E 40 1mm axial, SBI                  | mono E 40 1mm axial, SBI                  |
| <b>†DECT Siemens</b>        |   |   |   |
| <b>†PC-CT Siemens</b>       |   |   |   |

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

