

# UT Southwestern Department of Radiology

**Protocol Name:** Knee CT With IV Contrast

**Orderable Name:** CT LOWER EXTREMITY LEFT W IV CONTRAST

Adult Only

**Epic Button:** Knee + IV

CT LOWER EXTREMITY RIGHT W IV CONTRAST

CTDIvol < 50 mGy

**Indications:** Suspected infection, inflammation, tumor

**# Acquisitions:** 1

Active Protocol

|                     |  |                      |   |
|---------------------|--|----------------------|---|
| Oral Contrast: None | IV Contrast: <a href="#">Link to Contrast Information</a>                                | Other Contrast: None | Airway  |
|                     | Rate (ml/sec): 3   |                      |   |
|                     | Volume (ml): 60 - 75   |                      |   |
|                     | IV Access:   |                      |   |
|                     | Power injection: 20g or larger strongly preferred (if 22g use reduce rate to 2.5 mL/sec) |                      |   |
|                     | <b>Notes:</b>  |                      |   |
|                     | Adjust contrast volume based on patient size.  |                      |   |
|                     |  |                      | <b>Other Notes</b><br>*Place a marker at the site of most concern.<br>Use Right/Left orderable based on protocol or side indicated in reason for exam.<br>Metal (FOV): Use 140 kVp.<br>Dual energy/Spectral scanner required. Photon counting scanner preferred unless gout is indicated. |

Last Change: 1/13/2023

Last Review: 1/29/2025

Links:

[General Statements](#)

[Positioning Reference](#)

|                             |  |   |
|-----------------------------|--|---|
| <b>Special Instructions</b> | Use 5mm cor/sag if large patient or metal in FOV.                          | Do not repeat CT scan, recon soft tissue from 1st acquisition, send soft tissue kernal volume to TeraRecon<br>Use 5mm cor/sag if large patient or metal in FOV. |
| <b>Acq # / Series Name</b>  | <b>1</b> 60 Sec Delayed  | <b>N/A</b> 60 Sec Delayed   |
| <b>Phase Timing</b>         | 60 seconds   | N/A   |
| <b>Acquisition Protocol</b> |  | <a href="#">Recon Only</a>  |
| <b>Coverage</b>             | See illustration - Distal femoral metaphysis to proximal tibial metaphysis | Same  |
| <b>FOV</b>                  | Whole knee   | Same  |
| <b>Algorithm</b>            | Bone   | Soft Tissue   |
| <b>Axial Recons</b>         | 3 mm   | 4 mm, Volume  |
| <b>Other Planar Recons</b>  | 3 mm coronal and sagittal  | 4 mm coronal and sagittal   |
| <b>MIP Recons</b>           |  |   |
| <b>†DECT Philips</b>        | VNC,Gout maps (cor/sag), BM edema, SBI, mono E 100, mono E 120             |   |
| <b>†DECT Siemens</b>        | VNC,Gout maps (cor/sag), BM edema, low/high kVp, mono E 100, mono E 120    |   |
| <b>†PC-CT Siemens</b>       |  |   |

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

