

**Angio Head & Temp Bones UHR (non DE) Siemens Flash**

|                                          |                     |
|------------------------------------------|---------------------|
| Application Examples: pulsatile tinnitus |                     |
| Oral Contrast                            | No                  |
| IV Contrast / Volume                     | 75 mL Omnipaque 350 |
| Injection Rate                           | 5 mL/sec            |

*Technical Factors*

|                              |                         |
|------------------------------|-------------------------|
| Care Bolus ROI Location / HU | *see instructions below |
| Monitoring Delay             | 10 seconds              |
| Cycle Time                   | 1.5 seconds             |
| Scan Delay                   | 2 seconds               |
| Breath Hold                  | N/A                     |
| Detector Collimator          | Acq 128 x 0.6 mm        |
| Care kV                      | Semi / 120              |
| Care Dose 4D                 | On / 165                |
| Rotation Time (seconds)      | 0.5                     |
| Pitch                        | 1.2                     |
| Typical CTDIvol              | 25.24 mGy ± 50%         |

Topogram: AP and Lateral, 256 mm

| Angio Tbones | Recon Type | Width / Increment | Kernel | Safire | Window    | FoV | Series Description | Networking | Post Processing   |
|--------------|------------|-------------------|--------|--------|-----------|-----|--------------------|------------|-------------------|
| Recon 1      | Axial      | 0.6 x 0.6         | J30f   | 2      | Angio     | 160 | AXIAL              | PACS & TR  | Rotating MIP & VR |
| Recon 2      | 3D:COR     | 10 x 4            | J30f   | 2      | Angio     | -   | COR MIP            | PACS       | Coronal MIP       |
| Recon 3      | 3D:SAG     | 10 x 4            | J30f   | 2      | Angio     | -   | SAG MIP            | PACS       | Sagittal MIP      |
| Recon 4      | 3D: AXIAL  | 10 x 4            | J30f   | 2      | Angio     | -   | AXIAL MIP          | PACS       | Axial MIP         |
| Recon 5      | Axial      | 0.6 x 0.6         | J30f   | 2      | Angio     | 160 | AXIAL 0.6 STND     | TR & PACS  | 3D                |
| Recon 6      | Axial      | 0.6 x 0.6         | H60f   | -      | Inner Ear | 100 | AXIAL RT           | PACS       | None              |
| Recon 7      | Axial      | 0.6 x 0.6         | H60f   | -      | Inner Ear | 100 | AXIAL LT           | PACS       | None              |
| Recon 8      | 3D:COR     | 0.6 x 0.6         | H60f   | -      | Inner Ear | 100 | COR RT             | PACS       | None              |

There should be two orders: (1) **CT Angio Head** and (2) **CT Temp Bone with contrast**. Register patient on the scanner using study split.

**IV Placement:** ≥ 18 gauge, *preferably* in antecubital (AC) fossa.

**Patient Preparation:** Have patient remove any detachable dental work.

**Patient Position:** Position head with chin tucked and head in a symmetrical position (no rotation or tilt). Petrous ridges should be in the lower third of orbits on AP topogram. Repeat AP topogram until positioning is accurate and before furthering with scan.

**Scan Instructions:** Take pre-monitoring at level carotid bifurcations and place ROI in air. Manually trigger scan as soon as first blush of contrast is in carotid arteries.

**Scan Range:** Scan below carotid bifurcations (approximately C5 level) through circle of willis (COW) to top of head.

**Recons and Reformations:** After first 8 recons complete, delete two recons and make temporal bones reformations as listed below. It is important to choose the right or left planning base corresponding with the correct side. Check labeling and keep FoV consistent at 100.

|          |        |           |      |           |     |        |      |     |
|----------|--------|-----------|------|-----------|-----|--------|------|-----|
| Recon 7  | 3D:COR | 0.6 x 0.6 | H60f | Inner Ear | 100 | COR RT | PACS | MPR |
| Recon 8  | 3D:SAG | 0.6 x 0.6 | H60f | Inner Ear | 100 | SAG RT | PACS | MPR |
| Recon 9  | 3D:COR | 0.6 x 0.6 | H60f | Inner Ear | 100 | COR LT | PACS | MPR |
| Recon 10 | 3D:SAG | 0.6 x 0.6 | H60f | Inner Ear | 100 | SAG LT | PACS | MPR |

**3D:** Rotating MIP and VR of COW. See post processing protocol for more details.