

**RIH – UPPER EXTREMITY CTA
SIEMENS DEFINITION AS+ PROTOCOL**

Position/Landmark	Head first or feet first-Supine. The arm should be placed over the patient's head when possible. Zero appropriately															
Topogram Direction	Craniocaudal															
Respiratory Phase	Suspension															
Scan Type	Helical															
Ref kV/Ref mAs/Rotation time (sec) Pitch / Speed (mm/rotation) Safire Strength / Dose Optimization	Care kV 120 / Care Dose4D 180 / 0.5sec .8:1 , 40.00mm 3 / 6															
Detector width x Rows = Beam Collimation	0.625mm x 64 = 40mm (128 x .6mm)															
Average Tube Output	ctdi – 8.1 mGy dlp – 330 mGy.cm															
Helical Set Slice Thickness/ Spacing Algorithm Recon Destination	<table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; border-bottom: 1px solid black;">recon</th> <th style="text-align: left; border-bottom: 1px solid black;">body part</th> <th style="text-align: left; border-bottom: 1px solid black;">thickness/ spacing</th> <th style="text-align: left; border-bottom: 1px solid black;">algorithm</th> <th style="text-align: left; border-bottom: 1px solid black;">recon destination</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>run-off ct angio</td> <td>2mm x 2mm</td> <td>I31f med smooth</td> <td>pac</td> </tr> <tr> <td>2</td> <td>thin ct angio</td> <td>.75mm x .7mm</td> <td>I31f med smooth</td> <td>mpr/TereRecon</td> </tr> </tbody> </table>	recon	body part	thickness/ spacing	algorithm	recon destination	1	run-off ct angio	2mm x 2mm	I31f med smooth	pac	2	thin ct angio	.75mm x .7mm	I31f med smooth	mpr/TereRecon
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2	thin ct angio	.75mm x .7mm	I31f med smooth	mpr/TereRecon												
Scan Start / End Locations	determined by technologist or radiologist to include the anatomy of interest															
DFOV	18cm decrease appropriately															
IV Contrast Volume / Type / Rate	100mL Iohexol (Omnipaque 350) / 4mL per second															
Scan Delay	Smart Prep at aortic arch or proximal extremity															
2D/3D Technique Used	3mm x 3mm sagittal and coronal upper extremity , mip mode manually transferred to PACS. 3d run-off ct angiogram, manually transferred to PACS. Thick run-off mip rotation , manually transferred to PACS.															
Comments: The cta is done using bolus tracking at the level of the aortic arch. The threshold trigger is +100 HU. Recon 2 is thin for reformats. 3mm x 3mm coronal reformats, mip mode region are created from this helical image data set. Thick mip rotation of the arterial anatomy.																
Images required in PACS	Topograms, 2mm x 2mm axial run-off cta, 3mm x 3mm coronal upper extremity cta, 3mm x 3mm sagittal upper extremity cta, 3d run-off ct angiogram rotation, Thick mip rotation of the arterial anatomy. Patient Protocol															