Abdomen Renal Mass

Siemens 16 Slice

Application Examples: renal mass

Oral Contrast	Yes
IV Contrast / Volume	125 ml Omnipaque 350
Injection Rate	4.0 ml/sec

Technical Factors

Unenhanced - Arterial – 90 seconds – Delayed	
Scan Type	Spiral
Detector Collimator	Acq 16 x 1.2 mm
kV / mAs / Rotation Time	130 kV / 155mAs / 0.6 seconds
Care Dose 4D	On
Pitch	0.8
Typical CTDIvol	17.26 mGy

Breath Hold	Inspiration

Arterial Phase	
Care Bolus ROI Location / HU	Abdominal Aorta / 100
Monitoring Delay	10 seconds
Cycle Time	1.5 seconds
Scan Delay	**10 seconds**

90 seconds	
Scan Delay	*Adjust to scan at 90 seconds

Delayed	
Scan Delay	300 seconds

Topogram: AP, 512 mm

Unenhanced	**Width / Increment**	**Kernel**	**Window**	**Series Description**	**Networking**
Recon 1	3 x 3	B30s	Abdomen	AXIAL WITHOUT	PACS

Arterial	**Width / Increment**	**Kernel**	**Window**	**Series Description**	**Networking**
Recon 1	3 x 3	B30s	Abdomen	AXIAL ARTERIAL	PACS
Recon 2	1.5 x 0.7	B30s	Abdomen	AXIAL ARTERIAL 1.5 x 0.7 STND	PACS/ TeraRecon

90 seconds	**Width / Increment**	**Kernel**	**Window**	**Series Description**	**Networking**
Recon 1	3 x 3	B30s	Abdomen	AXIAL 90 SEC	PACS
Recon 2	1.5 x 0.7	B30s	Abdomen	AXIAL 90 SEC 1.5 x 0.7 STND	MPR / TeraRecon

Delay	**Width / Increment**	**Kernel**	**Window**	**Series Description**	**Networking**
Recon 1	3 x 3	B30s	Abdomen	AXIAL DELAYED	PACS
Recon 2	1.5 x 0.7	B30s	Abdomen	AXIAL DELAYED 1.5 X 0.7 STND	TeraRecon

Patient Position: Patient lying supine with arms above head.

Scan Instructions: First, scan kidneys unenhanced (if requested). Take pre-monitoring slice at top of arterial scan range (just above kidneys) and place ROI in aorta. Add monitoring delay, arterial scan delay, and arterial scan time to determine the scan delay for the 90 seconds phase—set to equal 90 seconds from the start of injection. Inject IV contrast and scan kidneys in arterial phase. Then, scan **liver and kidneys** in 90 seconds phase (pelvis also if ordered). Lastly, scan kidneys only in delayed phase (if requested).

Recons: Adjust FoV to fit body contour.

Scan Range: **Unenhanced / Arterial / Delay** – Kidneys only
90seconds – Upper abdomen to include liver and kidneys (and through ishcial tuberosities if pelvis ordered)

Reformations: Post processing done in 3D card.

Series: Arterial	**Reformat Type**	**Width / Increment**	**Window**	**Series Description**	**Networking**
Recon 2	Coronal MIP	3 x 3	Angio	COR MIP	PACS
Recon 2	Sagittal MIP	3 x 3	Angio	SAG MIP	PACS

Series: 90 seconds	**Reformat Type**	**Width / Increment**	**Window**	**Series Description**	**Networking**
Recon 2	Coronal MPR	3 x 3	Abdomen	COR	PACS
Recon 2	Sagittal MPR	3 x 3	Abdomen	SAG	PACS