

CTA TMVR (Encircle)

Updated 05/06/24

Reviewed 05/14/25

Indications - pre operative evaluation for mitral valve replacement.

Bill under CT Angio Cardiac w/ Contrast charge. Do not use CT Angio Coronary w/ Contrast charge.

GENERAL SCAN NOTES

Move the patient's arms over his/her head. Remove any metal from the imaging field of view.

Topogram - lung apices through diaphragm (obtained during end inspiration).

Craniocaudal scan coverage - top of aortic arch through bottom of heart (obtained during end inspiration).

Adjust FOV (field of view) on topogram to smallest without cropping anatomy (target FOV 150-220 mm).

Matrix must be 512 x 512 square.

EKG gating - always **retrospective**.

IV Contrast (triphasic protocol):

1st injection - 60 mL Omnipaque-350 at 4 mL/sec.

2nd injection - 40 mL 50:50 mixture Omnipaque-350 & normal saline at 4 mL/sec.

3rd injection - 20 mL normal saline at 4 mL/sec.

All three injections immediately after one another.

20-gauge or larger in forearm or more proximal.

Bolus track off **ascending aorta** triggered at **100 HU**.

SIEMENS PARAMETERS & RECONS

	Scan Mode	kV	mAs	Care Dose	Care kV & Lvl	Pitch	Acq	Coll	Rot Time	Scan Time
Go Top 64	spiral	100	54	on	on 64	0.31	64	0.6	0.33	4.2
Drive 128	spiral	100	282	on	on	0.17	128	0.6	0.285	6.5
Force 192	spiral	100	288	on	on	0.15	192	0.6	0.25	4.3

Name of Series	Thick	Interval	Kernel	Window	IR Lvl	Recon Direction
AX BEST DIA	0.6	0.4	Bv40	cardiac	3	head/feet
AX BEST SYS	0.6	0.4	Bv40	cardiac	3	head/feet
AX MULTI 20-80%	0.6	0.4	Bv40	cardiac	3	head/feet
AX SOFT	3.0	3.0	Br40	mediastinum	3	head/feet
COR SOFT	3.0	3.0	Br40	mediastinum	3	front/back
SAG SOFT	3.0	3.0	Br40	mediastinum	3	left/right
AX LUNG	3.0	3.0	B159	lung	3	head/feet