

 SELECT RADIOLOGY SOLUTIONS A Division of Radiology Imaging Associates	RENOGRAM W or WO LASIX		
	Approval: K. Shamlou, MD	rev:2	7/15/2026

Lasix Renogram

Radiopharmaceutical: 99mTc-MAG3 (Mertiatide)

Dose: 20 mCi

T1/2: 6 hours

Energy: 140 keV

CPT: 78708 (with Lasix); 78707 (without Lasix)

Indications:

Approved indications include, but are not limited to:

1. Hydronephrosis.
2. Renal calculi or mechanical obstruction.
3. Evaluation of renal function.
4. Evaluation of transplant kidney function.

Patient Preparation:

- Patient should be off of any prescribed diuretics for 24 hours prior to study.

Pharmacologic intervention:

- Standard adult dose of Lasix (furosemide) is 40 mg.
- Pediatric dose is 1 mg/kg.
- If patient has only one kidney or transplant kidney, Lasix dose is 20 mg.
- Consult with radiologist prior to determining proper Lasix dose for any other situation.

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Transplant Kidney Protocol:

- If patient has a transplant kidney, inject 3 mCi of 99mTc-Sulfur Colloid, wait 20 minutes, and acquire a 600 kcount anterior image of kidney.
- Then proceed with MAG3 Renogram with or without Lasix, as ordered.

Equipment:

GE 830 – LEHRS collimator

Procedure:

Set up 250mL bag of normal saline to be infused during exam

1. Position the camera posteriorly for patients with native kidneys, and anteriorly for patients with transplant kidney.
2. Acquire flow study at 1 sec/frame for 60 frames, followed by excretion study at 60 sec/frame for 40 frames.
3. At 15 minutes post injection, administer Lasix IV.
4. If one or both kidneys drained less than 25%, acquire a 5min static 2 hours post injection. 128x128 frame. You can extract and compress the last 5 frames of the excretion phase to use as a 40min comparison image.

Acquisition Parameters:

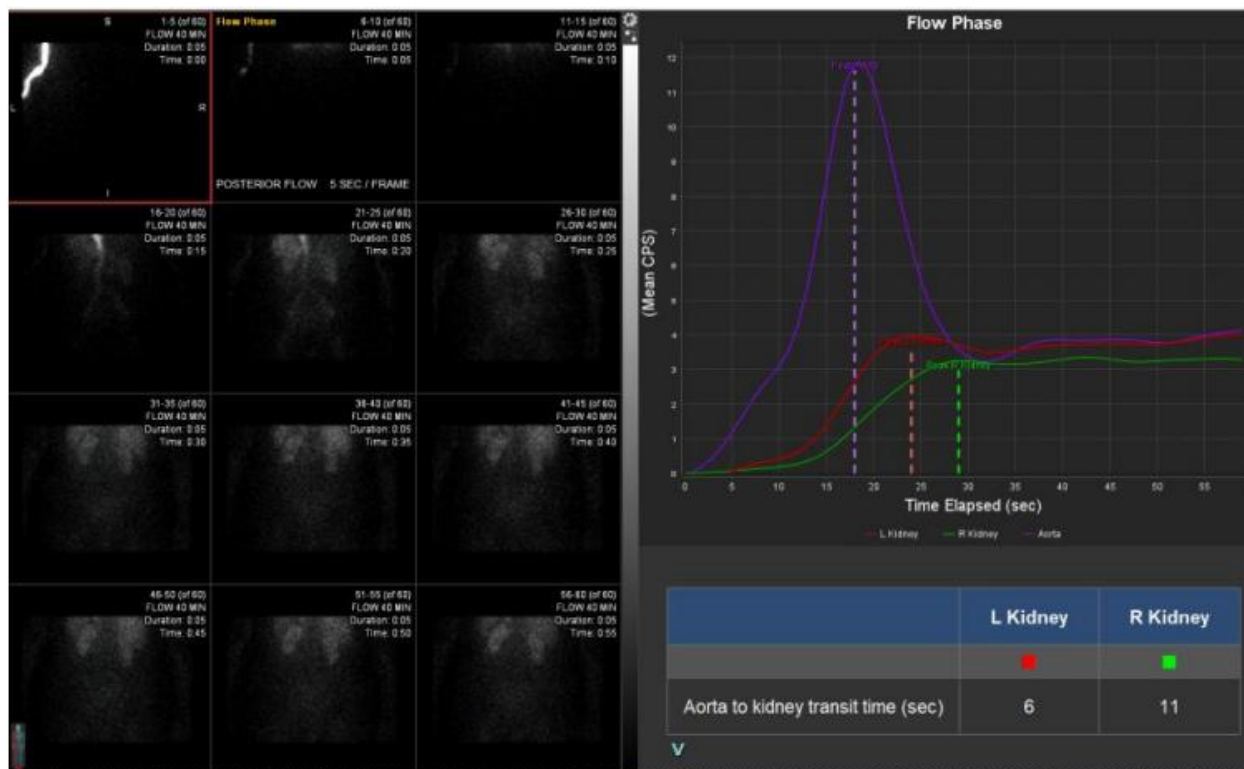
- Matrix: 128 x 128
- Zoom: 1.0 (Full Field)
- Dynamic Flow Time: 1 sec/frame for 60 frames
- Dynamic Excretion Time: 60 sec/frame for 40 frames.
- Position: Supine
- Orientation: Feet First

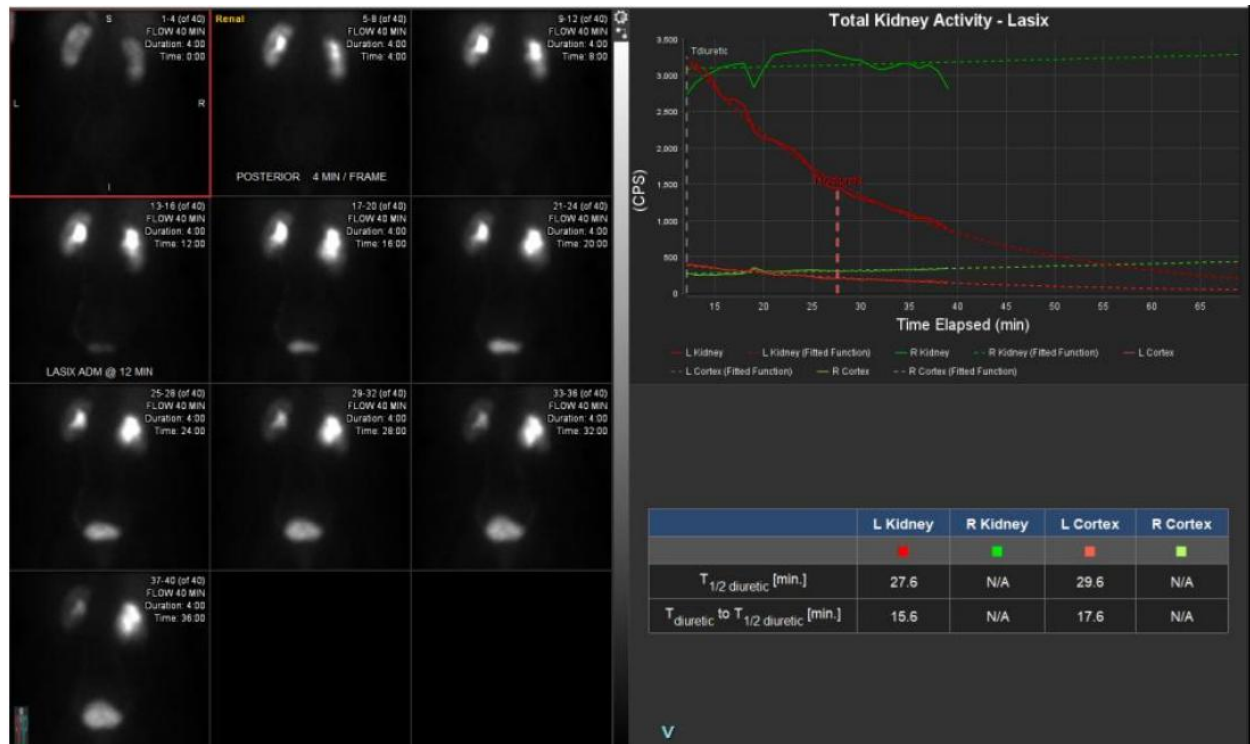
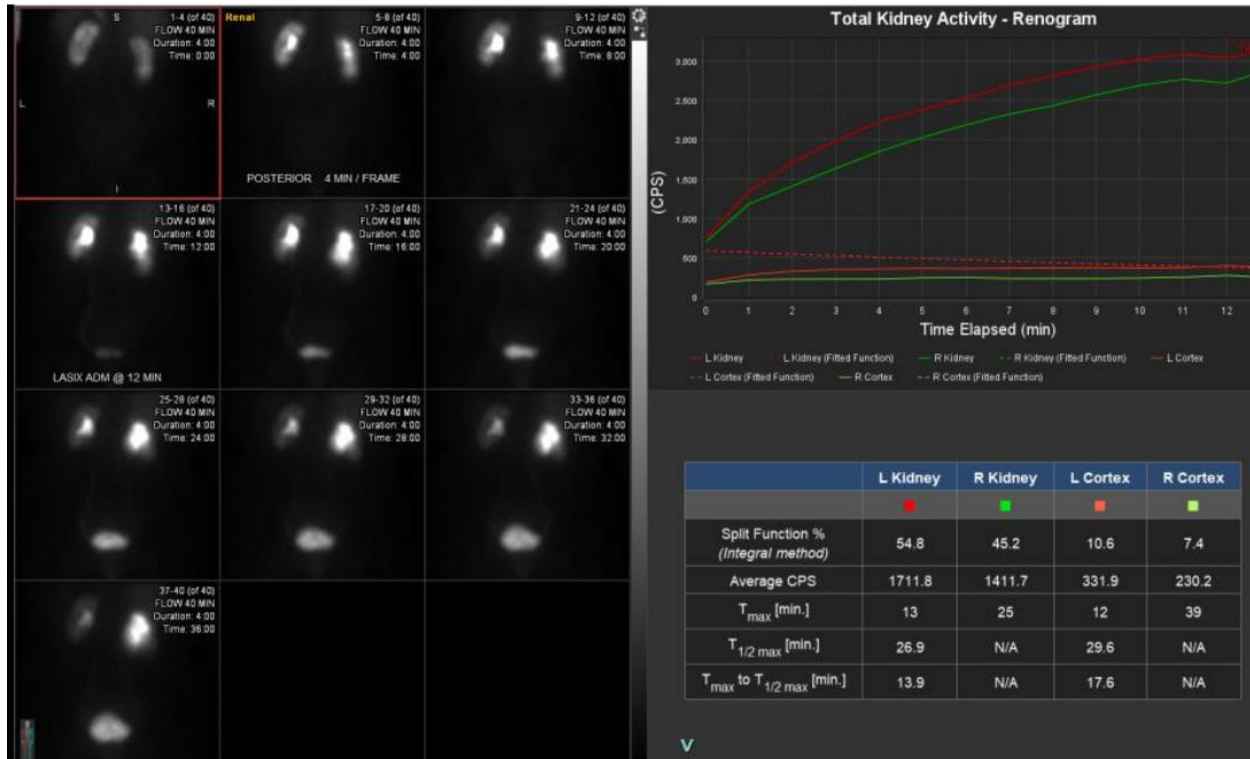
Delay:

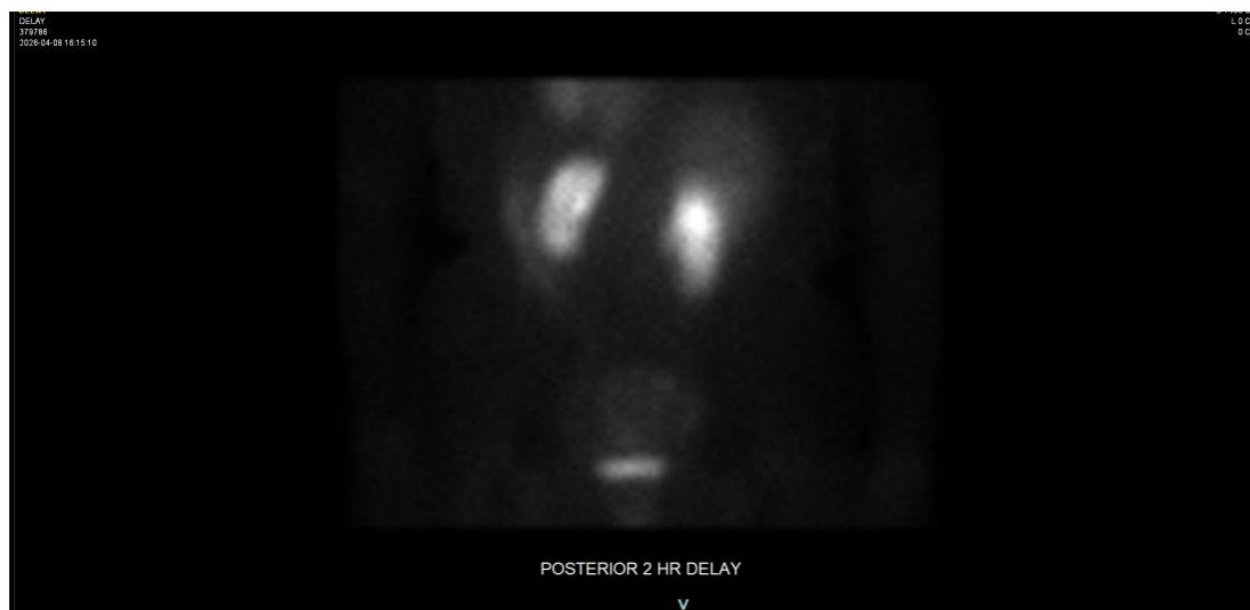
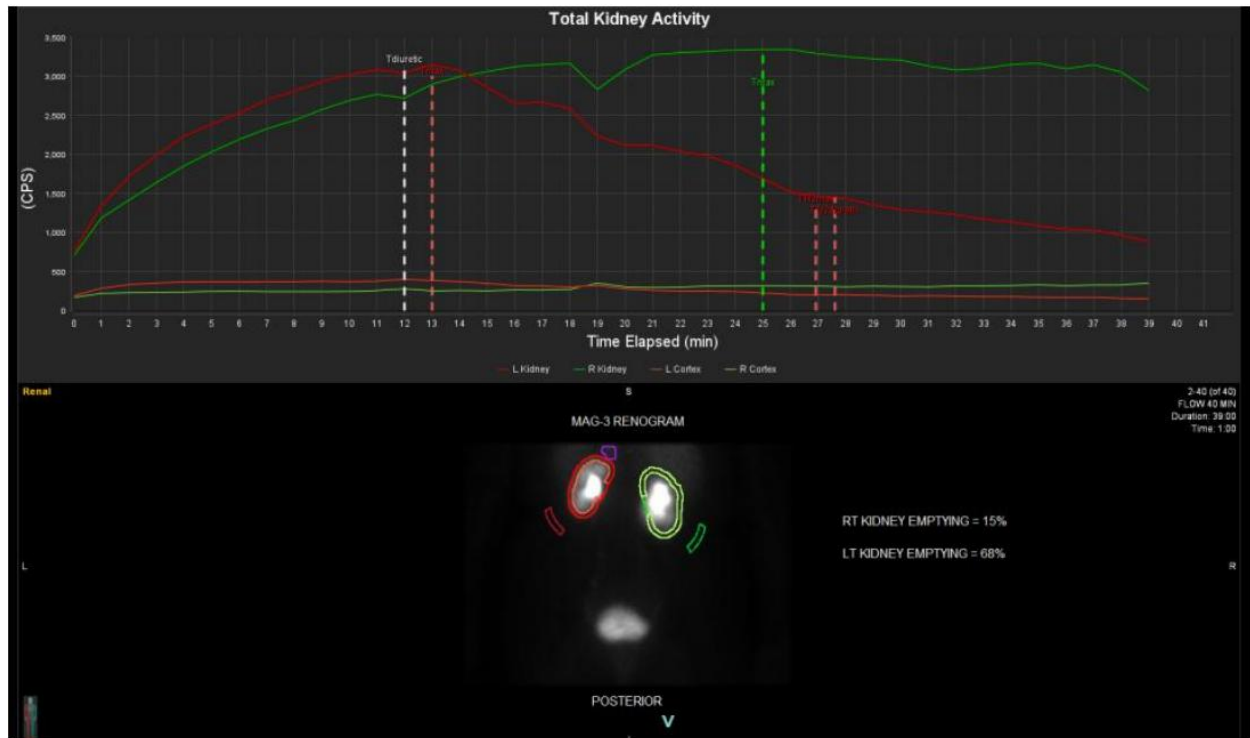
- Matrix: 128 x 128
- Total time: 300 sec
- Zoom: 1.0 (full field)
- Supine, feet first

Processing / Screenshots for PACS

- Initial flow phase graph
- Perfusion graph
- Excretion phase graph
- Full time activity graph
- Dynamic perfusion and excretion raw data
- Delay statics – if done









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