



MUGA Scan

Approval: K. Shamlou, MD

rev:2

7/15/2026

Gated Blood Pool (MUGA)

Radiopharmaceutical: Tc^{99m}- UltraTag labeled red blood cells

Dose: 20 mCi

T ½ : 6 hrs.

Energy: 140 keV

CPT: 78472

Indications

Clinical indications for gated equilibrium radionuclide ventriculography include, but are not limited to:

1. Known, or suspected, coronary artery disease (CAD) with or without myocardial infarction.
2. Congestive heart failure (CHF)
3. Evaluation of cardiac function in patients undergoing chemotherapy
4. Assessment of ventricular function in patients with valvular heart disease.

Patient Instruction

- Notify the patient that the appointment time is approximately 1 to 1 ½ hrs.
- Upon scheduling, if the patient has any pertinent studies, please instruct the patient or the office to make those available for correlation

Equipment

1. GE 830 Discovery

Procedure

- Follow package insert instructions to tag red blood cells with Tc^{99m}-Pertechnetate
- For patient receiving chemotherapy, acquire LAO and LPO projections for approximately 600 beats
- For cardiac indications, acquire LAO, ANT and LPO views. Acquire approximately 600 beats.

Acquisition Parameters

- LEHRS Collimator
- L – mode
- Accepted time: 480sec
- Matrix: 64 x 64
- Zoom: 2.57
- 24 frames/cycle – time mode
- PVC threshold 15% high/low

Processing / PACS data sets

- ROI / EF page with amplitude and phase
- Peak fill rate screen shot
- Raw gated dynamic

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