

 SELECT RADIOLOGY SOLUTIONS A Division of Radiology Imaging Associates	Bone Marrow Scan		
	Approval: K. Shamlou, MD	rev:2	7/15/2026

Bone Marrow Scan

Radiopharmaceutical: 99mTc-Sulfur Colloid

Dose: 10 mCi

T1/2: 6 hours

Energy: 140 keV

CPT: 78102 (limited area); 78103 (multiple areas); 78104 (whole body)

HCPCS: A9541 (Tc99m-Sulfur Colloid)

Indications:

Approved indications include, but are not limited to:

1. Avascular necrosis
2. Abnormal bone marrow distribution
3. Abnormal marrow replacement by tumor
4. Abnormal marrow replacement by infection (osteomyelitis)

Patient Preparation:

- Patient should make available any previous studies that could assist in the interpretation.

Equipment:

1. GE 830 Discovery

Procedure:

1. Inject patient with 10 mCi 99mTc-Sulfur Colloid IV, followed by 20 mL normal saline flush.
2. At 1 hour post injection, acquire wholebody scan at 8 cm/min.
3. Acquire static images of the area of concern in the ANTERIOR, POSTERIOR, BILATERAL, and/or OBLIQUE projections.

Acquisition Parameters:

Wholebody Scan

- Collimator ID: LEHRS
- Matrix: High-Res.
- Zoom: 0.92
- Scan Speed: 16.6 cm/min
- Position: Supine
- Orientation: Feet First
- Body Contour: Auto

Static Images

Bone Marrow Scan

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- Collimator ID: LEHRS
- Matrix: 256 x 256
- Zoom: 1.00 x (Full Field)
- Total Time: 300 seconds
- Total Kcounts: 1000
- Position: Supine, feet first

Processing/ PACS data sets

- Screenshot of posterior and anterior whole body images
- Screenshot of statics

