

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

Liver Hemangioma Scan

Radiopharmaceutical: Tc99m-UltraTag Red Blood Cells

Dose: 20 mCi

T1/2: 6 hours

Energy: 140 keV

CPT: 78205 (SPECT only); 78206 (SPECT with vascular flow)

Indications:

Approved indications include, but are not limited to:

1. Evaluation of possible or known liver hemangioma.
2. Abnormal radiological examination.

Patient Preparation:

- NPO for 4 to 6 hours.

Equipment:

1. GE 830 Discovery

Procedure:

1. Set an IV (22g or greater, to not damage RBCs), and draw 2-4 mL of whole blood into heparinized syringe (0.25 to 0.5 mL of heparin).
2. Follow instructions in UltraTag kit to tag RBCs with 99mTc-pertechnetate. This process takes roughly 25 min to complete.
3. Begin scanning immediately after reinjection of tagged RBCs.
4. Acquire six (6) 10 minute SPECT scans over the abdomen..
5. Correlate suspected area with US, MR, or CT scan. Patient must have had one of these done, in order to suspect a hemangioma.

Acquisition Parameters:

- Matrix: 128 x 128
 - Zoom: 1.0 (Full Field)
 - Time: 8 seconds/frame
 - Number of angles: 120 View angle 3
- Clockwise rotation starting at 0 degrees
- Position: Supine
 - Orientation: Feet First
- Body contour
Acquire during motion
H-mode

Processing/Data sets for PACS

- Axial, coronal, and sagittal dynamic SPECT datasets
- Composite screen shot of the dynamic SPECT data reformatted into summed frames (3 frames per image)