General Reference:
Practice Guideline For Performance Of Scintigraphy For Inflammation And Infection.pdf

Common Indications:
Bone marrow imaging is most often indicated in conjunction with *and prior to* a Tc99m-tagged WBC scan, in patients who currently have (or have ever had) internal fixation hardware (rod, pin, plate, screws, prosthesis, etc) or prior major orthopedic surgery involving the region of interest.

Pre-scan Clinical History:
Confirm that the patient has or has had hardware or major orthopedic surgery involving the interest. a bone marrow study will be needed. If yes, then

Patient Preparation:
None

Relative Contraindications (if present, consult with nuclear medicine physician prior to scan):
1. Recent nuclear medicine studies
2. Pregnancy

Radiopharmaceutical and Route of Administration:
10 mCi of Tc99m sulfur colloid injected intravenously.

Procedure:
1. **If the patient is scheduled for a WBC study,** draw the patient's blood according to the WBC imaging protocol.
2. Inject 10 mCi Tc99m sulfur colloid intravenously.
3. Image the area of interest 2 to 4 hours after the injection of sulfur colloid. **Colloid imaging must be completed before WBC reinjection.**
4. Be sure to include the entirety of the hardware/ prior surgery with multiple overlapping **AP and lateral static images, 300 seconds per image**. These images must completely cover the area of interest, beginning ABOVE region and extending BELOW.
5. Show the acquired images to the nuclear medicine physician and obtain approval to reinject the labeled white blood cells. **Approval MUST be given before WBCs are re-injected**.

Review:
Prepare images and documents for clinical review as per **Nuclear Imaging Acquisition and Presentation Guidelines**.

Dr. Barr | Date Implemented: 2009 | Date Reviewed: 6/2025