**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. Philips Skylight (VXUR collimator)
2. Philips Forte (VXUR collimator)
3. Philips Vertex Plus (LEUHR collimator)

**Procedure:**
1. Through patent IV line, inject patient with 10 mCi 99mTc-Sulfur Colloid, followed by at least 5 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: VXUR
• Matrix: High-Res.
• Zoom: 1.00 x (Full Field)
• Scan Speed: 8 cm/min
• Position: Supine
• Orientation: Feet First
• Body Contour: Learn Mode

Static Images
• Collimator ID: VXUR
• Matrix: 256 x 256
• Zoom: 1.00 x (Full Field)
• Total Time: 300 seconds
• Total Kcounts: 600
• Position: Supine
• Orientation: Feet First

**Processing:**
**WHOLEBODY**
1. LEFT click on 2 VIEW/4 VIEW WHOLEBODY DISPLAY from top menu in Pegasys.
2. Select in the following order: POSTERIOR, ANTERIOR and PROCEED.
3. Pan images so that top of patients skull is level across top of image.
4. Increase brightness as necessary for interpretation.
5. LEFT click on pencil tool and select correct annotation defaults.
6. LEFT click on camera icon to snapshot the image.
7. LEFT click on QUIT.

**STATICS**
1. LEFT click on ALL IMAGE DISPLAY from top menu in Pegasys.
2. Select images to display and PROCEED.
3. Increase brightness as necessary for interpretation.
4. LEFT click on pencil tool for annotation defaults. Choose proper labeling, ensuring proper image orientation.
5. LEFT click on camera icon to snapshot the image.
6. LEFT click on QUIT.
7. LEFT click on the CAMERA TOOL to double snapshot the images.
8. Choose the snapshot images and LEFT click PROCEED.
9. LEFT click on the camera tool for each image to double snapshot it.
10. LEFT click on QUIT.
11. DICOM send all of the double snapshots to PACS for radiologist interpretation.