Liver post Y-90 microspheres

<table>
<thead>
<tr>
<th>Special Instructions</th>
<th>Scheduling will be coordinated with Interventional Radiology.</th>
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<td>To performed at UNMH only.</td>
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**Radiopharmaceutical:** Y-90 microsphere (SIR-Spheres)

**Dose (Adult/Pediatric):** Determined by Authorized User / Interventional Radiologist

**Route of Administration:** Intra-arterial in Interventional Radiology

**Patient Preparation:** Per Interventional Radiology requirements. No specific requirements for the nuclear medicine imaging.

**Equipment Setup:**

- **Collimator (SPECT-CT):** Medium energy
- **Computer setup:**
  - **Energy window:**
    - 80 keV, 30%
- **Whole-body (anterior/posterior):**
  - Static acquisition
  - 256 x 1024 matrix
  - 24 cm/min
- **SPECT-CT images:**
  - Medium energy collimator
  - 128 x 128 matrix
  - 180 degrees, CW (clockwise)
  - 64 steps, 30 sec/step
  - Noncircular, continuous

**Patient Positioning:** Feet first, supine

**Procedure:**

- **Imaging time post-injection:**
  - As soon as the patient is transferred from Interventional Radiology; imaging may be performed same-day or next-day after administration of the radiopharmaceutical
  - Acquire planar anterior/posterior whole-body images followed by SPECT-CT of the abdomen (include entire liver).
  - Images are of the Bremsstrahlung radiation (Y-90 is a beta emitter).

**Processing:**

- **Whole-body anterior/posterior:** Dual-intensity display
- **SPECT-CT:**
Liver post Y-90 microspheres (continued)

- Follow automatic processing workflow
- Process CT in soft tissue (B30) and bone (B60) algorithm
- Should have attenuation corrected and non attenuation corrected SPECT tomo files; the non attenuation corrected SPECT is reviewed.
- Generate the SPECT-CT fused axial data set

Items Required For Complete Study:

- Processing and transfer of all images to PACS and/or Leonardo as appropriate
  - Raw data of all planar images to PACS
  - Planar: Lightbox/savescreen of planar images to PACS
  - SPECT-CT: Attenuation Corrected and Non Attenuation Corrected Tomo Reconstructions, CT (B30 and B60) to PACS and Leonardo; Fused axial data set to PACS only.
- Complete the examination in RIS