### In-111 OctreoScan

<table>
<thead>
<tr>
<th>Special Instructions</th>
<th>For pediatric SPECT-CT examinations, confirm with the radiologist whether the CT is required.</th>
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<tbody>
<tr>
<td></td>
<td><strong>To be performed at UNMH. To be performed at SRMC on a case by case basis with Attending Radiologist approval.</strong></td>
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**Radiopharmaceutical:** In-111 OctreoScan (pentetreotide)

**Dose (Adult/Pediatric):** Refer to Nuclear Medicine Dose Chart

**Route of Administration:** Intravenous

**Patient Preparation:** Please ensure the following:
- Tumor uptake of the radiopharmaceutical may be reduced (although usually not completely eliminated) in patients being treated with short-acting octreotide agents (e.g., octreotide acetate (Sandostatin®)), as well as long-acting agents (e.g., Sandostatin LAR Depot).
- If possible, before injection of the radiopharmaceutical, this treatment should be discontinued for 24 hours for short-acting agents or 4-6 weeks for long-acting agents.
- No other preparation needed.

**Equipment Setup:**

<table>
<thead>
<tr>
<th>Collimator (all cameras):</th>
<th>Medium energy</th>
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<tbody>
<tr>
<td><strong>Computer setup:</strong></td>
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<tr>
<td>Anterior/posterior whole-body sweep (top of head through feet unless otherwise specified by the radiologist):</td>
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<tr>
<td>- Static acquisition</td>
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<tr>
<td>- 256 x 1024 matrix</td>
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<tr>
<td>- 1.0 ZOOM (more for pediatric patients)</td>
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<tr>
<td>- Scan speed 6 cm/min</td>
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**Spot views** for small pediatric patients less than 5 years, or additional views on adults as needed (check w/ Radiologist to verify prior to imaging):

| - Static acquisition |               |
| - 128 x 128 matrix |               |
| - 1.0 ZOOM (more for pediatric patients) |               |
| - 5 min/image |               |

**SPECT or SPECT-CT images:**

| - 128 x 128 matrix |               |
| - 1.0 ZOOM |               |
| - 180 degrees, CW (clockwise) |               |
In-111 OctreoScan (continued)

- 64 steps, 30 sec/step
- Noncircular, continuous

**Patient Positioning:** Feet first, supine

**Procedure:** Imaging time post-injection:
- 4 and 24 hours; additional imaging at 48 hours may rarely be needed (consult with radiologist)
- Acquire planar anterior/posterior whole-body images (pediatric patients) or skull through thighs (adult patients) at 4 and 24 hours (and 48 hours if needed)
- Check with the radiologist for any additional spot views as needed.
- Check with the radiologist for SPECT or SPECT-CT at each imaging time point.
- Confirm regions to image with radiologist, typically abdomen/pelvis at 4 hours and any other region of interest (e.g., chest) at 24 hours.
- If chest, abdomen, or pelvis SPECT-CT is performed, arms should usually be up.
- If neck SPECT-CT is performed, arms should usually be down.

**Processing:**
- Dual-intensity static display of whole-body images at each time point (typically 4 and 24 hours).
- Static display of any additional spot views.

**SPECT-CT:**
- Follow automatic processing workflow

**If SPECT-CT:**
- Process CT in soft tissue (B30) and bone (B60) algorithm; should have attenuation corrected and non attenuation corrected SPECT tomo files.

**If SPECT only:**
- Should have reconstructed tomographic file and axial/coronal/sagittal lightboxes/savescrrenes

**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/savescrren of all planar images to PACS, including dual-intensity display of anterior/posterior whole-body images and display of any additional spot views
- **SPECT:**
  - Reconstructed Tomo to Leonardo and PACS, Lightboxes/savescrrenes of axial/coronal/sagittal SPECT to PACS. Rename SPECT to include region imaged (e.g., Reconstructed Tomo PELVIS)
In-111 OctreoScan (continued)

- **SPECT-CT:**
  - Attenuation Corrected and Non Attenuation Corrected Tomo Reconstructions, CT (B30 and B60) (to Leonardo and PACS). Rename SPECT and CT files to include region imaged (e.g., Reconstructed Tomo- AC - PELVIS)

- Complete the examination in RIS