**American College of Radiology**
**ACR Appropriateness Criteria®**

**Suspected Osteomyelitis, Septic Arthritis, or Soft Tissue Infection (Excluding Spine and Diabetic Foot)**

**Variant 1:** Suspected osteomyelitis, septic arthritis, or soft-tissue infection (excluding spine and diabetic foot). First study.

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<th>SOE</th>
<th>Adults RRL</th>
<th>Peds RRL</th>
<th>Rating</th>
<th>Median</th>
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**Variant 2:** Soft-tissue or juxta-articular swelling. Suspected soft-tissue infection. Additional imaging following radiographs.

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Variant 3: Soft-tissue or juxta-articular swelling with a history of puncture wound. Suspected foreign body. Negative radiographs.

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### Variant 4: Soft-tissue or juxta-articular swelling with cellulitis and a skin lesion, injury, wound, ulcer, or blister. Suspected osteomyelitis. Additional imaging following radiographs.

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**Variant 5:** Soft-tissue or juxta-articular swelling with a history of prior surgery. Suspected osteomyelitis or septic arthritis. Additional imaging following radiographs.
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<th>Peds RRL</th>
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Variant 6: Pain and swelling or cellulitis associated with site of previous nonarthroplasty hardware. Suspected osteomyelitis or septic arthritis. Additional imaging following radiographs.
<table>
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Variant 7: Draining sinus (not associated with a joint prosthesis). Suspected osteomyelitis. Additional imaging following radiographs.
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**Variant 8:** Clinical examination suggesting crepitus. Suspected soft-tissue gas. First study.

**Variant 9:** Initial radiographs showing soft-tissue gas in absence of puncture wound.
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<td>MRI area of interest without and with IV contrast</td>
<td>May be appropriate</td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>5</td>
<td>5</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CT area of interest without and with IV contrast</td>
<td>Usually not appropriate</td>
<td>Varies</td>
<td>Varies</td>
<td>Varies</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>US area of interest</td>
<td>Usually not appropriate</td>
<td>0 0 mSv</td>
<td>0 0 mSv [ped]</td>
<td>1</td>
<td>1</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Please refer to the supporting documentation for a more complete discussion of the concepts and their definitions below.

**Final Tabulations:** A histogram of the number of panel members who rated the recommendation as noted in the column heading (i.e., 1, 2, 3, … etc.)

**Disagree:** The variation of the individual ratings from the median rating indicates panel disagreement on the final recommendation.

**References:** Lists the references associated with the recommendation.

**SQ:** Study Quality (1, 2, 3, 4, Good M or Inadequate M) of the references listed.

**RRL:** Information on the Relative Radiation Level (RRL) designations can be found [here](#).