

Bone-RADS™ – Radiography Imaging Report Template for Potentially Neoplastic Bone Lesions

Examination: Radiographs, [number] Views.

Date of Study:

Clinical Indication:

Technique: views of the _____

Comparison/Correlation is made with _____

Patient Demographics:

Sex: M F

Age: Infant (0 – 12 months) Adolescent (11 – 20 years) Adult (41 – 70 years)

Child (1 – 10 years) Young Adult (21 – 40 years) Geriatric (> 70 years)

Known Malignancy: No Yes – Type: _____ (2 points)

FINDINGS:

Size: x x cm

Size relative to Bone Diameter: Less than 1/3 1/3 to 2/3 Greater than 2/3

Location/Bone Involved:

Long Axis Location (select epicenter of lesion or contiguous involved segments):

Epiphysis Metaphysis Diaphysis

Peri-trochanteric N/A (i.e. flat bone)

Short Axis Location:

Intramedullary – Central Intramedullary – Eccentric

Intracortical Surface

Radiodensity: Lytic Mixed Sclerotic

Matrix: None Osteoid Chondroid Ground glass Not readily classified

Bone-RADS™ – Radiograph SCORING SYSTEM (with Point Values)

Margination/Zone of Transition

- IA – geographic well-defined lesion with sclerotic border (1 point)
- IB – geographic, well-defined without sclerotic border (3 points)
- II – geographic, but ill-defined with wide of transition (5 points)
- IIIA – changing margin on surveillance or two distinct patterns at initial evaluation (7 points)
- IIIB – non-geographic; moth-eaten or permeative (7 points)
- IIIC – radiographically occult – excluding “incidentaloma” (7 points)

Periosteal Reaction:

- None (0 points)
- Non-aggressive – cortical remodeling, solid, continuous, buttressing (2 points)
- Aggressive – multi-lamellated, sunburst, spiculated (4 points)
- Codman’s angle – elevated and acutely interrupted (4 points)

Endosteal Scalloping: None/Mild (0 points)

Moderate (1 point)

Deep (2 points)

Pathological Fracture: No Yes (2 points)

Evidence of Extra-osseous Soft Tissue Mass: No Yes (4 points)

Impending Fracture: No Yes

Point Values:

Margination: Pathological Fracture:

Periosteal Reaction: Soft Tissue Mass:

Endosteal Erosion: Known Malignancy:

Point Total:

Bone-RADS™ Score:

- 0 (N/A) – Incompletely Characterized – further evaluation is suggested below
- 1 (1-2 points) – Very Low Risk of malignancy - very likely benign
- 2 (3-4 points) – Low Risk of malignancy - probably benign
- 3 (5-6 points) – Intermediate Risk of malignancy - potentially malignant
- 4 (7 or more points) – High Risk of malignancy – highly suspicious for malignancy

IMPRESSION:

Most Likely Diagnosis: 1. _____

Differential Diagnosis:

1. _____
2. _____
3. _____

RECOMMENDATION:

No further imaging follow up is necessary – unless new symptoms or change in clinical status

Radiographic surveillance is recommended at ___ months

Advanced imaging evaluation is recommended (SELECT BELOW)

Magnetic Resonance Imaging (MRI) of the _____ without with contrast

Computed Tomography (CT) of the _____ without with contrast

Nuclear Medicine Technetium-99M Bone Scan

PET-CT

PET-MRI

Other: _____

Biopsy and/or Orthopedic Oncology consultation is recommended