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Picture Prognosis

A 39-year-old man presents with a 30 × 15 cm ulcerated mass on the distal right forearm. Imaging shows an extensive lytic lesion of the distal radius with cortical breach and soft tissue invasion. Histopathology reveals multinucleated giant cells in a stromal background. What is the most likely diagnosis?

1. Giant Cell Tumor of Bone
2. Osteosarcoma
3. Ewing Sarcoma
4. Chondrosarcoma

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Answer: Giant Cell Tumor of Bone

Giant Cell Tumor of Bone is a benign but locally aggressive tumor, often in adults aged 20–45, affecting the distal radius. Histology shows numerous osteoclast-like multinucleated giant cells in a stromal background. Campanacci grade III lesions involve cortical breach and soft tissue extension, often requiring radical resection and complex reconstruction like a free fibular flap. Osteosarcoma typically presents with aggressive bone formation, osteoid deposition, and periosteal reaction; histology lacks multinucleated giant cells as seen here. Ewing Sarcoma usually affects children and adolescents, often in diaphyseal long bones, with small round blue cells histologically distinct from GCTB. Chondrosarcoma, a Malignant cartilage tumor, more common in adults >40, often with chondroid matrix and atypical chondrocytes; lacks osteoclast-like giant cells.