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Steven Gitelis, MD

The Rush University Professorship of Orthopedic Oncology

Advancement of Medicine

2023 was a very productive year for the Musculoskeletal
Oncology Program at Rush. This is a multi-disciplinary group
made up of surgical oncologists, radiation oncologists, pediatric
and adult oncologists, pathologists, radiologists, nurses and



others. Our market share in the Chicago area continues to grow, and we are a destination program that draws patients from the surrounding states. We have an international reputation for caring for musculoskeletal tumor patients.

One major item to note is that our program has new leadership. I have been appointed to be the clinical program director, and Marta Batus, MD, professor of medical oncology, has been selected to be clinical director, and Alan Blank, MD, was appointed research director. The Musculoskeletal Oncology Program strives for excellence in patient care, research and education. To optimize patient care, we have a very active sarcoma tumor board which reviews all patient treatment. This is optimal for a successful patient outcome.

Research

Funds from the Rush University Professorship of Orthopedic Oncology contribute to the operation of the sarcoma tumor board as well as to support a research assistant who is responsible for clinical research. In addition, our research team collaborates with Rush scientists investigating basic cancer science.

Our research team published numerous manuscripts and gave many well-recognized presentations in 2023. For example, we were asked to write a manuscript about bone grafting and bone graft substitutes for the Orthopedic Knowledge Update, or OKU, of the American Academy of Orthopedic Surgeons. This publication is required reading for orthopedic residents taking their board exams. It



was an honor to be asked to write this chapter. Other publications and presentations are listed below. This would not have been possible without your support.

Presentations

- Connective Tissue Oncology Society (CTOS) Dublin, Ireland 2023. "Evaluation of Local Recurrence and Diagnostic Discordance in Chondrosarcoma Patients Undergoing Preoperative Biopsy;" "Opiate use after Total Hip Arthroplasty for Metastatic Bone Disease;" "The Effect of Timing Between Between Pre-Operative Embolization and Surgery: A Retrospective Analysis of Hypervascular Bone Metatasies."
- American Society of Clinical Oncology (ASCO) Annual Meeting, Chicago, 2023. "Opiate Use after Total Hip Arthroplasty for Metastatic Bone Disease."
- American Society of Clinical Oncology (ASCO) Annual Meeting, Chicago, 2023. "The First Cold Atmospheric Plasma Phase I Clinical Trial for the Treatment of Advanced Solid Tumors: A Novel 4th Treatment Arm for Cancer."
- American College of Surgeons (ACS) Boston, 2023. "Cold Atmospheric Plasma: A New
 Plasma Electrical Charge for the Treatment at the Surgical Microscopic Tumor Bed."
- Twentieth Century Orthopaedic Association Annual Meeting, New Mexico, 2023. "Evaluation of Local Recurrence and Diagnostic Discordance in Chondrosarcoma Patients Undergoing Preoperative Biopsy."

Publication Highlights — Abbreviated

- "Rare dedifferentiated periosteal chondrosarcoma with 11-year metastatic relapse: a case report," International Journal of Surgical Pathology (2023).
- "Novel MRI scoring system to assess osseous malignancy in patients with soft tissue sarcoma following radiotherapy," American Society of Clinical Oncology 2023. (Abstract)
- "The first cold atmospheric plasma Phase 1 clinical trial for the treatment of advanced solid tumors: A novel 4th treatment arm for cancer," American Society of Clinical Oncology 2023. (Abstract)
- "The first cold atmospheric plasma phase I clinical trial for the treatment of advanced solid tumors: A novel 4th treatment arm for cancer," Cancers (2023).
- Myoepithelial carcinoma series of 2. JBJS Case Connector submitted 2023.

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- "Bone grafting, bone graft, substitutes and growth factors in reconstruction for bone defects," Orthopedic Knowledge Update (OKU) The American Academy of Orthopaedic Surgeons (2023).
- "The effect of timing between pre-operative embolization and surgery: A retrospective analysis of hypervascular bone metastases," *Journal of Surgical Oncology* (2023).
- "Development and external validation of a machine learning model for prediction of survival in extremity leiomyosarcoma," *Journal of Surgical Oncology* (2023).
- "A randomized Phase II trial to assess the safety and efficacy of anti-csf1 monoclonal antibody lacnotuzumab (mcs110) in patients with tenosynovial giant cell tumor," Completed 2023.
- "Epithelioid hemangioendothelioma of the distal lower extremity and the role of radiotherapy:
 A report of two cases," Rare Tumors (2023).

The Year Ahead: 2024 and Beyond

Under our new leadership, the Musculoskeletal Oncology Program will continue to strive for excellence in patient care, research and education.

With Gratitude

Thank you for enabling our research efforts. Your generous support is critical to the success of our program and patient outcomes.