

the power of  
**DATA**

# The AAOS Musculoskeletal Tumor Registry

The Musculoskeletal Tumor Registry (MsTR) is the third subspecialty registry to be incorporated into the AAOS family of registries. The wide-spread rollout of the MsTR Registry allows surgeons to combine data about rare bone and soft tissue tumors from sites around the country, thereby potentially answering treatment and outcome questions that are otherwise unable to be answered due to the rarity of the disease. The MsTR feedback and dashboards will help clinicians and health systems track function, complications, and outcomes in patients treated for these sarcomas with the potential to expand to metastatic bone disease and other musculoskeletal tumors in the future.

## Mission

The purpose of the MsTR is to provide a centralized record of patient, tumor, treatment, and outcomes data on musculoskeletal neoplasia in the pelvis, spine, and extremities. The data will be of research quality and allow for investigation into the natural history of disease, risk factors, quality and delivery of care, oncologic and reconstructive outcomes, prognosis, function, and patient quality-of-life. Database design is being curated to facilitate maximum participation by AAOS and Musculoskeletal Tumor Society (MSTS) members with clear goals to minimize the burden of data entry, capture a comprehensive set of relevant information, and to maintain flexibility for future modification as needed.

## Key Contributors: MsTR Steering Committee

- **Benjamin Miller, MD, FAAOS, MS, Chair**  
University of Iowa Hospital and Clinics
- **Megan E. Anderson, MD, FAAOS**  
Beth Israel Deaconess Medical Center  
Boston Children's Hospital
- **Meredith Bartelstein**  
Memorial Sloan Kettering Cancer Center
- **George T. Calvert, MD, FAAOS**  
Norton Healthcare
- **Eric Henderson, MD, FAAOS**  
Dartmouth-Hitchcock Medical Center
- **Adam Levin, MD, FAAOS**  
Johns Hopkins Medicine
- **Nathan Mesko, MD, FAAOS**  
Cleveland Clinic Foundation
- **Shalin Patel, MD**  
The University of Texas  
MD Anderson Cancer Center
- **Joseph Schwab, MD, MS, FAAOS**  
Massachusetts General Hospital
- **Kristy L. Weber, MD, FAAOS**  
University of Pennsylvania



For more information and to stay up to date on new features and enhancements for MsTR, scan this QR code.

“

*Clinical research and advancements in orthopaedic oncology have historically been hindered by limited numbers, heterogeneous disease presentations, and varied treatments. The MsTR has potential to provide insight into oncologic and functional outcomes for many sarcoma subtypes and surgical procedures on a scale not previously possible. Through the sarcoma and upcoming metastatic disease of bone modules, the MsTR offers an unparalleled opportunity to improve the quality of care for patients afflicted with musculoskeletal tumors.*

– Dr. Benjamin Miller, MD, FAAOS, MS, Chair

”

# Data Element Overview

Data elements will include but are not limited to patient demographics, patient baseline and examination, tumor baseline, treatment and post-treatment, and surgery detail along with postoperative data (oncologic failure, surgery complication, vital status), and patient-reported outcomes as conveyed in applicable instruments. This page is a summary of the MsTR data elements and is not all inclusive.

## BASELINE

### Patient:

- Name (Last, First)
- Date of Birth
- Social Security Number
- Diagnosis (ICD-10, CPT)
- Gender
- Race/Ethnicity
- Height + Weight/Body Mass Index
- Payer Status

### Site of Service:

- Name and Address (TIN, NPI)

### Surgeon:

- Name (NPI)

### Surgical Intervention:

- Procedure Type (ICD-10, CPT)
- Date of Surgery
- Implants
- Details Surrounding Surgery Type
- Comorbidities (ICD-10, CPT)

### Non-Surgical Intervention:

- Chemotherapy
- Radiation
- Clinical Trial

### Tumor Baseline:

- Size
- Metastasis at Diagnosis
- Margins
- Tissue Type
- Biopsy Type

## ENCOUNTERS AND PATIENT-REPORTED OUTCOMES

### Encounters

- Hospital Admission
- Procedure (ICD-10, CPT)
- Diagnosis (ICD-10)
- Recurrence

### Patient-reported Outcomes

- PROMIS-10 Global or VR-12
- MSTS
- TESS



**Get Started Today by Enrolling Here**