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The Musculoskeletal Tumor Registry: Progress and Priorities Update for 2022

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MsTR Steering Committee Members: Benjamin J Miller (Chair), Adam Levin (Publications Subcommittee Lead), Eric Henderson (Grants Subcommittee Lead), Nathan Mesko (Data Elements Subcommittee Lead), John Abraham, Megan Anderson, George Calvert, Mark Scarborough, Joseph Schwab, Kristy Weber

Background: The Musculoskeletal Tumor Registry (MsTR) has completed its pilot trial and was accepted as a full registry into the American Academy of Orthopaedic Surgeons (AAOS) Family of Registries, joining the American Joint Replacement Registry (AJRR), the Shoulder and Elbow Registry, and the American Spine Registry (ASR). MsTR's 2022 priorities include: 1) continued onboarding of MsTR member sites; 2) provider dashboard launch; 3) annual report publication; 4) achieve Sarcoma Module data contribution >80% contribution; 5) finalization and debut of the Metastatic Bone Disease Module; and 6) Integration of clinical trial functionality within MsTR.

Questions/Purposes: Our goal is to update the MSTs membership on MsTR's recent accomplishments and future goals.

Patients and Methods: As of May 1, 2022, MsTR is fully contracted with 25 tertiary sarcoma programs, with 14 additional centers engaged in contacting procedures. Monthly MsTR Steering Committee meetings include 10 MSTs Full Members and AAOS registry staff; an additional working group is engaged with the ASR to create a combined spine-tumor module.

Results: The Steering Committee has iteratively reviewed and approved all MsTR data elements for the sarcoma and MBD modules; data identification for the spine-tumor module is ongoing. The AAOS registry team is actively engage with contracted and future programs to ensure data integrity and streamline collection and retrieval. A provider-facing dashboard has been developed and approved, and an Annual Report Preview is planned for release in late 2022. MsTR is actively supporting a prospective clinical trial for giant cell tumor of bone (PI: Greenberg, funding: OREF), enabling MsTR to develop, test, and refine functionality to support multi-center clinical trials.

Conclusions: The MsTR effort continues to improve and mature ahead of schedule. Our future priorities include ensuring data completeness and accuracy, streamlining data collection, facilitating hypothesis-driven registry queries, and promoting data utilization in the form of adequately powered and high quality publications.