

2022 MSTs Annual Meeting - Preliminary Program				
November 30 - December 2, 2022				
Wyndham Grand - Clearwater Beach, FL				
Tessa Balach, MD, Program Chair				
Michael P. Mott, MD, MSTs President				
Wednesday, November 30, 2022				
9:00 AM	12:30 PM			MORI/MSTs Young Member Session
1:00 PM	6:00 PM			Poster Set Up
1:00 PM	6:00 PM			Technical Exhibit Booth Set Up
12:00 PM	7:00 PM			Registration
2:00 PM	5:00 PM			MSTs Coding Course
6:00 PM	8:00 PM			MSTs Welcome Reception
Thursday, December 1, 2022				
Start	End	Length (min)		
6:30 AM	4:30 PM			Registration
7:00 AM	7:45 AM			Breakfast / Poster Viewing
7:00 AM	4:30 PM			Poster/Technical Exhibits
7:45 AM	7:50 AM	5		Introduction and Welcome
				Session I: Bone Sarcomas
				Moderators: Joseph Benevenia, MD and Lisa Kafchinski, MD
7:50 AM	7:55 AM	5	Paper 1	The prognostic importance of pathologic fracture in limb salvage surgery for primary bone sarcoma of the extremities
7:55 AM	8:00 AM	5	Paper 2	Surgical staging of osteosarcoma: does incorporation of chemotherapy response improve prediction of local recurrence?
8:00 AM	8:05 AM	5	Paper 3	Biologic reconstruction with distraction osteogenesis in osseous sarcomas: A prospective analysis
8:05 AM	8:10 AM	5	Paper 4	Reverse total shoulder arthroplasty demonstrates improved functional outcomes over hemiarthroplasty following proximal humerus replacement: long-term results of 170 cemented endoprosthetic reconstructions for tumors of the upper extremity
8:10 AM	8:15 AM	5	Paper 5	Should larger stem diameter be prioritized over cement mantle thickness? An analysis of risks for failure in cemented endoprostheses with minimum five-year follow-up.
8:15 AM	8:25 AM	10	Q&A	
				Moderators: Rex Haydon, MD and Shawn Price, MD
8:25 AM	8:30 AM	5	Paper 6	How do the outcomes of radiation associated pelvic and sacral bone sarcomas compare to primary osteosarcomas following surgical resection?
8:30 AM	8:35 AM	5	Paper 7	The Use of Deep Learning for Necrosis Assessment in Patients with Osteosarcoma

Danielle Brown (Greig), MD

Zachary Burke, MD

Anthony Bozzo, MD

Danielle Brown (Greig), MD

Joseph Ippolito, MD

Alexander Leandros Lazarides, MD

Christa L. LiBrizzi, MD

8:35 AM	8:40 AM	5	Paper 8	Bone marrow aspiration and biopsy in the initial staging of extraskeletal Ewing sarcoma	Brian Wahlig
8:40 AM	8:45 AM	5	Paper 9	Serum Metal Ion Concentrations in the Setting of an Oncologic Endoprosthesis: Is There Cause for Concern?	Matthew T. Houdek, MD
8:45 AM	8:50 AM	5	Paper 10	Surgical Management of Chondrosarcoma of long bones utilizing a pre-operative radiologic aggressiveness score?	Zachary Burke, MD
8:50 AM	8:55 AM	5	Paper 11	Usage Trends and Safety Profile of Recombinant Human Bone Morphogenetic Protein-2 for Spinal Column Tumor Surgery: A National Matched Cohort Analysis	Noe C. Trevino
8:55 AM	9:05 AM	10	Q&A		
9:05 AM	9:15 AM	10	Break / Poster Viewing		
9:15 AM	9:35 AM	20	Product Theater - Onkos Surgical		
9:35 AM	9:40 AM	5	Break / Poster Viewing		
				Session II: Beyond Surgery: Outcomes, Diversity and Practice Management (Part 1)	
				Moderators: Carol Morris, MD, MS and Geoffrey Siegel, MD	
9:40 AM	9:45 AM	5	Paper 12	Re-evaluating the Work Up of Bone Lesions of Unknown Etiology: A Systematic Analysis	Harrison Miner, MD
9:45 AM	9:50 AM	5	Paper 13	Functional Outcomes of Pediatric and Adult Patients after Endoprosthetic Reconstruction of Lower Extremity Tumors	Tina H. Tran, BS
9:50 AM	9:55 AM	5	Paper 14	Mapping The Course of Recovery Following Limb Salvage Surgery for Soft Tissue Sarcoma of the Extremities	Alexander Leondros Lazarides, MD
9:55 AM	10:00 AM	5	Paper 15	The Sarcoma-Specific Quality of Life Study (SARC-QoL): Identifying key domains of Health-Related Quality of Life in adult patients with extremity soft tissue sarcoma	Krista Goulding MD, FRCSC, MPH
10:00 AM	10:05 AM	5	Paper 16	Utilization of Mental Health Referrals for Symptoms of Anxiety and Depression in Patients with Sarcoma	Meredith Bartelstein, MD
10:05 AM	10:15 AM	10	Q&A		
				Session III: Basic Science	
				Moderators: Brock Lindsey, MD and Jay Wunder, MD	
10:15 AM	10:20 AM	5	Paper 17	Targeting immune checkpoint blockade molecule B7-H3 using CAR T cells as adjuvant therapy in chordoma	David Osei-Hwedieh, MD, PhD
10:20 AM	10:25 AM	5	Paper 18	SKP2 knockout in Rb1/p53 deficient transgenic mouse models of osteosarcoma improves survival via induction of macrophage infiltration	Alexander Ferrena
10:25 AM	10:30 AM	5	Paper 19	DNMT3B is a novel target in high grade chondrosarcoma	Alex Michael Hollenberg
10:30 AM	10:35 AM	5	Paper 20	Expression of Angiogenesis Markers HSP70, HSP90, VEGF and pERK1/2 in Both Components of Dedifferentiated Chondrosarcomas	Rebekah Belayneh, MD
10:35 AM	10:40 AM	5	Paper 21	Intra-Articular Injections of AMB-05X, A Potent, Selective, Human Monoclonal Antibody Against Colony Stimulating Factor 1 Receptor for the Treatment of Tenosynovial Giant Cell Tumor	Thomas J. Scharschmidt, MD
10:40 AM	10:45 AM	5	Paper 22	Use of Small Molecule STING Agonist Immunotherapy for Canine Soft Tissue Sarcoma: A Cross-Species Analysis	Ye-Jean Park

10:45 AM	10:55 AM	10	Q&A		
10:55 AM	11:05 AM	10	Break / Poster Viewing		
11:05 AM	11:25 AM	20	Product Theater - SpringWorks Therapeutics		
11:25 AM	11:35 AM	10	Break / Poster Viewing		
11:35 AM	11:55 AM	20	Orthopaedic Surgery Reflections from the Ukraine Conflict 2022		
11:55 AM	12:00 PM	5	Break / Poster Viewing		
				Session IV: Metastatic Bone Disease - Part 1	
				Moderators: Christina Gutowski, MD and Robert Quinn, MD	
12:00 PM	12:05 PM	5	Paper 23	Improvement in Survival After Treatment for Metastatic Bone Disease: An International Trend-Analysis	Davis Lane Rogers, MD
12:05 PM	12:10 PM	5	Paper 24	Indications and longevity of endoprosthetic reconstructions for patients with metastatic bone disease	Joseph Kendal, MD, FRCSC
12:10 PM	12:15 PM	5	Paper 25	Effectiveness of immune checkpoint inhibitor therapy on bone metastases in non-small-cell lung cancer	Michael Monument, MD
12:15 PM	12:20 PM	5	Paper 26	Locking Plate Augmentation of Polymethylmethacrylate-Filled Distal Femur Defects	Harrison Robert Ferlauto, MD
12:20 PM	12:25 PM	5	Paper 27	Comparison of Carbon Fiber and Titanium Intramedullary Nails In Orthopaedic Oncology	Caleb M. Yeung, MD
12:25 PM	12:35 PM	10	Q&A		
12:35 PM	1:30 PM	55		MSTS Business Meeting - MSTS Members Only	
1:20 PM	2:20 PM	60	Lunch / Poster Viewing		
2:20 PM	2:40 PM	20		MSTS Research Updates & Grant Announcements	
2:40 PM	2:55 PM	15		Registry Update Papers	
				Moderator: Benjamin Miller, MD, MS	
			Paper 28	The Musculoskeletal Tumor Registry: Progress and Priorities Update for 2022	Adam S. Levin, MD
			Paper 29	Development Of The Metastatic Bone Disease Module Within The American Academy Of Orthopaedic Surgeons Musculoskeletal Tumor Registry	George T. Calvert, MD
			Paper 30	Establishing Data Elements for the Musculoskeletal Tumor Registry Sarcoma Module	Adam S. Levin, MD
2:55 PM	3:05 PM	10		Registry Update / Discussion	
3:05 PM	3:10 PM	5		MORI Update	
3:10 PM	3:20 PM	10	Q&A		
3:20 PM	3:30 PM	10	Break / Poster Viewing		
3:30 PM	3:50 PM	20	Product Theater - Medtronic		
3:50 PM	3:55 PM	5	Break / Poster Viewing		
				Session V: Metastatic Bone Disease - Part 2	
				Moderators: Juan Pretell, MD and Scott Weiner, MD	
3:55 PM	4:00 PM	5	Paper 31	Minimally Invasive Percutaneous Screw Fixation in Painful Pelvic Lesion Caused by Metastatic Cancer	Rui Yang, MD

4:00 PM	4:05 PM	5	Paper 32	Treatment of oligometastases: indications and results in 156 cases	Pietro Ruggieri, MD
4:05 PM	4:10 PM	5	Paper 33	Metastatic Bone Disease at Diagnosis is Associated with Increased Rate of Body Mass Index Loss and Worse Survival in Clear Cell Renal Cell Carcinoma	Jon-Luc Poirier, BA
4:10 PM	4:15 PM	5	Paper 34	Clinical Outcomes of Patients Treated with Carbon-Fiber Nails for Oncologic Indications in Long-Bones: An International Multi-Institutional Study	Santiago A. Lozano-Calderon, MD, PhD
4:15 PM	4:20 PM	5	Paper 35	A cost effectiveness analysis of elective versus emergent surgery for patients with metastatic bone disease	Joseph Kendal, MD, FRCS
4:20 PM	4:30 PM	10	Q&A		
4:30 PM				Meeting Adjourns	
5:30 PM				Social Event - MSTS Cocktails & Dinner at Island Way Grille	
Friday, December 2, 2022					
6:30 AM- 8:30 AM				Registration	
7:00 AM - 8:00 AM				Breakfast / Poster Viewing	
7:00 AM - 12:00 PM				Posters/Technical Exhibits	
8:00 AM	8:05 AM	5		Announcements	
				Session VI: RCTs / Large Scale Studies	
				Moderators: Brooke Crawford, MD and David Greenberg, MD	
8:05 AM	8:10 AM	5	Paper 36	Long-term efficacy and safety of pexidartinib in patients with tenosynovial giant cell tumor: Final results from the phase 3 ENLIVEN study	John H. Healey, MD, FACS
8:10 AM	8:25 AM	15		PARITY	
			Paper 37	Defining minimally important differences in functional outcomes for musculoskeletal oncology patients undergoing lower extremity endoprosthetic reconstruction	Aaron M. Gazendam, MD
			Paper 38	Predictors of functional recovery among musculoskeletal oncology patients undergoing lower extremity endoprosthetic reconstruction	Aaron M. Gazendam, MD
			Paper 39	Neoadjuvant chemotherapy and endoprosthetic reconstruction for lower extremity sarcomas: Does timing impact complication rates?	Aaron M. Gazendam, MD
			Paper 40	Opioid use in musculoskeletal oncology	Aaron M. Gazendam, MD
			Paper 41	Risk factors for all-cause early re-operations in patients undergoing tumor resection and endoprosthetic reconstruction: a secondary analysis from the PARITY trial	Joseph Kendal, MD, FRCS
8:25 AM	8:30 AM	5	Paper 42	Surveillance After Extremity Tumor surgery (SAFETY): Results of the Pilot International Randomized Controlled Trial	Michelle Ghert, MD, FRCS
8:30 AM	8:40 AM	10	Q&A		
8:40 AM	9:40 AM	60		Harnessing Evolutionary Dynamics for Control and Cure of Metastatic Cancers	Presidential Guest Speaker - Robert A. Gatenby, MD
9:40 AM	9:50 AM	10		Break / Poster Viewing	

9:50 AM	10:10 AM	20	Product Theater - Daiichi Sankyo, Inc (DSI)		
10:10 AM	10:15 AM	5	Break / Poster Viewing		
			Session VII: Beyond Surgery: Outcomes, Diversity and Practice Management (Part 2)		
			Moderators: Sheila Conway, MD and Douglas Letson, MD		
10:15 AM	10:20 AM	5	Paper 43	Gender Disparity within the Musculoskeletal Tumor Society: Does it exist?	Brian Batko, MD
10:20 AM	10:25 AM	5	Paper 44	Epidemiology And Survival Factors For Sarcoma Patients In Minority Populations: A Seer-Retrospective Study	Victoria Dahl
10:25 AM	10:30 AM	5	Paper 45	The Work Relative Value Unit System May Not Be the Optimal Measure of an Orthopaedic Oncologist's Productivity	Vineeth Romiyo, BS
10:30 AM	10:35 AM	5	Paper 46	Using the Social Vulnerability Index to Assess Social Determinants of Bone Cancer Care & Prognosis in the United States	David Fei-Zhang, BA
10:35 AM	10:40 AM	5	Paper 47	Patient engagement in sarcoma research: benefits, challenges, importance, and implications	Michelle Ghert, MD, FRCSC
10:40 AM	10:50 AM	10	Q&A		
			Session VIII: Soft Tissue Tumors - Part 1		
			Moderators: Albert Aboulaflia, MD and Anna Cooper, MD		
10:50 AM	10:55 AM	5	Paper 48	MRI based navigated cryosurgery of extra-abdominal desmoid tumors using skin fiducials markers	Ortal Segal, MD
10:55 AM	11:00 AM	5	Paper 49	Development of a Prognostic Nomogram to Predict 30-day Readmission in Localized Soft Tissue Sarcomas of the Extremity	Meena Bedi, MD
11:00 AM	11:05 AM	5	Paper 50	Outcome of Multidisciplinary Treatment of Merkel Cell Carcinoma of the Lower Extremity	Samuel E. Broida, MD
11:05 AM	11:10 AM	5	Paper 51	Predicting Diagnosis in Myxoid Soft Tissue Tumors: Performance of Radiomics vs. Radiologists	Joshua M. Lawrenz, MD
11:10 AM	11:15 AM	5	Paper 52	First-in-human Clinical Trial Results of a Small-Molecule Fluorophore Applied to Soft-Tissue Sarcomas	Eric R Henderson, MD
11:15 AM	11:25 AM	10	Q&A		
11:25 AM	11:35 AM	10	Break / Poster Viewing		
11:35 AM	11:55 AM	20	Product Theater - Zimmer Biomet		
11:55 AM	12:00 PM	5	Break / Poster Viewing		
			Session IX: Soft Tissue Tumors - Part 2		
			Moderators: Gregory Domson, MD and Ginger Holt, MD		
12:00 PM	12:05 PM	5	Paper 53	Clinical impact of whole-body MRI in the staging and surveillance of patients with myxoid liposarcoma: a 14-year single-center experience	Robert Turcotte, MD
12:05 PM	12:10 PM	5	Paper 54	MSTS Member Survey: Intra-Operative Peripheral Margins in Soft Tissue Sarcoma	Lauren Zeitlinger, DO
12:10 PM	12:15 PM	5	Paper 55	Do High- and Low-Risk Pediatric Rhabdomyosarcoma Survival Estimates Equalize 5 Years After Diagnosis? A Cause-specific Conditional Survival Analysis	Benjamin J. Miller, MD, MS

12:15 PM	12:20 PM	5	Paper 56	What factors differentiate early vs. late pulmonary metastases in soft tissue sarcoma of the extremities? A comparative cohort analysis	Alexander Leandros Lazarides, MD
12:20 PM	12:25 PM	5	Paper 57	Follow-up for patients with extremity soft tissue sarcoma: validation of a rational schedule.	Maroun Rizkallah, MD
12:25 PM	12:35 PM	10	Q&A		
12:35 PM	12:45 PM	10		Award Presentations	
12:45 PM	1:30 PM	45	Lunch		
1:30 PM	4:30 PM	180		Ultrasound Course	
4:30 PM				Meeting Adjourns	
				<i>Thank you for attending the 2022 MSTs Annual Meeting</i>	