

DAY 1 | Tuesday, 6 September 2022

TIME	Main Hall (Level 1)
07:55-09:30	ISOLS Young Surgeons' Committee Program 07:55-08:00 Welcome talk Francis J. Hornicek (United States) & Philipp Theodor Funovics (Austria): Welcome and outline of the day and sessions 08:00-08:30 Session 1: History and overview Catrin Wigley (United Kingdom): James Ewing Mishil Parikh (India): Overview and historical perspective 08:30-09:00 Session 2: Chemotherapy (tba): - Novel Arun Singh (United States): Standard 09:00-09:30 Session 3: Surgery, extremity (tba): Upper and lower limb surgery
09:30-10:00	<i>Coffee Break - e-Posters viewing</i>
10:00-12:30	10:00-10:30 Session 4: Surgery, central (tba): Central 10:30-11:30 Session 5: Radiation (tba): Neo/adjuvant (tba): Proton, carbon and IMRT 11:30-12:00 Session 6: Soft tissue cover (tba): Soft tissue coverage options and considerations 12:00-12:30 Session 7: The MDT Nicholas Bernthal (United States): Combination of therapeutic interventions and a multidisciplinary approach, sequencing of modalities
12:30-13:30	<i>Lunch Break</i>
13:30-16:00	13:30-14:00 Session 8: Research Michiel van de Sande (The Netherlands): Salient research, future research, current issues 14:00-16:00 Session 9: Case Discussions Andreas Leithner (Austria) Michiel van de Sande (Netherlands) Pietro Ruggieri (Italy) Manish Agarwal (India)
16:00-19:30	ISOLS Opening Ceremony, Presidential Address Opening Remarks Honorary Presidents Lectures Moderators: Panayiotis J. Papagelopoulos (Greece), Francis J. Hornicek (United States) Franklin H. Sim (United States): ISOLS: Past, Present and Future Patrick Boland (United States): Evolution of musculoskeletal over the past 50 years Oleg Vyrva (Ukraine): Orthopaedics and oncology at war in Ukraine: bone defect management Remembrance of Jeffery Eckardt Nicholas Bernthal (United States) UCLA Sarcoma group History: Fred Eilber (United States) Surgical advances: Nicholas Bernthal (United States) Medical targeted/immunotherapies: Arun Singh (United States) Radiation techniques: Anusha Kalbasi (United States)

DAY 2 | Wednesday, 7 September 2022

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
08:00-09:00	<p>Flash Session 1 Radiation oncology & Implant engineering <i>Moderators: Dimosthenis Andreou (Austria)</i></p> <p>RADIATION ONCOLOGY</p> <p>Amir Sternheim (Israel): How does bone strength change after radiation for metastatic disease and can we avert pathologic fractures? CT base biomechanical finite element analyses of patients with bone metastases to the femur</p> <p>Kimberly Roesler (United States): Long-Term Experience with Intraoperative Electron Radiation Therapy Boost in Extremity Sarcoma</p> <p>Peter Rose (United States): Treatment Outcomes of Extraskelatal Ewing Sarcoma: Should Radiotherapy Be Combined with Chemotherapy and Surgery in All Patients?</p> <p>Joe Kendal (United States): Surgical outcomes in patients treated with 5-day neoadjuvant radiotherapy for primary soft tissue sarcoma</p> <p>Katsuhiko Hayashi (Japan): Clinical outcomes of local therapy for malignant pelvic bone tumors including surgery and carbon-ion radiotherapy</p> <p>Katherine Mallett (United States): Lack of Radiosensitivity Predicts Poor Oncologic Outcome in Extremity Myxoid Liposarcoma</p> <p>Mouli Edward (Indonesia): Radiation for Pelvic Giant Cell Tumor of The Bone A Case Report</p> <p>Pramod Chinder Shekarappa (India): Outcomes of Brachytherapy in soft tissue sarcoma of the extremities: Tips to burn the tumour and not our fingers with experience of 58cases from a single institute.</p> <p>Yutaka Nezu (Japan): Ancillary role of radiotherapy for infiltrative soft tissue sarcoma</p> <p>IMPLANT ENGINEERING</p> <p>Zeger Rijs (The Netherlands): Indications and clinical outcomes of oncological patients treated with carbon-fiber plates: an international multi-institutional study</p> <p>Chen-wen Huang (Taiwan): Biomechanical Analysis and Design Method for Patient-Specific Reconstructive Implants for Large Bone Defects of the Distal Lateral Femur</p> <p>Richard Boyle (Australia): Transpelvic fixation using a custom made 3D printed titanium prosthesis: an option for radiotherapy affected bone.</p> <p>Muhammad Ather Siddiqi (United Kingdom): Early Radiological Outcomes of a Fully Porous Bridging Collar in Lower Limb Endoprosthetic Reconstructions: A Case Matched Study</p> <p>David Joyce (United States): Rate of Implant Failure after Treatment for Metastatic Disease of the Femur: Larger Diameter My Not Be Better</p> <p>Paul Stalley (Australia): A proposed classification system of custom 3D printed pelvic implants</p> <p>Kumar Sukrit (India): Planning and executing surgery using 3D printing technology - with 3D designing, modeling and rapid prototyping; end-to-end tips from an Engineer's perspective in an orthopedic oncology team.</p> <p>Yi Yang (China): Application of a 3D-printed total ulnar megaprosthesis: report of two cases</p> <p>Ana Cecilia Belzarena (United States): Complex Shoulder Extra-Articular Resection and Reconstruction – A Novel Design</p>	<p>Flash Session 2 Surgery of bone and soft tissue tumours <i>Moderators: Will Aston (UK), G. Ulrich Exner (Switzerland)</i></p> <p>Satoru Demura (Japan): Perioperative complication of total en bloc spondylectomy for spine tumor</p> <p>Permsak Paholpak (Thailand): Quadriceps Motor Power Recovery After Nerve Root Dissection Following L3 Total En Bloc Spondylectomy</p> <p>Anthony Griffin (United States): How do the outcomes of radiation associated pelvic and sacral bone sarcomas compare to primary osteosarcomas following surgical resection?</p> <p>Paul Caine (United Kingdom): Modified Capanna technique for salvage of lower limb tibial sarcoma defects in a paediatric population at a United Kingdom sarcoma unit</p> <p>Paul Caine (United Kingdom): Modification and outcomes of the Innocenti technique for epiphyseal fibula reconstruction in paediatric sarcoma defects</p> <p>Saminathan Suresh Nathan (Singapore): Sarcomas in the age of COVID- a needed dialogue</p> <p>Karen Voltan (Brazil): Bone Tumors with Aneurysmal Content: Decision Algorithm in Primary Surgical Treatment</p> <p>Mustafa Hashimi (United States): Do High- and Low-Risk Pediatric Rhabdomyosarcoma Survival Estimates Equalize 5 Years After Diagnosis? A Cause-specific Conditional Survival Analysis</p> <p>Michael Mork Petersen (Denmark): Solitary vs. Multiple Bone Metastases in The Extremities: Are There Any Differences?</p> <p>Dechao Yuan (China): The effects of surgical treatment with chondroblastoma in children and adolescents in open epiphyseal plate of long bones</p> <p>Ronnakrit Maethungkul (Thailand): Combination of pretreatment systemic immune-inflammation index (SII) and prognostic nutritional index (PNI) as prognostic predictor for disease-specific survival in patients with soft tissue sarcoma</p> <p>Anthony Griffin (Canada): Surgical Factors to Predict Postoperative Wound Complications in Localized Soft-tissue Sarcomas of the Extremity</p> <p>John H. Healey (United States): Survival, ambulation, and pain relief after arthroplasty for proximal femoral metastasis: improvement over 40-years</p> <p>Anthony Maher (Australia): Halving infection rates in endoprosthetic reconstructions by creating a targeted peri-operative antibiotic protocol</p> <p>Berkay Dogan (Turkey): Enchondroma and atypical cartilaginous tumor: To operate or not to operate...</p>	<p>Flash Session 3 Limb salvage surgery <i>Moderators: Arne Streitbueger (Germany), Ahmad Shehadeh (Jordan)</i></p> <p>Alexandra Arguello (United States): Comparison of fixation techniques for rotationplasty</p> <p>Mohammad Altayeb (Saudi Arabia): Ankle stabilization by synthetic material after distal fibula resection in sarcoma patients.</p> <p>Eiji Nakada (Japan): What are the Results of Resection of Forearm Soft Tissue Sarcoma?</p> <p>Philipp Theodor Funovics (Austria): The influence of the extent of surgical procedures on the outcome in soft tissue sarcoma</p> <p>Shunichi Toki (Japan): Core needle biopsy versus open biopsy of malignant bone tumor in diagnostic accuracy, complications, and cost-effectiveness: A systematic review and meta-analysis</p> <p>Guilin Huang (China): Limb-salvage surgery using individualized 3D-printed porous tantalum alloy prosthesis prosthetic reconstruction for large defect of the humerus</p> <p>Dimitra Melissaridou (Greece): Functional outcome and sports activity after soft tissue sarcoma of the lower extremities</p> <p>Shashi Sah (India): Comparison of MRI and Synovial Fluid Analysis with histopathological correlation in detecting joint involvement by extremity sarcomas</p> <p>Ahmet Salduz (Turkey): Extensor mechanism reconstruction with the polypropylene mesh after closed resections of the knee</p> <p>Nathan Thomas (United States): Allograft Prosthetic Composite Reconstruction of Bony Defects following Pelvic Tumor Resection</p> <p>Joshua Labott (United States): Durability of Intercalary Endoprosthesis for Humeral Reconstruction</p> <p>Chiao Yee Lim (Malaysia): Management of fungating soft tissue tumours. What can be done to improve the clinical outcome of limb salvage surgery?</p> <p>Yao Weitao (China): Treatment of a special type of femoral osteosarcoma in children</p> <p>Yao Weitao (China): Efficacy of inactivated reimplantation of osteosarcoma osteoarticular around the knee joint</p> <p>Prashant Narhari (Malaysia): total elbow replacement as bailout surgery for complex elbow fractures</p> <p>Nicolas Casales (United States): Rotated Massive Autograft Reconstruction for Bone Tumors: A Safe and Reproducible Technique</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
09:00-10:00	<p>Flash Session 4 Basic science and research <i>Moderators: Francis J. Hornicek (United States), Zhenfeng Duan (United States), Eisuke Kobayashi (Japan)</i></p> <p>Yohei Yamada (Japan): Bone healing after autogenous bone grafting using 'high hydrostatic pressure' in posterolateral spinal fusion of rabbit</p> <p>Min Wook Joo (South Korea): Sarcomas in teachers using 3D Printers</p> <p>Zhenfeng Duan (United States): Discoidin domain receptor tyrosine kinase 1 (DDR1) is a novel therapeutic target in liposarcoma</p> <p>Jichuan Wang (United States): SKP2 targeted-inhibition therapy has Antitumor Activity and Survival benefits in the Osteosarcoma Transgenic model</p> <p>Joe Kendal (United States): Mutational analysis of primary, recurrent and metastatic chordoma tissue using next-generation sequencing</p> <p>Senlin Lei (China): Effects of mechanical loading on the degradability and mechanical properties of the nanocalcium-deficient hydroxyapatite-multi(amino acid) copolymer composite membrane tube for guided bone regeneration</p> <p>Chao-Ming Chen (Taiwan): Genetic mutations related to chemosensitivity of osteosarcoma by next generation sequence analysis</p> <p>Xiaoyang Li (China): Cyclin-dependent kinase 12 (CDK12) is a novel prognostic marker and therapeutic target in metastatic osteosarcoma</p> <p>Xiaolei Ren (China): Establishment and application of osteosarcoma organoids.</p> <p>Chen-wen Huang (Taiwan): The effective distance and cooling rate of liquid nitrogen-based adjunctive cryotherapy for bone tumors ex vivo</p> <p>Chandhanarat Chandhanayingyong (Thailand): Tumor-to-bone distance and radiomic features on MRI distinguish intramuscular lipomas from well-differentiated liposarcomas</p> <p>Chandhanarat Chandhanayingyong (Thailand): Novel CSF1R-positive tenosynovial giant cell tumor cell lines and their pexidartinib (PLX3397) and sotrutetinib (BLZ945)-induced apoptosis</p> <p>Richard Boyle (Australia): A novel Nano-structured Surface increases osseointegration of titanium implants</p> <p>Zeger Rijs (The Netherlands): Development of a clinical tracer for fluorescence-guided surgery of myxofibrosarcoma: An immunohistochemical and evaluation study</p> <p>Venkatesan Sampath Kumar (India): Evaluation of Tumor Immune Microenvironment for PD-L1 score and Tumor Infiltrating Lymphocytes in high grade osteosarcomas and their correlation with disease progression</p>	<p>Flash Session 5 Surgery of bone and soft tissue tumours <i>Moderators: Dundar Sabah (Turkey), Miguel Angel Clara-Altamirano (Mexico), Marcus Galli Serra (Argentina)</i></p> <p>David Joyce (United States): Despite Education Orthopaedic Surgeons Still Perform Unplanned Resections</p> <p>Matthew Houdek (United States): Is Reconstruction Necessary Following Iliosacral Resection? A Comparison of Outcomes from Two Tertiary Sarcoma Centers</p> <p>Jin Yuan (China): Clinical features and a predictive nomogram for cancer-specific survival of synovial sarcoma: based on the SEER database and a Chinese validation cohort</p> <p>Steven Thorpe (United States): MSTs Member Survey: Intra-Operative Peripheral Margins in Soft Tissue Sarcoma</p> <p>Changye Zou (China): The characteristics of oncological and functional outcomes in 345 cases of Lower-limb osteosarcoma pediatric patients</p> <p>Steven Thorpe (United States): Intra-Operative Margin Sampling in Soft Tissue Sarcoma</p> <p>Trevor R. Gulbrandsen (United States): An Osteosarcoma National Update: 40 Years of Incidence and Survival Trends</p> <p>Ana Cecilia Belzarena (United States): Female Presenting trends in Oncology Orthopedics – An Analysis of the Past 5 years</p> <p>Ana Cecilia Belzarena (United States): Impact of Insurance Status on Chondrosarcoma Diagnostic Stage in the United States: Implications for Detection and Outcomes</p> <p>Annalise Abbott (Canada): Evaluating surgical care pathways for patients with metastatic bone disease: A comparison of clinical outcomes following elective versus emergent surgery</p> <p>Divesh Jalan (India): Role of Ultrasound guided needle biopsy for bone tumors</p> <p>Shalin Patel (United States): Common comorbidities and a comparison of four comorbidity indices in orthopaedic oncology surgical patients</p> <p>Hyo-Jin Lee (South Korea): Recurrence after extended curettage for giant cell tumors of bone: before and after demsumab era</p> <p>Shalin Patel (United States): Comparison of clinician-reported Karnofsky Performance Status and patient-reported Physical Health in orthopaedic oncology patients</p> <p>Christina Holm (Denmark): Can machine learning technique be used for prediction of 1-year survival in patients with osteosarcoma?</p> <p>Nevzat Dabak (Turkey): Clinical follow-up of myxofibrosarcoma patients and evaluation of the relationship between surgical margin distance and local recurrence.</p>	<p>Flash Session 6 Limb salvage surgery <i>Moderators: Herrick Siegel (United States)</i></p> <p>Daniela Kristina Carolino (Philippines): Incidental Finding of an Atypical Cartilaginous Tumor in an Adult Female with Recurrent Patellar Dislocation: Single-Stage Extended Curettage using Freezing Nitrogen Ethanol Composite followed by Medial Patello-Femoral Ligament Reconstruction</p> <p>Daniela Kristina Carolino (Philippines): Functional Outcomes of Limb Salvage Surgery in Patients with Giant Cell Tumor of Bone of the Lower Extremities: A Cross-Sectional Comparative Study</p> <p>Sandeep. (India): Zoledronic acid given as neo-adjuvant therapy for GCTB reduces post-operative recurrence rate.</p> <p>Guilin Huang (China): Limb Salvage using 3D-printed Porous Ti-coating Prosthesis for Proximal Humerus</p> <p>Xiao Tony Chen (United States): Acral Merkel Cell Carcinoma: Recurrence and Survival after Multidisciplinary Treatment</p> <p>Loren Josephine Lantin (Philippines): Case of recurrent fungating sacrococcygeal chordoma with perineural invasion of the sciatic nerve – highlighting role of multidisciplinary teleconference in treating spinal tumors during COVID-19 era</p> <p>Zile Singh Kundu (India): BONE TUMOURS AROUND KNEE: WHERE, WHY AND HOW TO DO STRAIGHTPLASTY?</p> <p>Lauren Dittman (United States): Mid-Term Outcomes of Total Hip Arthroplasty after Hemipelvectomy and Iliofemoral Arthrodesis</p> <p>Anand Raja (India): Outcomes of Vascular resection and reconstruction in extremity bone and soft tissue sarcoma</p> <p>Sandeep. (India): Result of mesh suspension of the humerus following scapulectomy for malignant tumors of the shoulder-girdle</p> <p>Sandeep. (India): Reconstruction after distal ulna tumor resection is still an enigma among the orthopaedic oncologists. We present the outcomes of ulnar buttress arthroplasty without stabilization of the ulna stump in GCTB of the distal ulna.</p> <p>Love Kapoor (India): Does improvisation in the surgical technique enhance ECRT autograft union? An analysis of factors affecting incorporation of irradiated graft following bone sarcoma resections.</p> <p>Love Kapoor (India): Surgical Phocomelia: a suitable method of limb salvage for sarcomas of the upper limb.</p> <p>Junqiang Yin (China): Autologous menisci-cruciate ligament composite as a supplementary flap for soft tissue reconstruction following malignant bone tumor resection and prosthesis reconstruction around the knee</p> <p>Zile Singh Kundu (India): The long term assessment of fibular hypertrophy after its tibialization (The Huntington's Procedure) for tumors of the tibia: A clinico-radiologic study of 8-20 years follow up</p> <p>Amar Kamat (India): Hemiarthroplasty of pedicle frozen proximal tibia for primary malignant bone tumours - A case report</p>
10:00-10:30	Coffee Break - e-Posters viewing		

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
10:30-11:30	<p>ISOLS Partnership Society: SLATME</p> <p>Moderators: Eduardo Botello (Chile), Juan Pablo Zumárraga (Ecuador)</p> <p>Eduardo Botello (Chile): Lecture 1- SLATME in today's world</p> <p>Marcos Galli Serra (Argentina): Lecture 2- Impact of preoperative virtual planning on tumor recurrence in oncological patients</p> <p>Carlos Cuervo (Mexico): Lecture 3- Oncological reconstructions in orthopedic oncology</p> <p>Nicolás Casales (Uruguay): Lecture 4- Tips and tricks for safe performance of pedicle freezing in malignant bone tumor</p> <p>Tomás Zamora (Chile): Lecture 5- Use of the COMPRESS system: a real alternative for prosthetic fixation?</p> <p>Santiago Lozano-Calderon (United States): Lecture 6- Saving function when limb salvage fails: functional ablative surgery and updates in amputation surgery</p> <p>Q & A</p>	<p>Flash Session 7 Surgery of bone and soft tissue tumours <i>Moderators: Samuel Kenan</i> (United States), <i>Praveen Gupta</i> (India)</p> <p>Ambika Paulson (United States): Thematic Analysis of Online Discussion Forums for Bone Sarcomas</p> <p>Juan P Zumarraga (Ecuador): Uncommon location for solitary osteochondromas: Scapula, ischium and ribs.</p> <p>Muhammad Ather Siddiqi (United Kingdom): Application of 3D printing in Guided Pelvic Resections: Experience from 2 Tertiary Referral Centres in the UK</p> <p>Lee Zuckerman (United States): Evaluation of the surgical management of the skeleton in patients with Ollier's disease and Mafucci syndrome</p> <p>Meredith Bartelstein (United States): Do patients with sarcoma utilize referrals to mental health professionals during their disease course?</p> <p>Yazan Kadkoy (United States): Cemented versus uncemented tumor endoprostheses at the knee, a systematic review and meta-analysis</p> <p>Weifeng Liu (China): Long-term Follow-up Analysis of Surgical Treatment for Osteosarcoma in Distal Radius</p> <p>Umit Burak Alparslan (Turkey): Is there any difference in mid to long term results of LCL reconstructions after proximal fibula resections?</p> <p>Joseph Ippolito (United States): 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.</p> <p>Yazan Kadkoy (United States): Custom reconstruction lowers risk of mechanical failure following pelvic tumor resection: A Meta Analysis and Systematic Review of the Literature</p> <p>Burkhard Lehner (Germany): Reduction of blood loss by tranexamic acid in cases of lower extremity tumor resection and modular tumor endoprosthesis</p> <p>Alexander Christ (United States): Medicare Advantage May Be Associated with Worse Outcomes in Patients with Soft Tissue Sarcoma</p> <p>Burkhard Lehner (Germany): Long-term outcome and patient related outcome measurements in patients with modular distal femoral and proximal tibial megaprotheses</p> <p>Burkhard Lehner (Germany): Limb-saving treatment of bone metastases in the lower extremity using a modular implant system</p> <p>Andrzej Szafranski (Poland): Treatment of osteosarcoma in children and adolescents in an atypical location</p> <p>Michelle Ghert (Canada): Tourniquet use in patients undergoing oncologic resection and endoprosthetic reconstruction of the knee</p>	<p>Flash Session 8 Limb salvage surgery</p> <p>Eduardo Sadao Yonamine (Brazil): Reconstruction using recycled bone tumor treated by liquid nitrogen – 28 cases treated at Santa Casa Medical School of Sao Paulo</p> <p>Zile Singh Kundu (India): Partial salvage of limb parts after resection of large bone tumors: something is better than nothing</p> <p>Benedetta Spazzoli (Italy): Different techniques for unicondylar reconstruction around knee: comparative study between osteoarticular bone grafts VS custom-made prostheses.</p> <p>Haijie Liang (China): Reconstruction with a 3D-printed prosthesis with ankle arthrodesis after resection of a tumor in the distal tibia</p> <p>Scott Evans (United Kingdom): Outcomes of Soft Tissue Sarcomas in Nonagenarians</p> <p>Wei Guo (China): Hemipelvic endoprosthesis fixed through lumbosacral spine for reconstruction after resection of sarcoma involving whole ilium and acetabulum- Early results of 102 cases</p> <p>Ting Yuan (China): The blood pressure and use of tourniquet are related to local recurrence after intralesional curettage of primary benign bone tumors a retrospective and hypothesis-generating study</p> <p>Pramod Chinder Shekarappa (India): Biological reconstruction for malignant bone tumours of the proximal femur in children less than 10years: A single institutional case series and technical note for using Allograft Prosthetic Composite and Pedicle frozen autograft</p> <p>Ran Wei (China): Using three-dimensional printed endoprosthesis for reconstruction after metaphysis-involved intercalary tumor resection: the preliminary results</p> <p>Huseyin Kaya (Turkey): Reconstruction with Extracorporeally Irradiated Autograft After Intercalary Resection of Femur and Tibia Malignant Bone Tumors</p> <p>Scott Evans (United Kingdom): Outcomes of Bone Sarcoma in the Over 90's</p> <p>Sreeraj Rajan (India): Evaluation of functional and oncological outcome of surgery for malignant bone tumours of the lower limb in paediatric population-a single institution study</p> <p>Huseyin Kaya (Turkey): Total femur replacement as a limb salvage surgery</p> <p>Aaron Gazendam (Canada): Defining minimally important differences in functional outcomes for musculoskeletal oncology patients undergoing lower extremity endoprosthetic reconstruction</p> <p>Weifeng Liu (China): Mid-Long term results of surgical treatment for primary malignant pelvic bone tumors</p> <p>Maurizio Scorianz (Italy): Intercalary reconstruction with Vascularized Fibula after resection for Primary Bone Tumors of the Humerus</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
11:30-12:30		<p>Flash Session 9 Surgery of bone and soft tissue tumours <i>Moderators: Michelle Ghert (Canada), Christos Vottis (Greece)</i></p> <p>Ana Cecilia Belzarena (United States): Bone Overgrowth and Limb Deformity After Osteochondroma Resection</p> <p>Satoru Demura (Japan): The influence of costal resection on pulmonary function after total en bloc spondylectomy for spine tumor</p> <p>Permsak Paholpak (Thailand): Pre-operative Embolization Is Not Mandatory in Single Posterior Approach Total En Bloc Spondylectomy</p> <p>Yao Weitao (China): Surgical efficacy and prognosis of 54 patients with spinal metastases from breast cancer</p> <p>Aaron Gazendam (Canada): Opioid use in musculoskeletal oncology</p> <p>Pakjai Tuntarattanapong (Thailand): Do cemented standard-length femoral stems have enough longevity for the pathological fractures of the femoral neck with metastatic lesions? A retrospective study</p> <p>Mustafa Hashimi (United States): Scoring Criteria for Prediction of Neoadjuvant Chemotherapy Response in Osteosarcoma: A Multicenter International Validation Study</p> <p>Aaron Gazendam (Canada): Neoadjuvant chemotherapy and endoprosthetic reconstruction for lower extremity sarcomas: Does timing impact complication rates?</p> <p>G. Ulrich Exner (Switzerland): Osteofibrous Dysplasia-like Adamantinoma of the Tibia progressing into classic Adamantinoma after 36 years. Reconstruction by modified Capanna technique.</p> <p>Wirin Tieosirisap (Thailand): Microscopic emboli is one of the worst prognostic factors in non-metastatic osteosarcoma</p> <p>Afrim Iljazi (Denmark): Hip joint stability after Hip replacement surgery due to metastatic bone disease A retrospective cohort study evaluating different hip joint options</p> <p>Kunihiko Ikuta (Japan): Clinical outcomes in elderly patients over 80 years with soft tissue sarcomas</p> <p>Joe Kendal (United States): Risk factors for all-cause early re-operations in patients undergoing tumor resection and endoprosthetic reconstruction: a secondary analysis from the PARITY trial</p> <p>Samuel Broida (United States): Bone marrow aspiration and biopsy in the initial staging of extraskeletal Ewing sarcoma</p> <p>Discussion</p>	<p>Flash Session 10 Limb salvage surgery <i>Moderators: Joseph Benevenia (United States), Hazem Wafa (Belgium)</i></p> <p>Alexander Christ (United States): Hybrid Reconstruction with Modular Cemented Intercalary Prosthesis and Plating for Metastatic Disease of the Humerus Provides Durable Fixation and Excellent Functional Outcome.</p> <p>Samuel Kenan (United States): Joint Preservation Limb Sparing Surgery in Children with Malignant Bone Tumors about the Knee Joint. Preoperative Surgical Margin Assessment Using a Three-Dimensional Printed Model in Performing Safe Osteotomy Cut in Highly Selected Patients. The Biological Solution.</p> <p>Samuel Kenan (United States): Is an Intercalary Allograft Alone to Bridge a Large Segmental Defect Following Wide Resection for Malignant Bone Tumors Involving the Tibial Diaphysis Sufficient?</p> <p>Samuel Kenan (United States): Total Condylar Hemiarthroplasty of the Knee in the Growing Child: Long-Term Outcomes in Patients with Primary Malignant Bone Tumors</p> <p>Norio Yamamoto (Japan): Significance of Joint Preservation Surgery in Distal Femur Using Liquid Nitrogen-treated Tumor-bearing Bone for Malignant Bone Tumors in AYA Generation</p> <p>Praveen Gupta (India): Combined surgical team approach for limb salvage in bone and soft tumors</p> <p>Praveen Gupta (India): Distal Radius bone tumors; Role of T plate fixation for ulna translocation</p> <p>Xianbiao Xie (China): A novel limb-salvage reconstruction strategy with a custom hemipelvic endoprosthesis and preserved femoral head following the resection of periacetabular tumors</p> <p>Danielle Brown (Greig) (United States): The prognostic importance of pathologic fracture in limb salvage surgery for primary bone sarcoma of the extremities</p> <p>Danielle Brown (Greig) (United States): Long-term outcomes of proximal femoral replacement in the oncologic population</p> <p>Danielle Brown (Greig) (United States): 30-year follow-up results of 170 cemented endoprosthetic reconstructions for tumors of the upper extremity</p> <p>Adam Chrobok (Poland): 3d printed implants for pelvic periacetabular tumors – early follow up and clinical outcome.</p> <p>Adam Chrobok (Poland): Reverse shoulder arthroplasty for proximal humerus bone tumors – clinical outcome of 19 patients.</p> <p>Adam Chrobok (Poland): Total femur replacement, the review of 10 clinical cases – clinical outcome, complications, indications.</p> <p>Yongsung Kim (South Korea): Unique Characteristics of Diaphyseal Location in Secondary Osteosarcoma Following Retinoblastoma: Availability of Bone Scan in Early Detection</p> <p>Abhijit Behera (India): Endoprosthesis application versus Nail Cement Spacer application for reconstruction after resection of tumors of Proximal Humerus: Is there any difference in functional outcome ?</p>
12:30-13:00	<p>ISOLS Lecture- Infection: worst of all complications Chair: Panayiotis J. Papagelopoulos (Greece)</p> <p>(tba): Infection: worst of all complications</p>		

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
13:15-14:15	<p>Industry Lunch Symposium: IMPLANTCAST Moderator: Pietro Ruggieri (Italy)</p> <p>Panayiotis J. Papagelopoulos (Greece): 3D printed glenoid implants and reverse shoulder arthroplasty for shoulder reconstruction after partial scapulectomy</p> <p>Arne Streitbuerger (Germany): Printed short stem solutions/individual Joint Sparing Implants</p> <p>Jendrik Harges (Germany): Osseous involvement of soft tissue sarcoma - indications and results for megaprosthesis reconstruction</p> <p>Joseph Benevenia (United States): Minimally invasive approach for the treatment of metastatic bone disease some new concepts</p> <p>Michiel van de Sande (The Netherlands): LUMC midterm outcome of the LUMiC® Partial Pelvic Prosthesis</p> <p>Discussion</p>		
14:30-16:00	<p>Platform Session 1 Limb salvage surgery Moderators: Nicholas Bernthal (United States), Rosanna Wustrack (United States)</p> <p>Introductory Lecture Orjan Berlin (Sweden): Autobiologic reconstruction of the shoulder with a single vascularized fibula graft in the immature skeleton. A 20-year follow-up with functional evaluation</p> <hr/> <p>Michelle Ghert (Canada): The Effect of Implant Type on Re-operation Rates Following Endoprosthetic Reconstruction Surgery</p> <p>Pietro Ruggieri (Italy): 3D-printed custom-made prosthetic reconstructions: the experience of University of Padova in 33 patients</p> <p>Philipp Theodor Funovics (Austria): Outcome of the surgical treatment of chondrosarcoma outside the spine and pelvis</p> <p>Min Wook Joo (South Korea): Feasibility of novel in-situ local tumor ablation and recycling machine using radiofrequency dielectric heating</p> <p>Tao Ji (China): Use of custom-made 3D titanium plates for biological reconstruction in pediatric limb salvage</p> <p>Tao Ji (China): Devitalized autograft and intramedullary free vascularized fibular in skeletal reconstruction for bone tumors in children</p> <p>Badaruddin Sahito (Pakistan): Frozen bone Auto graft for reconstruction of Bone and soft tissue Sarcoma; our Experience</p> <p>Osman Emre Aycan (Turkey): Failures and management experience in proximal femur tumor endoprostheses</p> <p>Lorenzo Andreani (Italy): Reconstruction after pelvic bone massive resection: evolution and actuality of 3D-printed technology</p> <p>Dimitra Melissaridou (Greece): Distal Femur Replacement with modular prosthesis. Retrospective study of 75 patients</p> <p>Han-Soo Kim (South Korea): Long-term clinical outcome of prosthetic reconstruction for tumors of the distal tibia and fibula</p> <p>Ioannis Trikoupi (Greece): Mid-term results of modular noninvasive expandable endoprosthesis after bone tumor resection in skeletal immature patients</p> <p>Orjan Berlin (Sweden): Autobiologic reconstruction of the knee with dual vascularized fibula grafts in the immature skeleton. A 20-year follow-up with functional evaluation</p> <p>Pietro Ruggieri (Italy): Modular tumor Mutars megaprostheses: a long-term experience in 187 cases.</p> <p>Manish Agarwal (India): Extracorporeal irradiation and reimplantation of the distal tibia shortens the period of protected weight bearing for distal tibia reconstructions</p>	<p>Platform Session 2 Surgery of bone and soft tissue tumours Moderators: Andrea Angelini (Italy), Jendrik Harges (Germany)</p> <p>Introductory Lecture Domenico Andrea Campanacci (Italy): Surgical treatment for pelvic bone metastatic disease from renal cell carcinoma</p> <hr/> <p>Dimosthenis Andreou (Austria): Which factors are associated with negative surgical margins in soft tissue and bone sarcoma patients? Results from a German-wide cohort study (PROSa study)</p> <p>Dimosthenis Andreou (Austria): Treatment delays are associated with an unfavorable outcome in patients with localized Ewing sarcoma: a retrospective analysis of data from the Euro-E.W.I.N.G.99 trial</p> <p>Abigail Tud (Philippines): A Re-evaluation of Amputations versus Rotationplasties in the Reconstruction of Tumors about the Knee</p> <p>Maria Anna Smolle (Austria): Impact of pulmonary metastasectomy on outcome of bone sarcoma patients with lung metastases. A retrospective, IPTW-weighted analysis.</p> <p>Thomas Haider (Austria): Early radiographic osseointegration of a novel highly porous 3D-printed collar for tumour prostheses</p> <p>Dimosthenis Andreou (Austria): Which variables should be evaluated in Surgical Case Report Forms of prospective randomized trials in Ewing Sarcoma? A proposal of the Euro Ewing Consortium (EEC) SurgicalWorking Group</p> <p>Joachim Thorkildsen (Norway): Chondrosarcoma in Norway 1990-2013; Risk stratification without histology</p> <p>Julian Fromm (Germany): Unplanned resections of soft tissue sarcomas – is further surgery necessary in every case?</p> <p>Michiel van de Sande (The Netherlands): Surgical management of 144 diffuse-type tenosynovial giant cell tumor patients in a single institution: a 20-year cohort study</p> <p>Shinji Miwa (Japan): Risk factors for surgical-site infection after soft-tissue sarcoma resection and development of a risk scoring system</p> <p>Hung-Kai Weng (Taiwan): Perioperative complications of freezing nitrogen ethanol composite in treating bone tumors: Clinical experience from a single-center</p> <p>Vetra Markeviciute (Lithuania): A single-center experience with Giant Cell Bone tumors 2005-2021</p> <p>Michiel van de Sande (The Netherlands): One- versus two-stage synovectomy of diffuse-type tenosynovial giant cell tumor of the knee: an international, retrospective, cohort study</p> <p>Vasileios Kontogeorgakos (Greece): Unplanned excision of soft tissue sarcomas of the hand and the wrist</p>	<p>ISOLS Board Meeting</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
16:00-16:30 16:30-18:00	<p>Session: Advances in Medical and Radiation Oncology Chair: Francis J. Hornicek (United States)</p> <p>Jonathan Trent (United States): Advances in Medical Oncology Raphael Yecheli (United States): Advances in Radiation Oncology</p>	<p><i>Coffee Break - e-Posters viewing</i></p> <p>Platform Session 3 Surgery of bone and soft tissue tumours <i>Moderators: Domenico Andrea Campanacci</i> (Italy), <i>Lor Randall</i> (United States)</p> <p><u>Introductory Lecture</u> Daniel Kotrych (Poland): Innovative surgical technique of sacral resections in treatment of bone sarcoma and its impact on function and overall survival</p> <hr/> <p>Jungo Imanishi (Japan): Clinical outcomes of chondroblastomas in the femoral head: a Japanese Musculoskeletal Oncology Group (JMOG) study</p> <p>Robert Kamil (United States): Prognostic Factors for Survival in Patients with Metastatic Ewing sarcoma: an Insight From the Surveillance, Epidemiology, and End Results (SEER) Program Database</p> <p>Daniel Kotrych (Poland): New surgical approach for pelvic reconstructions and 3D printing technology on the experience of 10 year follow up - how to avoid complications?</p> <p>Joseph Benevenia (United States): Total Femoral Replacement following prior oncologic or joint reconstruction is associated with increased risk for infection and limb-salvage failure</p> <p>Andrea Angelini (Italy): Decompressive surgery for spine metastases: factors related to clinical outcomes and neurologic recovery in 49 patients</p> <p>Andrea Angelini (Italy): Orthopaedic-vascular multidisciplinary approach to improve patient safety in surgery for musculoskeletal tumors</p> <p>Anthony Maher (Australia): Improving outcomes in proximal tibia replacements</p> <p>Akash Shah (United States): Pedicled vastus lateralis myocutaneous flap for sacropelvic defects after wide oncologic resection: surgical technique and outcomes</p> <p>Michelle Ghert (Canada): Surveillance After Extremity Tumor surgery (SAFETY): Results of the Pilot International Randomized Controlled Trial</p> <p>Anthony Maher (Australia): Sacrectomy as a unique indication for 3-D printing custom prosthesis</p> <p>Walid Ebeid (Egypt): Oncological and functional outcome of patients with osteosarcoma proximal humerus treated by limb salvage and neoadjuvant chemotherapy</p> <p>Jin Wang (China): The safety and efficacy of en bloc resection of spinal giant cell tumor with preoperative treatment of denosumab: a single-center experience</p> <p>Osman Emre Aycan (Turkey): The operative results of enchondroma, atypical chondroid tumor and low grade chondrosarcoma: Does it make any difference?</p> <p>Michele Boffano (Italy): Wound healing complication in soft tissue tumors: does it affect follow up and local recurrence ?</p>	<p>Platform Session 4 Limb salvage surgery <i>Moderators: Valerae O. Lewis</i> (United States), <i>Reinhard Windhager</i> (Austria), <i>Tomas Zamora</i> (Chile)</p> <p><u>Introductory Lecture</u> Anna Kulidjian (United States) : TBA</p> <hr/> <p>Taweetchok Wisanuyotin (Thailand): Allograft versus autograft for reconstruction after resection of primary bone tumors: A comparative study of long-term clinical outcomes and risk factors for failure of reconstruction</p> <p>Gitte Krebbelx (The Netherlands): Long-term gait analysis after a rotationplasty, a cross-sectional follow up study</p> <p>Isaac Rhee (Australia): Oncologic Outcomes in Myxofibrosarcomas: The Role of a Multidisciplinary Approach and Surgical Resection Margins</p> <p>Ahmad Shehadeh (Jordan): Long term outcome of Limb Salvage Surgery, A single Institution experience, analysis of 210 cases.</p> <p>Ahmad Shehadeh (Jordan): Tibia Multiplanar deformities and growth disturbance following Expandable Endoprosthetic distal femur replacement</p> <p>Piya Kiatisevi (Thailand): Local zoledronate improves the union of graft-host junctions of pasteurized bone autograft after limb-sparing surgery</p> <p>Pietro Ruggieri (Italy): The use of GMRS megaprosthesis: analysis of 131 cases in a single Center</p> <p>Andrzej Szafranski (Poland): Development of an algorithm for medical management in reconstructions in children and adolescents with primary malignant bone tumors, using Implantcast growing endoprostheses.</p> <p>Andrzej Szafranski (Poland): 3 epochs in the use of Implantcast growing endoprosthesis - Experience of the Polish Group for the treatment of primary malignant bone tumors</p> <p>Matthew Houdek (United States): Outcomes of Oncologic Scapular Resection and Reconstruction</p> <p>Praveen Gupta (India): Modified Hot Dog Technique for Epiphyseal Sparing Primary Malignant Bone Sarcomas of Femur; Recreation with Vascularised Composite of Recycled Tumor Bone and Pedicle Free Fibula Angiogenesis</p> <p>po kuei Wu (Taiwan): Outcome of High-Grade Osteosarcoma Involving the Limbs Treated by Pedicle-Freezing Using a Novel Freezing Tank</p> <p>Oleg Vyrva (Ukraine): Biological Allograft Reconstruction following the Acetabulum Tumor Pelvic Resection.</p> <p>Aaron Gazendam (Canada): Predictors of functional recovery among usculoskeletal oncology patients undergoing lower extremity endoprosthetic reconstruction</p>

DAY 3 | Thursday, 8 September 2022

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & BG (Level 2)
08:00-09:00	<p>Flash Session 11 Surgery of bone and soft tissue tumours <i>Moderators: Oleg Vyrvy (Ukraine), Fabrice Fiorenza (France)</i></p> <p>Ahmet Salduz (Turkey): Management of the Oncogenic Osteomalacia</p> <p>Yu-min Lin (Taiwan): Feasibility of Super-thin Flap Method Excision and Reconstruction for the Sarcoma Management</p> <p>Alexander Christ (United States): Prevalence of Primary Carcinoma, Rates of Pathologic Fracture, and Mortality in the Setting of Metastatic Bone Disease</p> <p>Nicolas Casales (United States): The Oncology Orthopedist Role – Where do we fit?</p> <p>Ukei Anazawa (Japan): Arthroscopic resections for intramuscular hemangioma of the thigh near the knee joint</p> <p>Maurizio Scorianz (Italy): Treatment and outcome of Giant Cell Tumor of the femoral head and neck</p> <p>Keiichi Kato (Japan): Clinical results of wide resection of malignant bone and soft tissue tumors with femoral vessel reconstruction</p> <p>Kohei Mizuta (Japan): Surgical Outcomes of Bone and Soft Tissue Sarcomas in Chest Walls</p> <p>Motaz Alaqeel (Saudi Arabia): The Validity of The Birmingham Atypical Cartilage Tumour Imaging Protocol (BACTIP) to Predict Survival Outcomes and Guide Surgical Decision-Making.</p> <p>Motaz Alaqeel (Saudi Arabia): What is The Influence of Negative Pressure Wound Therapy on High-Risk Wounds in Pelvic Oncology?</p> <p>Motaz Alaqeel (Saudi Arabia): Does Size and Percentage o-f Dedifferentiated Chondrosarcoma Influence Survival?</p> <p>Daniela Kristina Carolino (Philippines): Femoral Shaft Fracture Secondary to a Gunshot Wound Leading to Chronic Expanding Hematoma with Concomittant Osteomyelitis: An Unusual Presentation of a Pseudotumor</p> <p>Shintaro Iwata (Japan): How to manage infiltrative soft tissue sarcoma? - Survey for the musculoskeletal oncology surgeons –</p> <p>Michael Russell (United States): Sarcopenia in Soft Tissue Sarcoma Population</p> <p>Bryan Loh (Singapore): Early functional outcomes following surgical resection of upper extremity soft tissue tumours</p>	<p>Flash Session 12 Surgery of bone and soft tissue tumours <i>Moderators: Walid Ebeid (Egypt), Howard Rosenthal (United States)</i></p> <p>Federico Sacchetti (Italy): What are prognostic factors in synovial sarcomas? Results of a multicentric study</p> <p>Ferdiansyah Mahyudin (Indonesia): Clinical outcome, oncological result and survival rate of osteosarcoma with limb salvage surgery and amputation in RSUD Dr. Soetomo Surabaya</p> <p>Mouli Edward (Indonesia): Malignant degeneration of chronic ulcer in extremity a serial case report</p> <p>Qi Jia (China): Posterior-only approach for Multilevel Total En Bloc Spondylectomy of recurrent thoracic spinal tumors: description of technique and report of six cases</p> <p>Ali Usta (Turkey): Relationship between Histopathological Features and Oncologic Outcomes in patients with Giant cell tumor of bone</p> <p>Hao Yao (China): Diagnostic Errors in Initial Misdiagnosis of Malignant Bone Tumor Located in Proximal Femur</p> <p>Hao Yao (China): Relationship between Regional Lymph Node Involvement and Prognosis in Patients with Pelvic Osteosarcoma: A Population-Based Analysis</p> <p>Serena Puccini (Italy): Cleidectomy as treatment of sclerosing osteomyelitis of garre'</p> <p>Elo Nwoye (Nigeria): Ddiagnostic accuracy of the biopsy of soft tissue component of bone tumour with soft tissue extension</p> <p>Caleb Yeung (United States): Comparison of Carbon Fiber and Titanium Intramedullary Nails In Orthopaedic Oncology</p> <p>Caleb Yeung (United States): Prospective Evaluation of Tranexamic Acid in Metastatic Cancer Patients with Pathologic Fractures Treated with Total Hip Arthroplasty or Hemiarthroplasty</p> <p>Ryan Paul (United States): Post-Operative Outcomes Using Carbon Fiber with Reinforced Polyetheretherketone (CFR-PEEK) Nailing in Orthopedic Oncology Patients</p> <p>Ryan Paul (United States): Carbon Fiber with Reinforced Polyetheretherketone (CFR-PEEK) Plating and Nailing for Intercalary Resection with Tibial Allograft Reconstruction in Two Oncologic Patients</p> <p>Amir Sternheim (Israel): Cryo-ablation in the treatment of Aneurysmal Bone Cysts – does it improve outcome?</p> <p>Jin Wang (China): Paraspinal sarcoma resection: a series of 13 cases in a single institute</p> <p>Ali Usta (Turkey): Does histopathological features can predict local recurrence in patients with giant cell tumor of bone?</p> <p>Anand Raja (India): Recurrence in Extremity osteosarcoma- Is there light at the end of tunnel?</p>	<p>Flash Session 13 Limb salvage surgery <i>Moderators: Matthew Houdek (United States), Florencio Segura (Argentina)</i></p> <p>Catrin Wigley (United Kingdom): Long term Outcomes of Proximal Femoral Replacements with and without acetabular reconstruction.</p> <p>Loren Josephine Lantin (Philippines): One-year follow-up of upfront en bloc resection of stage 3 giant cell tumor of the proximal humerus reconstructed using clavícula pro humero technique – a case report</p> <p>Yi Shen (China): New adjustable modular hemipelvic prosthesis replacement with 3D-print osteotomy guide plate used in periacetabular malignant tumors</p> <p>Hairong Xu (China): Femoral Z osteotomy and rotation hip transposition with allograft for defect after pelvic tumor resection</p> <p>Feng Yu (China): Revision for Aseptic Loosening of Tumor Prosthesis in Lower Limbs</p> <p>Rachel Mahoney (United Kingdom): Outcomes of Distal Radial Endoprostheses: A Single Centre Experience over 15 years</p> <p>Claudio Silveri (United States): Limb Salvage Surgery with Liquid Nitrogen Pretreated Bone Tumor Autograft - Successful Outcomes at Low Cost</p> <p>Wei Guo (China): A bionic megaprosthesis for the defect of distal femur after tumor resection: results of short-term follow-up in children</p> <p>Peter Ferguson (United States): Mapping The Course of Recovery Following Limb Salvage Surgery for Soft Tissue Sarcoma of the Extremities</p> <p>Chee Leong Choong (Malaysia): A massive destruction of Aneurysmal Bone Cyst (ABC) of left hemipelvis in a 15 year old girl: How to treat?</p> <p>Jun Wan (China): Having fish and bear's paw both- Could biological reconstruction in joint sparing of osteosarcoma around knee guarantee both limb function and oncological prognosis?</p> <p>Shah Alam Khan (India): Challenging the conventional surgical corridors. Is there a need to revisit conventional pelvic resections?</p> <p>Dechao Yuan (China): Total femoral prosthesis replacement following resection of femoral malignant tumors</p> <p>Mikaela Sullivan (United States): Utility of Pedicled Functional Latissimus Flaps for Reconstruction of the Upper Extremity Following Resection of Soft-Tissue Sarcomas</p> <p>Ryu Terauchi (Japan): Long-term results of femoral megaprostheses – follow-up for more than 15 years</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
09:00-10:30	<p>Platform Session 5 Medical oncology <i>Moderators: Gina D'amato (United States), Arun Singh (United States)</i></p> <p>Introductory Lecture Andreas Leithner (Austria): Ewing sarcoma and liquid biopsy: plasma ctDNA quantification by ddPCR for monitoring residual disease</p> <p>Andrea Angelini (Italy): Therapeutic algorithm from diagnosis to management in Gorham-Stout disease: analysis of 352 cases</p> <p>Hairong Xu (China): Efficacy and Safety of JMT103 in Patients with Giant Cell Tumor of Bone: a multicenter, single-arm, open-label, phase Ib/II study</p> <p>Badaruddin Sahito (Pakistan): Giant Cell Tumor grade III and Denosumab Effects ; prospective study 94 patients</p> <p>Binghao Li (China): Anti-PD-1 antibody plus anlotinib versus anlotinib alone for refractory undifferentiated or high-grade conventional chondrosarcoma: A multicenter, non-randomized, controlled trial</p> <p>Chiyoung Yoon (South Korea): Impacts of preoperative denosumab treatment on bone metabolism in young patients with giant cell tumor of bone</p> <p>Haijie Liang (China): Landscape of venous tumor thrombus in primary bone tumors in the pelvis: a clinical and radiological study of 583 intermediate and malignant tumors</p> <p>Han-Soo Kim (South Korea): Favorable outcome of high-dose chemotherapy and autologous hematopoietic stem cell transplantation in nonmetastatic osteosarcoma patients with less necrosis than 90% after neoadjuvant chemotherapy.</p> <p>Julian Fromm (Germany): Tumor necrosis in soft tissue sarcoma following multimodal neoadjuvant therapy –is it chemo- or radiotherapy? Does it influence prognosis?</p> <p>Julian Fromm (Germany): A Deep Learning Model for Classification of Chondroid Tumors on CT-Images</p> <p>Maria Anna Smolle (Austria): Prognostic accuracy of 7th and 8th AJCC classification for soft tissue sarcomas. Results from a retrospective, multi-centre study</p> <p>Qiyuan Bao (China): Is it safe to discontinue the tyrosine kinase inhibitors in advanced sarcoma following a favorable tumor response to antiangiogenics therapy?</p> <p>Trevor R. Gulbrandsen (United States): Metastatic Bone Disease: The Relationship Between Demographic Variables, Prevalence, and Survival</p>	<p>Platform Session 6 Robotics, 3D, PSI, Navigation <i>Moderators: Christina D'Anjou (United States /Stryker), Martin Roche (United States)</i></p> <p>Introductory Lecture Shintaro Iwata (Japan): Is Mixed Reality beneficial in infiltrative soft tissue sarcoma surgery? – A proof-of-concept study</p> <p>Benedetta Spazzoli (Italy): Juxta-articular distal femur resection sparing knee joint with custom made surgical guide</p> <p>Caleb Yeung (United States): Minimally Invasive Fixation of Pelvic Metastases by CT-Assisted Surgical Navigation Improves Pain and Maintains Function at One Year</p> <p>Juan P Zumarraga (Ecuador): 3D-printing and computer navigation in preoperative planning and surgical management of soft tissue sarcomas.</p> <p>Juan P Zumarraga (Ecuador): 3D virtual reality simulation for musculoskeletal tumors: reconstruction and simulated surgery. A preliminary 15 case study.</p> <p>Maurizio Scorianz (Italy): Custom made cutting guides and custom shaped allografts in joint sparing juxta articular resections of the knee</p> <p>Pichaya Thanindrarn (Thailand): Computer-aided surgical planning and patient specific cutting guides for accurate bone tumor resection in a patient with Ollier disease presenting with humeral deformity</p> <p>Sarah Consalvo (Germany): Deep learning algorithm for differentiation of enchondromas and atypical cartilaginous tumors in radiographs</p> <p>Xinhui Du (China): Mixed-reality assisted pelvic tumor surgery: pilot attempts and experiences</p> <p>Wei David Xu (China): Invasion-Controlled Surgery Using a Robot-Assisted Mini-Open Approach for the Treatment of Metastatic Spinal Lesions</p> <p>Benjamin J. Miller (United States): Mechanical Effects of Virtual Prophylactic IMN Fixation in Femurs with Metastatic Disease</p> <p>Chandhanarat Chandhanayingyong (Thailand): Three Dimensional (3D) Printing in Musculoskeletal Tumor Surgery</p> <p>Hong Duan (China): Improved virtual surgical planning with 3D-multimodality image for malignant giant pelvic tumors</p> <p>Joel Werier (Canada): Virtual reality for patient-specific, multidisciplinary planning of complex orthopedic oncological surgery.</p> <p>Yang-Guk Chung (South Korea): Reconstruction with 3D printed implants in the pelvic bone tumors: Early experience of 6 cases.</p> <p>Pramod Chinder Shekarappa (India): Three-dimensional (3D) printed guides for malignant bone tumours: Institutional experience of 127cases and work-flow to design ideal guides for complex resections of pelvis and sacrum</p> <p>Pramod Chinder Shekarappa (India): Outcomes of anterior minimally invasive (robotic & laproscopic) dissection of malignant bone tumours of the pelvis and sacrum: A multidisciplinary surgical approach</p> <p>Vineet Kurisunkal (United Kingdom): Does Navigation assisted tumor surgery improves margins in pelvic chondrosarcomas?</p> <p>Ka Li (China): Robot-Assisted Radiofrequency Ablation for the Treatment of Osteoid Osteomas</p> <p>Qing Zhang (China): Comparative analysis of the surgical treatment of chordoma of sacrum assisted by computer navigation and traditional surgery</p> <p>Siyi Huang (China): Three-dimensional planning and patient-specific surgical jig for tumor resection at sacropelvic region – How accurate can we achieve?</p>	<p>Platform Session 7 Surgery of bone and soft tissue tumours <i>Moderators: Peter Rose (United States), Vasileios Kontogeorgakos (Greece)</i></p> <p>Introductory Lecture Pietro Ruggieri (Italy): Orthoplastic approach with one-stage soft tissue reconstruction following sarcoma excision: analysis of 161 patients</p> <p>Richard Boyle (Australia): Use of Custom 3D Printed titanium prostheses in the pelvis: An Australian cohort of 124 cases.</p> <p>Amrithlal Mascarenhas (India): Surgical outcomes in patients operated for symptomatic metastatic spinal cord compression: A single institutional analysis to determine the change in quality of life and prognostic indicators for surgery</p> <p>Pietro Ruggieri (Italy): Evolution in the strategy treatment of bone metastatic disease: what has been changed?</p> <p>Bartlomiej Szostakowski (Poland): Curettage of locally advanced giant cell tumour of bone after denosumab therapy.</p> <p>Peter Steadman (Australia): Outcomes from a tertiary orthopaedic oncology service for patients undergoing forequarter amputation for metastatic squamous cell carcinoma.</p> <p>Peter Steadman (Australia): Dedifferentiated liposarcoma arising within an Atypical Lipomatous Tumour - is marginal resection enough?</p> <p>Seung Hyun Lee (South Korea): What are the resection accuracy and guide fitting errors associated with 3D-printed, patient-specific resection guides for bone tumor resections?</p> <p>Lee Jeys (United Kingdom): Haemorrhagic soft-tissue sarcoma: oncological outcomes and prognostic factors for survival</p> <p>Ioannis Trikoupis (Greece): Surgical Treatment of Sacral Chordomas. A Retrospective Study of 26 cases</p> <p>Pietro Ruggieri (Italy): Pseudotumors of the hip: diagnosis and treatment</p> <p>Joseph Benevenia (United States): Reconstruction following Giant Cell Tumor of the extremity: Subchondral bone grafting decreases risk for arthritis and fracture compared with PMMA alone</p> <p>Joseph Benevenia (United States): Intercalary Endoprosthetic Reconstruction: An Analysis of Complications</p> <p>Saumiya Sivaji (Australia): Correlation between the initial PET scan SUV and chondral lesion grading at resection.</p> <p>Osman Emre Aycan (Turkey): Unicameral bone cysts at lesser trochanter level: A warning for pathological fractures</p> <p>Michele Boffano (Italy): Biohybrid bone grafts for pediatric oncologic patients: indications and results</p>
10:30-11:00	Coffee Break - e-Posters viewing		

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
11:00-11:30	Keynote Lecture Moderator: Pietro Ruggieri (Italy) Speaker: Panayiotis J. Papagelopoulos (Greece)		
11:30-12:30	Osseointegration & Amputation Moderator: Rosanna Wustrack (United States) Örjan Berlin (Sweden): Introductory Word Rickard Braanemark (United States): Orthopaedic osseointegration. History, present status and future options Ian Dickey (United States): (tba)	Platform Session 8 Basic science and research Moderators: Zhenfeng Duan (United States), Han-Soo Kim (Korea) <u>Introductory Lecture</u> Krista Goulding (United States): A Systematic Review of Patient-reported outcomes used to measure Health-related Quality of Life in Soft-tissue Sarcoma Kedar Mate (United States): Meaningful interpretation of Toronto Extremity Salvage Score in people with soft-tissue sarcoma using Rasch analysis Kedar Mate (United States): 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 Chao Ming Chen (Taiwan): A Cryoprotectant-Gel Composite Designed to Preserve Articular Cartilage during Frozen Osteoarticular Autograft Reconstruction for Malignant Bone Tumors: An AnimalBased Study Floortje Verspoor (The Netherlands): Malignant giant cell tumours of bone Ferhat Say (Turkey): The relationship between lesion geometry and pathological fracture risk in a metastasis model of the femoral neck Pablo Arbelaez (Colombia): Design and mechanical behavior of 3D printed polymeric bone scaffolds to repair bone defect. Experimental study Hongmin Chen (China): Tumor Microenvironment Reprogramming during neoadjuvant therapy in advanced osteosarcoma Francis Lee (United States): Why certain pathological fractures do not heal well?: Sustained inflammation and deranged cytokine expression impair healing of pathological fractures in the presence of breast cancer cells	Platform Session 9 Implant engineering Moderators: (tba) <u>Introductory Lecture</u> Manish Agarwal (India): 3d printed plates in Orthopaedic Oncology Reconstruction: Are they worth the effort and cost? Ahmad Shehadeh (Jordan): The outcome of 3-D printed implants in Joint sparing limb salvage surgery, review of 39 cases. Jiaming Lin (China): Design and biomechanical validation of a novel fusion-type proximal humeral prosthesis John A. Abraham (United States): Design elements of an intramedullary stem utilizing a mechanical integration rationale John A. Abraham (United States): Mechanical Integration may provide an alternate means of fastening orthopedic oncology implants to compromised bone Taweetchok Wisanuyotin (Thailand): Effect of bone cement augmentation with different configurations of the dual locking plate for femoral allograft fixation: Finite element analysis and cadaveric validation study Pramod Chinder Shekarappa (India): Protho-prosthetic composite Limb salvage for massive Chondrosarcoma of the proximal humerus- maiden use of 3D printing to reconstruct multiple bones around the shoulder: a video demonstration Tao Ji (China): 3D printed axial compressive endoprosthesis (ACE) for metaphyseal and diaphysis reconstruction: biomechanical study and retrieval histological study
12:30-13:00	ISOLS Lecture - Translational research advances in sarcoma care Chairs: Evanthia Galanis (United States), Tsuchiya Hirohuki (Japan) Robert Hoffman (United States): Translational research advances in sarcoma care		
13:15-14:15	Industry Lunch Symposium		

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
14:30-15:30	<p>Orthopedic Oncology Training Worldwide Chair: Panayiotis J. Papagelopoulos (Greece)</p> <p>Valerae O. Lewis (United States): (tba)</p> <p>Andreas Leithner (Austria): Education on sarcoma: worth the effort?</p> <p>Eduardo Botello (Chile): (tba)</p> <p>Peter Steadman (Australia): (tba)</p> <p>Xiaohui Niu (China): How far the osteosarcoma cells travel in the bone and How far is the safe osteotomy range</p>	<p>Flash Session 14 Surgery of bone and soft tissue tumours <i>Moderators: Philipp Theodor Funovics</i> (Austria)</p> <p>David Slawaska-Eng (Canada): Patient and Surgical Risk Factors for Surgical Site Infection in Lower Extremity Oncologic Endoprosthetic Reconstruction: A Secondary Analysis of the PARITY Trial Data</p> <p>Juan Carlos Gonzalez-Saldivar (Mexico): Structural allograft for benign bone tumors.</p> <p>Hirofumi Oshiro (Japan): Filling with alpha-tricalcium phosphate followed by curettage and phenol-ethanol ablation for appendicular giant cell tumor of bone</p> <p>Nicolas Casales (United States): Freezing in Florida – Are we ready for Diversity?</p> <p>Atsushi Mihara (Japan): Oncological and functional outcomes of planned and unplanned excision of soft tissue sarcoma</p> <p>Ting Yuan (China): Computerised tomography features of giant cell tumour of the knee are associated with local recurrence after extended curettage</p> <p>Lenian Zhou (China): Preoperative CT for prediction of local recurrence after curettage of giant cell tumor of bone</p> <p>Chindanai Hongsaprabhas (Thailand): Preoperative imaging determines necessity of tissue biopsy in extraperitoneal lipomatous tumor</p> <p>Hong Duan (China): Chondrosarcoma of the Pelvis: surgical management options and outcomes of 41 cases</p> <p>Hong Duan (China): Surgical strategy for benign lesions in proximal femur: internal fixation or endoprosthetic replacement</p> <p>Dechao Yuan (China): Surgical options and outcomes for pelvic bone metastasis</p> <p>Xiang Fang (China): Surgical management of metastatic lesions of the proximal femur with pathological fractures using intramedullary nailing or endoprosthetic replacement</p> <p>Samuel Broida (United States): PET Imaging Versus Clinical Examination in Determining Lymph Node Involvement in Merkel Cell Carcinoma of the Extremity</p> <p>Samuel Broida (United States): Outcome of Multidisciplinary Treatment of Merkel Cell Carcinoma of the Lower Extremity</p> <p>Xiao Tony Chen (United States): Outcome of Multidisciplinary Treatment of Merkel Cell Carcinoma of the Upper Extremity</p>	<p>Flash Session 15 Limb salvage surgery <i>Moderators: Paul Stalley</i> (Australia), <i>Santiago Lozano-Calderon</i> (United States)</p> <p>Patrick Lin (United States): En Bloc Resection and Intercalary Endoprosthetic Reconstruction for Palliative Treatment of Patients with Diaphyseal Long Bone Metastases</p> <p>Juan P Zumarraga (Ecuador): Distal femur pedicle frozen autograft reconstruction for malignant bone tumors.</p> <p>Jiaming Lin (China): The short-term clinical efficacy of fused proximal humerus prosthesis</p> <p>Bryeson Rodgers (United States): Serial radiographic appearance of Cerament bone graft substitute in various orthopaedic surgery applications</p> <p>Venkatesan Sampath (India): Which is the best tool for assessing functional outcome following endoprosthetic reconstruction around the knee in Indian population- MST5 87, MST5 93 or TESS?</p> <p>Yongsung Kim (South Korea): Does reverse total shoulder arthroplasty with allograft-prosthesis composite (APC) has surgical benefits over hemiarthroplasty with APC in patients with tumors of the proximal humerus?</p> <p>Bryeson Rodgers (United States): Implant survival of 89% in custom 3D-printed ONKOS hemipelvis endoprostheses</p> <p>Domenico Andrea Campanacci (Italy): What is the infection risk of massive allograft reconstruction after bone tumor resection?</p> <p>Fabrice Fiorenza (France): Retrospective evaluation of silver coated tumour prostheses: about 56 cases with 53 months follow up.</p> <p>Chee Leong Choong (Malaysia): Series of Proximal Humerus Endoprosthesis Reconstruction Post Tumour Resection - Penang, Malaysia Experience</p> <p>Brooke Crawford (United States): Survival of distal femur replacement for oncologic diseases. Does implant characteristic and type of tibial component affects survival?</p> <p>Venkatesan Sampath Kumar (India): Cost effective options of limb salvage in pediatric bone sarcomas: minding the problem and finding solutions in developing countries</p> <p>Will Aston (United Kingdom): Joint sparing endoprostheses of the long bones in the treatment of musculoskeletal tumours</p> <p>David Yung (Singapore): Limb salvage after multiple local recurrences of pleomorphic sarcoma in the forearm.</p> <p>Amit Gupta (India): Limb Salvage following Intercalary Resection of malignant tumors using Biological Reconstruction methods: Functional & Oncological Outcomes of 48 Patients</p> <p>Orjan Berlin (Sweden): Autobiologic reconstruction of the hip with dual vascularized fibula grafts in the immature skeleton. A 20-year follow-up with functional evaluation</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
15:30-16:30		<p>Flash Session 16 Surgery of bone and soft tissue tumours <i>Moderators: Theodore Kormas (Greece), Nicolas Casales (Uruguay)</i></p> <p>Hiroshi Koike (Japan): The efficacy of ADC map for the treatment outcome in patients with osteosarcoma</p> <p>Todsapon Chanchaoenchai (Thailand): Clinical and imaging features affecting the necessity of tissue biopsy in pathological long bone fractures</p> <p>Julian Fromm (Germany): Prognostic influence of rejection of (neo-)adjuvant sarcoma therapy</p> <p>Chee Leong Choong (Malaysia): Defining the management of bone and soft tissue sarcomas diagnosed during pregnancy using 38-year data collected in a single centre</p> <p>Waleed Al-Hardan (United States): Staged Conversion of the Tripod Technique to Cemented Total Hip Arthroplasty: Early Experience. A Retrospective Study.</p> <p>Lorenzo Andreani (Italy): Topic use of vancomycin powder to cover megaprosthetic implants: an expedient to reduce the burden of infections</p> <p>Benjamin J. Miller (United States): Moving Toward an International Sarcoma Registry: Establishing Data Elements for the Musculoskeletal Tumor Registry Sarcoma Module</p> <p>Benjamin J. Miller (United States): Development Of The Metastatic Bone Disease Module Within The American Academy Of Orthopaedic Surgeons Musculoskeletal Tumor Registry</p> <p>Alberto Crimi (United States): Mythology to Modular, history of endoprosthetic reconstruction and limb salvage of the distal femur</p> <p>Julian Fromm (Germany): The infected Megaprotheses: Treatment Strategies, Results.</p> <p>John H. Healey (United States): Management of diffuse-tenosynovial giant cell tumor by combination of surgery and pexidartinib treatment: presentation of 3 clinical cases</p> <p>Hanako Tsuji (Japan): A patient with diffuse intramuscular lipomatosis of a lower limb having pudendal nerve insufficiency – Successfully resected following vascular embolization</p> <p>Andre Spiguel (United States): Prognostic Factors and Outcomes of Dedifferentiated Chondrosarcoma—The University of Florida Experience</p> <p>Xinhui Du (China): Pedicled sartorius flap and mesh (PSM) technique vs no reconstruction in reconstructing the defect after type III pelvic tumor resection: a retrospective study</p> <p>Xinhui Du (China): Experience of utilizing a novel 3D digital model with CT and MRI fusion data in sarcoma evaluation and surgical planning</p> <p>Shah Alam Khan (India): Does endothelial cell dysfunction decide surgical wound health in bone sarcoma? A prospective study evaluating factors predicting wound complications in bone sarcoma.</p>	<p>Flash Session 17 Limb salvage surgery <i>Moderators: Andrzej Szafranski (Poland), Nichola Fabbri (United States)</i></p> <p>Lee Zuckerman (United States): Mid-term results of utilizing a magnetic lengthening nail for intercalary allograft reconstruction after tumor resection</p> <p>Musab Alageel (Saudi Arabia): Translation, Validation, and Cross-Cultural Adaptation Of The Toronto Extremity Salvage Score System Into The Arabic Language</p> <p>Lee Zuckerman (United States): Distraction Osteogenesis for Reconstruction of Intercalary Defects with a Bone Transport Nail After Tumor Resection</p> <p>Mujgan Yilmaz (Denmark): Reconstructions surgery with custom-made 3D-printed pelvic prosthesis due to malignancy or benign bone tumors involving the acetabulum. Single-center retrospective cohort study with clinical follow-up including patients from 2014 to 2020.</p> <p>Katherine Mallett (United States): Comparing limb-salvage techniques for proximal tibia tumors: Allograft prosthetic composite associated with higher reoperation rate but longer survival than proximal tibial replacements</p> <p>C. Parker Gibbs (United States): Clinical Outcomes of a Modular Platform Shoulder Prosthesis Used to Perform Reverse Total Shoulder Arthroplasty for the Treatment of Complex Fractures and Proximal Humeral Bone Loss</p> <p>Arman Fijany (United States): Prophylactic Gracilis Muscle Free Flap Transfer in a High-Risk Ankle Arthroplasty Patient</p> <p>Rachel Honig (United States): Functional Outcomes of Scapular Resection: Is a New Classification System Needed?</p> <p>Zhengxiao Ouyang (China): Wound complication risk factors of soft tissue sarcoma resection with neoadjuvant radiotherapy</p> <p>Badaruddin Sahito (Pakistan): Secondary Chondrosarcoma of Clavicle Due to Multiple Hereditary Exostosis in Adolescent</p> <p>Koichiro Ihara (Japan): Frozen bone-tendon-bone autograft for reconstruction of extensor apparatus of the knee in a patient with soft tissue sarcoma</p> <p>Harry Burton (United Kingdom): 'Spare-parts' in surgery - optimising functional outcomes for below knee amputations with insufficient stump length</p> <p>Michael Mork Petersen (Denmark): A new technique for internal trifocal bone transport with two lengthening nails, for defects above 8-10 cm.</p> <p>Dimitra Melissaridou (Greece): Biological Reconstruction for Parosteal Osteosarcoma of the Distal Femur</p> <p>Dimitra Melissaridou (Greece): Limb Salvage for Infected T.K.A. using a Modular Silver Coated Arthrodesis Implant</p>
16:00-16:30		Coffee Break - e-Posters viewing	
16:30-18:00	ISOLS General Assembly		

DAY 4 | Friday, 9 September 2022

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
08:00-09:00	<p>Flash Session 18 Surgery of bone and soft tissue tumours <i>Moderators: Dimosthenis Andreou (Austria)</i></p> <p>Toshi Kunisada (Japan): Postoperative function and walking ability of hip transposition arthroplasty following resection of pelvic sarcoma</p> <p>Vijay Titus (India): Role of Bone Grafting, Cementing in Large Gd3 Campanacci GCTumors of Proximal Tibia.</p> <p>Rachel Mahoney (United Kingdom): The Prevalence of Iron Deficiency Anaemia, and Association with Peri-Operative Transfusion Rates in Patients Undergoing Resections of Bone and Soft Tissue Sarcomas and Metastatic Bone Disease</p> <p>Frank Traub (Germany): Reconstruction of intercalary bone defect after resection of malignant bone tumor</p> <p>Laura Trullols Tarrago (Spain): Intralesional curettage and bone graft for the treatment of bone GCT. Experience in a single institution since 1982.</p> <p>Wenli Zhang (China): Experience of interstitial permanent I(125) brachytherapy for extremity soft tissue sarcomas</p> <p>Luke Johnson (Australia): Is a Carbon Enhanced Polymer Intramedullary Nails safe to use for patients with Metastatic Bone Disease in the Femoral bone? A retrospective cohort study</p> <p>Nevzat Dabak (Turkey): Enchondroma of Acromion: Case Report of An Unusual Tumor Location</p> <p>Nevzat Dabak (Turkey): A rare diagnosis: osteoid osteoma in the metacarpal bone</p> <p>Amar Kamat (India): A 6-point protocol in management of pelvic bone and soft tissue tumors - a single institute outcome from India</p> <p>Amar Kamat (India): A single institution experience of bone allograft in musculoskeletal oncology- a review of 135 cases</p> <p>Amar Kamat (India): An Update of Technical Tips of Microwave Ablation and CT-Guided Radiofrequency Ablation as a part of Minimally Invasive Techniques in Orthopedic Oncology - A review of 70 cases from A Tertiary Care Center in India</p> <p>Anto Gopurathingal (India): A Review of 1884 Core Biopsies In Orthopedic Oncology - A Single Institute Experience</p> <p>Motaz Alaqeel (Saudi Arabia): Outcomes of soft-tissue sarcoma in nonagenarians</p> <p>Anto Gopurathingal (India): Reconstruction of Proximal Humerus Resections With Mesh Cone-Nail-Cement Spacer Construct</p> <p>Anto Gopurathingal (India): Unusual Recurrence in a Case of Distal Radius GCTB</p>	<p>Flash Session 19 Basic science and research <i>Moderators: Krista Goulding (United States), Brooke Crawford (United States)</i></p> <p>Alexander Ferrena (United States): Knockout of SKP2 in pre-clinical transgenic mouse models of OS induces macrophage infiltration and improves survival</p> <p>Ye-Jean Park (Canada): Use of Small Molecule STING Agonist Immunotherapy for Canine Soft Tissue Sarcoma: A Cross-Species Analysis</p> <p>Grant McChesney (United States): Variation in the Administration and Reporting of the MSTS Score: Evidence for the Need of Standardized Outcome Measurement Guidelines</p> <p>Yazan Kadkoy (United States): Reconstruction of large segmental defects at the femur: how does a modular intercalary prosthesis compare with massive allograft reconstruction? A biomechanical analysis</p> <p>Krista Goulding (United States): Patient-reported Outcome Measures to measure Health-related Quality of Life in people with Soft-Tissue Sarcoma: A Systematic Review of Measurement Properties of Patient-reported Outcomes</p> <p>Michiel van de Sande (The Netherlands): Health-Related Quality of Life of Sarcoma patients at time of diagnosis.</p> <p>Kan Ito (Japan): Study on predictive factors of valgus knee deformity in patients with multiple osteochondromas</p> <p>Eunseok Choi (South Korea): Characterizing Organelles in Myxofibrosarcoma Cells Using Label-Free Optical Diffraction Tomography</p> <p>Sudhir Kumar Garg (India): Accuracy of mri in evaluation of longitudinal intraosseous extent of primary malignant bone tumors</p> <p>Prashant Narhari (Malaysia): Short and Intermediate term outcomes with long bone allograft in Penang General Hospital, Malaysia</p> <p>Siyi Huang (China): Plate configuration for biological reconstructions at diaphysis following large femoral segmental defect – A finite element evaluation of orthogonal versus parallel</p> <p>Qianyu Shi (China): Single-cell analysis reveals an immunostimulatory microenvironment in tumor thrombus of osteosarcoma</p> <p>Hesham Abdelbary (Canada): Combining Bacteriophage and Vancomycin is More Efficacious in Treating MRSA Aggregates Formed in Human Synovial Fluid Compared to Using Vancomycin or Bacteriophage Alone</p> <p>Wichayan Chobchai (Thailand): Do inflammatory indices predict prognosis of patients with chondrosarcoma?</p> <p>Amirul Adlan (Saudi Arabia): Does the histological presence of a nidus correlate with improved outcomes in osteoid osteoma treated with percutaneous radiofrequency ablation (RFA)?</p> <p>Anto Gopurathingal (India): How accurate is measurement on radiological images for resection and reconstruction in Orthopedic Oncology?</p>	

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
09:00-10:00	<p>Flash Session 20 Surgery of bone and soft tissue tumours <i>Moderators: (tba)</i></p> <p>Sudhir Kumar Garg (India): Incidence and risk factors for recurrence giant cell tumour of tendon sheath in hand</p> <p>Wence Wu (China): Can the unipedicular approach replace bipedicular percutaneous balloon kyphoplasty for the management of metastatic vertebral lesions?</p> <p>Xingyu Liu (China): Ultra-short course of neo-adjuvant denosumab for nerve-sparing surgery for giant cell tumor of bone in sacrum</p> <p>Wentin Chen (Austria): Evaluating the utilisation of biopsy in suspected chondrosarcoma</p> <p>Zengjie Zhang (China): Optimal Surgical Strategy for Aggressive Vertebral Hemangiomas: a retrospective study of 36 patients</p> <p>Anmol Anand (India): Does hemiarthroplasty proximal femoral endoprosthesis following tumor resection causes less wear of the native acetabulum?</p> <p>Chongqi TU (China): A comparison of cemented and cementless intra-neck curved stem use during hip-preserving reconstruction following massive femoral malignant tumor removal</p> <p>Jichuan Wang (United States): A proposed survival predicting system for breast cancer patients with bone metastases</p> <p>Mahmoud Etaiwi (United Kingdom): Does a combined oncoplastic resection and reconstruction reduce wound complication in soft sarcomas of the proximal thigh?</p> <p>Brooke Crawford (United States): The effects of neoadjuvant or adjuvant radiation or chemotherapy on the local recurrence, distant metastasis and overall survival in myxofibrosarcoma patients: a meta-analysis of existing literature</p> <p>Mikaela Sullivan (United States): Utility of Targeted Muscle Reinnervation to Reduce Postoperative Pain in Patients Undergoing Hindquarter Resections</p> <p>Sreeraj Rajan (India): Long term follow up in a high-grade sarcoma of the arm encasing the radial nerve treated by ISP technique</p>	<p>Flash Session 21 Medical oncology & Basic science and research <i>Moderators: (tba)</i></p> <p>MEDICAL ONCOLOGY</p> <p>Chung Ming Chan (Singapore): Mesenchymal chondrosarcoma; Single center study of oncologic outcomes and the effect of adjuvant treatment</p> <p>Seiji Shimomura (Japan): Overall survival of soft tissue sarcomas may be prolonged with 2nd line chemotherapy in succession</p> <p>Suraya Zainul-Abidin (Singapore): Phosphaturic Mesenchymal Tumours : a rare cause of Oncogenic Osteomalacia</p> <p>Santiago Lozano-Calderon (United States): Clinical Outcomes of Patients Treated with Carbon-Fiber Nails for Oncologic Indications in Long-Bones: An International Multi-Institutional Study</p> <p>Santiago Lozano-Calderon (United States): Determining pain and functional outcomes for percutaneous stabilization of metastatic pelvic lesions via photodynamic nails</p> <p>Akihiko Takeuchi (Japan): Randomized Placebo-Controlled Double-Blind Phase II Study of Zaltoprofen for Patients with Diffuse-Type and Unresectable Localized Tenosynovial Giant Cell Tumors: the REALIZE study</p> <p>Loren Josephine Lantin (Philippines): Case of giant cell tumor of distal femur with pathological fracture treated with postoperative denosumab following extended intralesional curettage – is there role for adjuvant denosumab?</p> <p>Jian Zhou (China): Association between glucosamine use and cancer mortality: a large prospective cohort study</p> <p>Yong Chen (China): A single-arm phase II clinical trial of neoadjuvant anlotinib plus liposomal doxorubicin in local advanced soft tissue sarcoma</p> <p>Amir Sternheim (Israel): Artificial Intelligence Algorithm can predict the clinical course of Desmoid Tumors based on Baseline MRI- A Feasibility study</p> <p>Abel Arikho (Indonesia): Profile of osteosarcoma patients undergoing chemotherapy in Dr. Soetomo General Hospital 2014-2020</p> <p>Anand Raja (India): Progression on chemotherapy in extremity osteosarcoma- Outcomes and survival</p> <p>Pichaya Thanindratarn (Thailand): Clinical Effects of Aromatase Inhibitor on Bone Mineral Density Loss in Patients with Non-Metastatic Breast Cancer; 5-year experience in Chulabhorn Hospital, Bangkok, Thailand</p> <p>BASIC SCIENCE AND RESEARCH</p> <p>Christopher Hamad (United States): Decreasing bacterial colonization: Non-eluting Zimmer Bactiguard® implant coating decreases burden of implant infection seven days after surgery</p> <p>Christopher Hamad (United States): Periprosthetic joint infection (PJI) promotes immunosuppression: Characterizing the peri-implant immune environment in a murine model of PJI</p> <p>Zeinab Mamouei (United States): Microbial teamwork: Polymicrobial prosthetic joint infection with Staphylococcus aureus and Pseudomonas aeruginosa augments infection burden of both pathogens in a mouse model</p> <p>Jingnan Shen (China): Dissecting the biology and therapeutic vulnerabilities of RB1-mutant osteosarcoma using hereditary Retinoblastoma iPSCs</p> <p>Zeinab Mamouei (United States): Can antimicrobial implant coatings improve osseointegration in a murine model of knee arthroplasty?</p> <p>Yong-Suk Lee (South Korea): Predicting proximal femoral pathologic fractures from digitally reconstructed radiographs using deep learning in advanced cancer patients</p>	<p>Flash Session 22 Limb salvage surgery <i>Moderators: Michiro Susa (Japan)</i></p> <p>Dongqing Zuo (China): Periacetabular Tumor Resection and Reconstruction Based on a Modified Classification System for the Hip Transposition Procedure</p> <p>Zhiqing Zhao (China): Outcomes of Fixed-Hinged Knee Prosthesis for Distal Femoral Osteosarcoma in Skeletally Immature Patients: First Results</p> <p>Jiakang Shen (China): Computer navigation-assisted joint sparing reconstruction strategy in the treatment of osteosarcoma around knee</p> <p>Pengfei Zan (China): Computer navigation-guided metaphyseal-preserving resection and customized endoprosthesis reconstruction for bone sarcomas of distal femur</p> <p>Xiaobo Yan (China): Extra-articular resection of the hip with a posterior column-preserving technique for treatment of periacetabular tumors</p> <p>Xiaobo Yan (China): Reconstruction after hemipelvectomy through Sacral-Iliac joint with 3D-print based custom-made prosthesis: What are the short-term clinical results?</p> <p>Xiang Fang (China): Total ulna replacement with a 3D printed custom-made prosthesis after en bloc tumor resection</p> <p>Federico Sacchetti (Italy): Endoprosthetic Replacement Of The Proximal Tibia For Oncological Conditions.</p> <p>Xianbiao Xie (China): comparison of a novel custom hemipelvic endoprosthesis with femoral head preserved and traditional hemipelvic endoprosthesis following the resection of periacetabular tumor : a propensity score matching study</p> <p>Christopher Hamad (United States): Indications and longevity of endoprosthetic reconstructions for patients with metastatic bone disease</p> <p>Love Kapoor (India): Functional Outcome following Excision but No Reconstruction in Patients with Sacral Tumors.</p> <p>Love Kapoor (India): Zoledronic acid given as neo-adjuvant therapy for GCTB reduces post-operative recurrence rate.</p> <p>Domenico Andrea Campanacci (Italy): What are long-term results of growth plate fibular transplantation in proximal humerus and distal radius reconstructions in paediatric age?</p> <p>Kourosh Zarghooni (Germany): Bone reconstruction with a magnetically-driven, intramedullary bone transport nail: Novel application on intercalary femur defect after tumor resection. A case report</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
10:00- 10:30 10:30-12:00	<p>Platform Session 10 Surgery of bone and soft tissue tumours <i>Moderators: Andreas Leithner (Germany), Marc Scarborough (United States), Rosanna Wustrack (United States)</i></p> <p>Introductory Lecture Peter Steadman (Australia): Identifying potential risk factors for stem breakage in distal femoral endoprosthetic replacements undertaken for primary bone tumours</p> <hr/> <p>Yongsung Kim (South Korea): Amputation in patients with extremity soft tissue sarcoma: The experience of an East Asian referral center</p> <p>Rui Yang (United States): Minimally Invasive Percutaneous Screw Fixation in Painful?Pelvic Lesion Caused by Metastatic Cancer?</p> <p>Min Wook Joo (South Korea): Giant cell tumor of bone and pregnancy: preliminary report by the Eastern Asian Musculoskeletal Oncology Group</p> <p>Chiyoung Yoon (South Korea): Secondary malignancy in giant cell tumor in the extremity: a single-center experience</p> <p>Manish Agarwal (India): ECRT as Osteoarticular reconstruction of the hip for acetabulum involving tumors: How durable are the results?</p> <p>Yang-Guk Chung (South Korea): Clinical characteristics and prognostic factors of myxofibrosarcoma in the extremity and trunk: preliminary report by the Eastern Asian Musculoskeletal Oncology Group</p> <p>Oleg Vyrva (Ukraine): Bioactive ceramics based on bone cement "CalCemex" in the treatment of benign bone tumours</p> <p>Peter Ferguson (Canada): Surgical Management of Chondrosarcoma of long bones utilizing a pre-operative radiologic aggressiveness score?</p> <p>Floortje Verspoor (The Netherlands): The importance of awaiting biopsy results in solitary pathological proximal femoral fractures</p> <p>Will Aston (United Kingdom): Outcomes of Tenosynovial Giant Cell Tumour of the Foot and Ankle</p> <p>Will Aston (United Kingdom): Physical function following limb-sparing surgical resection and reconstruction for pelvic primary bone sarcoma - a systematic review.</p> <p>Francis Lee (United States): A minimally invasive AORIF procedure for periacetabular osteolytic metastases in a prospective cohort of 56 patients: Local Cancer Control + Bone Biology + Biomechanics + Time-Related Bone Changes</p> <p>Wei Guo (China): En bloc sacrectomy via a posterior-only approach: standardized protocols based on a surgical classification for primary sacral malignancies</p> <p>Vineet Kurisunkal (United Kingdom): Accuracy of MRI Scans in predicting intraarticular joint involvement in high-grade sarcomas around the knee</p>	<p>Platform Session 11 Basic science and research <i>Moderators: (tba)</i></p> <p>Introductory Lecture Michiel van de Sande (The Netherlands): Non-Invasive Detection of Soft Tissue Sarcoma using Volatile Organic Compounds in Exhaled Breath: A Pilot Study</p> <p>Nicholas Peterson (United States): Intrawound Vancomycin Powder Does Not Alter in vivo Titanium Osseointegration in a Murine Model of Joint Arthroplasty</p> <p>Ting Yuan (China): Alpha-(1,6)-fucosyltransferase (FUT8) affects the survival strategy of osteosarcoma by remodeling TNF/NF-κB2 signaling</p> <p>Chuangzhong Deng (China): Exosomal miR-3164 derived from tumor associated fibroblasts promotes progression of osteosarcoma</p> <p>Gregor Hauschild (Germany): Impact of topography and added TiN-coating on adult human dermal fibroblast viability and proliferation after seeding on titanium surface in vitro</p> <p>Matthew Houdek (United States): Serum Metal Ion Concentrations in the Setting of an Oncologic Endoprosthesis: Is There Cause for Concern?</p> <p>Tess Hudson (Canada): Patient engagement in sarcoma research: benefits, challenges, importance, and implications</p> <p>Seung Hyun Kim (South Korea): Tumor microenvironment induces alternative lengthening of telomere (ALT) activation via RAD52 during immortalization of MPNST</p> <p>Weifeng Liu (China): Comprehensive Molecular Characterization of Osteosarcoma in Chinese Patients</p> <p>Hesham Abdelbary (Canada): Histologic mapping of bacterial infection in an established PJI cemented hemiarthroplasty hip rat model at acute and chronic stages</p> <p>Nicholas Peterson (United States): Low Dose Aspirin for VTE Prophylaxis Results in Lower Rates of Periprosthetic Joint Infection After Total Joint Arthroplasty</p> <p>Ricardo Becker (Brazil): Giant Cell Tumor of Bone: Multicenter Epidemiological Study in Brazil</p> <p>Michele Boffano (Italy): Musculoskeletal geriatric oncology: do we have to change our approach in elderly patients? Preliminary results of a retrospective study</p> <p>Krista Goulding (United States): Analysis of Negative reviews of Orthopedic Oncology Surgeons: A Review of Healthgrades, Vitals, and Google</p> <p>Brooke Crawford (United States): Photoacoustic Microscopy of Undecalcified Bone</p>	<p>Platform Session 12 Limb salvage surgery <i>Moderators: (tba)</i></p> <p>Introductory Lecture Davide Maria Donati (Italy): Efficacy of Electrochemotherapy for minimal-invasive treatment of bone metastases</p> <hr/> <p>Dimitra Melissaridou (Greece): Proximal Femur replacement with a modular prosthesis. Retrospective study of 96 patients</p> <p>Trisha Ann Hermogenes (Philippines): Challenge of treating skeletal muscle metastasis during the COVID-19 pandemic in a low-resource setting</p> <p>Han-Soo Kim (South Korea): Intramedullary Distance between Osteosarcoma and Osteotomy site for the Safe Margin in the wide excision of Limb Salvage Surgery</p> <p>Xiaohui Niu (China): Is it a solvable problem: unacceptable limb length discrepancy in pediatric osteosarcoma patients with long-term survival?</p> <p>Akihiko Takeuchi (Japan): Mid- to long-term clinical outcome of tumor-devitalized autografts in limb-sparing surgery for bone and soft tissue tumors - A nationwide multicenter study -</p> <p>Shah Alam Khan (India): Does Medial Gastrocnemius flap in Proximal Tibial endoprosthetic reconstructions to assist in active knee extension during Gait?- Extended results of a pilot study</p> <p>Anthony Griffin (Canada): Surgical staging of osteosarcoma: does a precise margin cutoff and incorporation of chemotherapy response improve prediction of local recurrence?</p> <p>Walid Ebeid (Egypt): Dissection of the tumour-vessels interface: A prognostic factor for local recurrence in distal femoral osteosarcoma.</p> <p>Ioannis Trikoupis (Greece): Prosthetic reconstruction of the shoulder after resection of proximal humerus bone tumors</p> <p>Anthony Bozzo (United States): Bone transport reconstruction for limb salvage surgery: A prospective database analysis</p> <p>Yong-Suk Lee (South Korea): Long-term Outcomes of Reconstructions of Structural Allografts for Massive Bone Defects</p> <p>Osman Emre Aycan (Turkey): Complications of Liquid Nitrogen Recycled Bones: The dark side of the moon!</p>

TIME	Main Hall (Level 1)	Laurete Room (Level 1)	Optimist A & B (Level 2)
12:00-13:00	<p>Leaders of Industry tell the Future Chair: Francis J. Hornicek (United States), Philipp Theodor Funovics (Austria), Panayiotis J. Papagelopoulos (Greece)</p> <p>Implantcast Mirko Büttner: (tba)</p> <p>Stryker tba</p> <p>ZimmerBiomet Ivan Tornos: Innovative Technology for Arthroplasty: Don't Get Caught Behind</p> <p>BonesSolutions Drew Diaz: Bone Solutions and Magnesium</p> <p>OnkosSurgical Patrick Tracey: (tba)</p>		
13:00-14:00	<p>Prizes – Announcements - Closing Ceremony</p>		