



LATE BREAKING POSTERS

Saturday, February 8, 2025

10:00 AM - 7:30 PM

Room #North Hall A-C

PS1-180 Late Breaking Poster Session 1

Poster No. 2130

Bisphosphonates Loaded Nanoparticles In Microparticles: A Potential Macrophage Targeting Immunomodulatory Drug Delivery System For Osteoarthritis Treatment

Paul Sagoe; Era Jain

Poster No. 2131

Pdgf-ab And Tgf- β 1 Release From Blood Suspension Loaded Beta-tcp Dowels In An Experimental Setting After Addition Of Antibiotics To Nutrient Medium

Marco Waldmann; Marc Bohner; Anna Baghnavi; Bianca Riedel; Michael Seidenstuecker

Poster No. 2132

Catalase-loaded Liposome As Highly Efficient Antioxidant Nanoparticle For Osteoarthritis Therapy

Hanli Guo; Qiushi Liang; Diling Zhang; Jun Li; Yiyang Xu; Yunyi Niu; Huan Wang; Tingfang Sun; zhiliang cheng; LING QIN

Poster No. 2133

Is There A Relation Between The Early Postoperative Exercise And Bone Formation Around Degrading Mg-based Implants? Multiscale In Vivo Study In A Rat Preclinical Model

Omer Suljevic; Thomas Bretschneider; Pircher Lukas; Irene Fernandez Rodriguez; Helga Lichtenegger; Christian Hellmich; Andreas Menzel; Begüm Okutan; Jan Eike Freudenthal-Siefkes; Annelie Martina Weinberg; Sommer Nicole

Poster No. 2134

Clinically Prioritized Materials Development: Assessing Electrical And Mechanical Viability Of Conductive UHMWPE Composites For Orthopedic Implant Applications

Peder Solberg; Douglas Van Citters

Poster No. 2135

Clonal Variability Of Chondroprogenitor Cell Differentiation In Osteogenic And Chondrogenic Culture Conditions

Kenneth Weekes; Genevieve Romanowicz; Phillip Hernandez; Robert Guldberg



LATE BREAKING POSTERS

Poster No. 2136

Sintering 3d Printed Mineral Lattices Improves Bioactivity And Mechanical Strength For Bone Composite Scaffolds

Peter M. Bertone; Levi Olevsky; Kavin Kathir; Simon Agnew; William Scheidler; Katherine Hixon

Poster No. 2137

Withdrawn

Poster No. 2138

Interfacial Tendon-to-bone Scaffold For Improved Rotator Cuff Repair

Stephanie S. Steltzer; Nicole Migotsky; Kyle B. Timmer; Adam C. Abraham; Brendan Harley; Megan L. Killian

Poster No. 2139

Onset Of Cyclic Tensile Strain Affects The Vascular Morphology Of 3D Microvascular Constructs

Samuel Lester; Anna Burger; Alister Wong; Adam Rauff; Kimberly Jones; Angela Lin; Robert Guldberg

Poster No. 2140

Highly Mineralized Human Bone Organoids Emulating Osteoporotic Fracture Phenotypes In Vitro

Chris Steffi; Anke de Leeuw; Gian Nutal Schädli; Xiao-Hua Qin; Matthias Rüger; Ralph Mueller

Poster No. 2141

Triply Periodic Minimal Surface Architectures Improve In Vitro Bone Growth In Pcl Scaffolds

Hisham Omar; Paulina Bargallo Gonzalez Lugo; Rachel Bonfini; Matthew Fainor; Sarah E. Gullbrand; Michael W. Hast

Poster No. 2142

A Novel Clip-rotation System For Integrating Electrospun Pcl Scaffolds With Gelma Hydrogels To Enhance Tendon Regeneration

Lin Xu; Zizhao Li; Se-Hwan Lee; Sung-Han Jo; Su Chin Heo

Poster No. 2143

Composite Tissue Muscle Constructs Enable Precision Alignment And Dimensional Stability

Adam Rauff; Ievgenii Liashenko; Kimberly Jones; Charlotte Lippa; Lila M. Pender; Paul Dalton; Nick Willett; Robert Guldberg

Poster No. 2144

Distinct Expression And Heme Homeostasis Patterns Of Prrx1+ Chondroprogenitors In Limb Growth Plates: Conditional Ablation Of Prrx1 Elucidates Mechanisms Underlying Chondrodysplasia



LATE BREAKING POSTERS

Sai Rama Krishna Meka; Pranav Mishra; Michael Kluppel; Tanishka Khurana; Alfonso Torquati; Anna Spagnoli

Poster No. 2145

Correlation Between Bone Marrow Edema And Meniscal Injury On Mri And Bone Resorption In Spontaneous Osteonecrosis Of The Knee

Dai Sato; Taiki Tokuhiro; Hotaka Ishizu; Tomohiro Shimizu; Yuki Ogawa; Koji Iwasaki; Eiji Kondo; Masayuki Inoue; Tomonori Yagi; Norimasa Iwasaki

Poster No. 2146

The Critical Role Of Irisin In Maintaining Bone Health And Its Therapeutic Potential For Diabetic Osteoporosis And Neuropathy

Giulia DiRaimo; Hassan Ainani; Marcia Urban-Maldonado; Jelena Basta-Pljakic; Mitchell Schaffler; Sylvia O. Suadican; David C. Spray; Mia M. Thi

Poster No. 2147

Digital Wrist Tomosynthesis Captures Age Related Cortical And Trabecular Structural Differences In Distal Radius Bone In Women

Ram N. Yadav; Daniel Oravec; Terra Cushman; Sudhaker D. Rao; Yener N. Yeni

Poster No. 2148

Impact Of Senescent Osteocyte SASPs On Bone Marrow Stromal Cells: A Mechanobiological Perspective On Bone Aging

Chanul Kim; Maryam Tilton

Poster No. 2149

Myeloid Cell-derived Wnt5a Regulates Bone Formation Without Affecting Bone Resorption

Valentina Daponte; Joseph Roberts; Chandra Gavva; Katrin Henke; Hicham Drissi

Poster No. 2150

Severity-dependent Loss In Bone Strength: A Mouse Model Of Polytrauma-related Systemic Bone Disease

Jeffrey Nyman; Ben Asbury; Sasidhar Uppuganti; Kurando Utagawa; Court Reese; Rachel McKee; Jonathan Schoenecker; Stephanie Moore-Lotridge

Poster No. 2151

PR1P: A Novel VEGF-Stabilizing Peptide That Enhances Fracture Repair

Prateek Misra; Diana Yeritsyan; Maria Velasquez Hammerle; Kaveh Momenzadeh; Amr Al-absi; Shubham Laiwala; Mason Garcia; Elizabeth Vickery; Ara Nazarian



LATE BREAKING POSTERS

Poster No. 2152

Cdk8 Inhibition As A Therapeutic Treatment For Ischemic Fracture

Christina Capobianco; Jeanna Schmanski; Luke Schroeder; Yadav Wagley; Karen Kessell; Alexis Donneys; Mengqian Chen; Igor Roninson; Tristan Maerz; Kurt Hankenson

Poster No. 2153

Evaluating The Interobserver Agreement Of The 2018 Modification Of The Aofota Fracture Classification System For Long Bone Fractures

Timothy S. Keeley; Stephanie Hu; Ryan T. Halvorson; Sean Campbell; Kelly A. Lefavre; Douglas Lundy; Eric Meinberg; Kyle Schweser; Stephen Shymon; Meir Marmor

Poster No. 2154

The Effect Of Chronic Vaping Delta-9-tetrahydrocannabinol (thc) In Traumatic Femur Fracture In Mice

Joseph Trejo; Nikhil C. Mathur; Gerardo Figueroa Romero; Austen Thompson; Bryn Nisbet; Jason Lowe; David Margolis; Tally Largent-Milnes; Todd Vanderah

Poster No. 2155

Vanguard Feasibility Study: Pain And Nicotine In Tibial Fracture Healing And Early Recovery (PANTHER)

Neil Jain; Samantha Weiss; Robert Gomez; Mehran Bahrami; Steven Chen; Hannah Dailey; Chinenye Nwachuku

Poster No. 2156

Bi-directional Control Of Yap/taz Signaling Impacts Macrophage Function In Bone Healing

Georgios Kotsaris; Sung Yeon Kim; Elizabeth Bernstein; Nathaniel Dymont; Robert Mauck; Joel Boerckel

Poster No. 2157

Osteocytes Inhibit The Activity Of In Vitro Nociceptors: An Effect Lost After Mechanical Piezo1 Activation

Ryan Jones; Sophie Gilbert; Deborah Mason

Poster No. 2158

Spatial Transcriptomics Of Adult Human Bone Resolves Tissue-level Molecular Effects Of RANKL Inhibition Therapy In A Randomized Clinical Trial For Periprosthetic Osteolysis

Mark J. Dunning; Christine Le Maitre; Mark Wilkinson

Poster No. 2159

Impact Of Adjuvant Plating On Intramedullary Nailing Outcomes In Distal Tibial Fractures: A Single-surgeon Retrospective Analysis



LATE BREAKING POSTERS

Ruth Simpson; Aaron Lee; Christopher Evaristo; Dexter Allen; Mark Foreman

Poster No. 2160

Adeno-associated Virus As A Gene Therapy Vector For Osseous Nonunion

Erin B. McGlinch; Joseph A. Panos; Michael J. Coenen; Michael A. Barry; Christopher H. Evans

Poster No. 2161

Assessing Endocrinology Referral Rates And Osteoporosis Directed-care After Upper Extremity Fragility Fractures: A Quality Improvement Project

Camryn Payne; Alejandro Holle; Annika Hiredesai; Nathan Beckett; Carina Howlett; Cara Lai; Joshua Bingham

Poster No. 2162

Tailoring Of Cryogel Scaffold Pore Distribution For Improved Bone Vascularization

Katherine Cox; Levi Olevsky; Eric Holmgren; Linqing Li; Katherine Hixon

Poster No. 2163

A Natural Naphthoquinone (naquinat; Nq8) Causes Increased Release Of Osteoprotegerin And Osteocalcin By Cultured Primary Human Femoral Osteoblasts Through A Wnt16-mediated Mechanism Of Action For Periosteal Expansion And Reduced Cortical Porosity In A Bilateral Ovx Rat Model Of Rapid Bone Loss

Cenk Oguz

Poster No. 2164

Defining Senescence In Cartilage And Synovium In PTOA In Young And Old

Nikhil C. Bagchi; Jin Han; Kavita Krishnan; Sushma Nagaraj; Elise Gray-Gaillard; Jennifer Elisseff

Poster No. 2165

Cam-type Femoroacetabular Impingement As A Clinical Precursor Of Advanced Osteoarthritis: A Histological And Translational Framework

Brian Li; Daniel Fedida; Chloe Heiting; Srino Bharam; Haixiang Liang; Daniel Grande

Poster No. 2166

Surfactant-stripped Micellar Nanocarriers: A Targeted Approach To Combat Senescence In Osteoarthritis

Jayishnu Roy; Matthew Patrick; Jacqueline Shine; Mingqian He; Brian Diekman; Jonathan Lovell; Ramkumar T. Annamalai

Poster No. 2167



LATE BREAKING POSTERS

Activation Of Articular Chondrocytes By Inflammatory Factors Released By Osteoarthritic Synovial Fibroblasts

Alecia J. Rajesh; Philip Coryell; Jorge Fernandez Davila; Susanna Chubinskaya; Richard Loeser

Poster No. 2168

CD8 T-cells And M1:M2 Macrophage Polarization Correlate With Equine Osteoarthritis Severity

Erica Secor; Bettina Wagner; Julie Engiles; Heidi Reesink

Poster No. 2169

Identifying The Effect Of Growth-mediated Mechanical Stimulation In Limb Synovial Joint Development

Minwook Kim; Heejong Kim; Wookjin Choi

Poster No. 2170

Unbiased Secretome Analysis Identifies Critical Regulators Of Mouse Knee Joint Articular Cartilage In Young Mice That Are Lost With Age-related Pathologies

Veeraj Shah; Chitra Dahia

Poster No. 2171

Effect Of Acute Inflammation On Nasal Septum Derived Chondrocytes And Cartilage Progenitor Cells

Jeffrey Fanzhi Chen; Kyra Smith; Riccardo Gottardi

Poster No. 2172

Proteomic Analysis Of Human Synovial Biofluids Associates Fibrosis, inflammation And Oxidative Stress Proteins To Osteoarthritis Progression

Charles A. Schurman; Qi Liu; Iris Flores; Bob Hutchens; Birgit Schilling

Poster No. 2173

Minimum Two Year Follow Up Of Patellofemoral (PF) Osteochondral Allograft (OCA) Implantation With Or Without Concomitant Tibial Tubercle Osteotomy (TTO): Sagittal Tibial Tubercle Trochlear Groove (stt-tg) As A Predictor Of Clinical Outcomes

Edouard J. Augustin; Kofi Acheampong; Thomas E. Moran; Brian J. Cole; Adam B. Yanke

Poster No. 2174

Novel Therapy For Cartilage Regeneration Using Losartan Sustained Release Microspheres

Shintaro Mukohara; Kohei Yamaura; Jae Sung Lee; Haruki Nishimura; Kiminari Kataoka; Chelsea Bahney; Marc Philippon; William Murphy; Johnny Huard

Poster No. 2175



LATE BREAKING POSTERS

Co-administration Of Colchicine And Bortezomib As A Novel Strategy To Mitigate Inflammation And Cartilage Damage In Osteoarthritis

Alireza Mirahmadi; Niloufar Bineshfar; Pooya Hosseini-Monfared; Shayan Amiri; Hamidreza Pazoki; Kaveh Momenzadeh; Ara Nazarian

Poster No. 2176

IL11 As A Novel Target For Arthrofibrosis Therapy

Miguel A. De Jesus; Ryan Schroeder; Steven Saweikis; Molly Chaffee; Cathy Swindlehurst; Luis Marrero

Poster No. 2177

Minced Cartilage Demonstrates Lower Viability And Increased Variability Compared To Isolated Chondrons.

Dunja Scheepmaker; Christopher V. Nagelli; Katherine L. Lydon; Lucienne A. Vonk; Aaron J. Krych; Roel J.H. Custers; Daniel B.F. Saris; Jasmijn V. Korpershoek

Poster No. 2178

Single Plug Vs. Snowman Osteochondral Allograft Transplantation Of The Knee: A Matched Cohort Analysis

Yusuf Mufti; Jared Sachs; Edouard Augustin; Chloe Franzia; Bouftas Fatima; Eric Cotter; Adam Yanke; Brian Cole

Poster No. 2178A

Pulsed Electromagnetic Fields (PEMFs) Stimulate The Proliferation And Differentiation Of Chondrogenic ATDC5 Cells

Harun Momin; Weiguang Wang; Aaron Kavanaugh; Fabrizio Billi

Poster No. 2179

Cd200 Modulates Human Chondrocyte Catabolism And Murine Synovial Fluid Proteomic Profile

Folly M. Patterson; Priya Kulkarni; Thuy-Khanh Tran-Dao; Li-mor David; Angela Philistin; Wendy F. Liu; Kyle D. Allen; Blanka Sharma

Poster No. 2180

Glycosaminoglycan-mimetics As Injectable Fibers To Promote Mesenchymal Stem Cell Chondrogenesis And Affect Metabolic Activity

Phillip Hu; Treena Arinze

Poster No. 2181

Large Language Models For Encoding Operative Notes In Total Hip Arthroplasty



LATE BREAKING POSTERS

Sami Saniei; Linjun Yang; Kellen L. Mulford; Anish Kanabar; Miguel Girod; Nicholas Bedard; Robert Trousdale; Marisa Ulrich; Michael Taunton; Cody Wyles

Poster No. 2182

Incidence Of Manipulation Under Anesthesia Following Cemented Versus Cementless Total Knee Arthroplasty And Impact On Revision Rates

Wesley Day; Gwyneth Maloy; Lee E. Rubin; Muhammad T. Padela; Jonathan N. Grauer; Thomas R. Hickernell

Poster No. 2183

Statistical Analysis Plan For Latent Class Analysis In Identifying Biobehavioral Phenotypes Of Chronic Low Back Pain (clbp)

Fatemeh Gholi Zadeh Kharrat; Prakruthi Amar Kumar; Wolf Mehling; Irina Strigo; Jeffrey Lotz; Thomas A. Peterson

Poster No. 2184

Prevalence And Risk Factors For Chronic Postamputation Pain Requiring Analgesia Or Nerve Interventions: A Population-based Study In East Asia

Wen-Chih Liu; Fu-Wei Su; Sheng-You Su; Chia-Lung Shih; Kyle R. Eberlin; Yin-Chih Fu

Poster No. 2185

5-year Acl Injury Rate For Transgender And Gender Diverse Patients Using Gender-affirming Hormone Therapy

Alicia Jacobson; Lauren Heinonen; Emily Reinoso Jacome; Anthony Prentice; Kelly Taylor; Julie Blaszcak; Eileen Crawford

Poster No. 2186

Socioeconomic Risk Factors For Delayed Presentation In Adolescent Idiopathic Scoliosis

Nathaniel Hunter; Cole Payne; Aidan Wright; Rohini Vanodia; Jacob Siahaan; Lindsay Crawford; Shah Dodwad; Rex Marco; Surya Mundluru; Shiraz Younas; Timothy Borden

Poster No. 2187

Sex-specific Differences In Outcomes After The Open Latarjet Procedure: A Systematic Review

Jeffrey S. Mun; Rachel L. Poutre; James R. Satalich; Brandon J. Allen; Srish S. Chenna; Stephen M. Gillinov; Bilal Siddiq; Nathan J. Cherian; Christopher T. Eberlin; Scott D. Martin

Poster No. 2188

Perceived Social Support Following Extremity Trauma: Does Sex Matter?

Anna LeJeune; Hallie Berndt; Victoria Bourgeois; Jessica Rivera



LATE BREAKING POSTERS

Poster No. 2189

The Prevalence Of Orthopedic Injuries And Treatment Options In Urban Unhoused Patient Populations

Sanjana Arun; Tyler Krall; Joseph Solomon; Armine Kasabyan; Taylor Lee; Robert Fauer

Poster No. 2190

Uneven Ground: Exploring Disparities In Access To Foot/ankle Care

Roshan V. Patel; David Mothy; Numair Attaar; Gnaneswar Chundi; Aayush Mehta; Soheil Ashkani-Esfahani

Poster No. 2191

Intertrochanteric Line Approach For Managing Irreducible Femoral Neck Fractures

Xin Wang; Wang Zhang; Linglong Deng; Xue Fang; Changhuan Liu; Min Zhou; Lekai Zhu; Wei Tan; Zonghuan Li; Xiaqing Yang; Zheng Wang; Zhe Xie

Poster No. 2192

Withdrawn

Poster No. 2193

Predictive Model For Deep Venous Thrombosis Caused By Closed Lower Limb Fracture After Thromboprophylactic Treatment

Jian Xing; Pengfei Wang

Poster No. 2194

The Adoption And Decline Of Interspinous Process Devices For Lumbar Spinal Stenosis From 2017 To 2022

Albert H. Lee; Michael J. Gouzoulis; Kashif Qureshi; Lucas Y. Kim; Gwyneth C. Maloy; Jonathan N. Grauer

Poster No. 2195

What Is The Best Gotfried Positive Reduction For Adult Femoral Neck Fracture

Jian Xing; pengfei Wang; Shuang Han

Poster No. 2196

Anatomic Patellofemoral Factors That Affect The Sagittal Tibial Tubercle-trochlear Groove Distance In Patella Instability Patients

Adam Yanke; Kofi K. Acheampong; Zachary Oppenheim; Thomas Moran

Poster No. 2197

The Molded Ankle Foot Orthosis (mafo) And Patient-reported Outcomes For Achilles Tendinopathy:a Retrospective Study



LATE BREAKING POSTERS

Bryson M. Houston; Alexis Watson; Devyn Russo; Josh Baxter; Lorraine Boakye

Poster No. 2198

Study On The Flatfoot Subtypes Classification Using Morphological And Biomechanical Features

Dongyun Gu; Zengguang Wang; Tianyi Hu; Xin Jia; Qianqian Chen; Yaokai Gan

Poster No. 2199

Unraveling The Shared Genetic Architecture Between Body Mass Index And Ossification Of The Posterior Longitudinal Ligament Of The Spine

Zhenjie Wei; Yoshinao Koike; Masahiko Takahata; Morio Matsumoto; Kota Watanabe; Chikashi Terao

Poster No. 2200

Evaluating The Safety Of Early Return-to-play In Athletes Sustaining Metacarpal Or Scaphoid Fractures: A Systematic Review

Calvin Wang; Jason Daniels; Daniel Devine; Michael Simon; David Kirschenbaum; Brian Katt

Poster No. 2201

Evaluating ChatGPT In Orthopaedic Sports Medicine Surgery: A Systematic Review

Jacob D. Kodra; Arthur Saroyan; Michael S. Lee; Fabrizio Darby; Serkan Surucu; Scott Fong; Stephen Gillinov; Jeremy Ansah-Twum; Jay Moran; Andrew Jimenez

Poster No. 2202

Cause Of Extensor Pollicus Longus Ruptures After Distal Radius Fracture

Liam Harvey

Poster No. 2203

Weight Bearing Simulation Of Bimalleolar Ankle Fracture Fixation And Comparison Of Fixation Techniques: A Biomechanical Study

Travis Flick; Alexander Chong; Jordan Shearer; Anthony Brown

Poster No. 2204

Chatgpt In Musculoskeletal Education: Anatomist Vs. Orthopedic Surgeon Assessment Of Ai-generated Responses To Medical Students' Open-ended Questions

Brian Li; Aleksandra Qilleri; Chloe Heiting; Rosemary Bassey; Daniel Bowles; Kate Nellans

Poster No. 2204A

Evaluating The Educational Quality And Accuracy Of Carpal & Cubital Tunnel Related Content On Tiktok

Levi M. Travis; Jacob Jahn; Kristen Dean; Seth Dodds



LATE BREAKING POSTERS

Poster No. 2205

The Effects Of Increased Preoperative Education For Patients Undergoing External Fixation

Nathaniel Hunter; Travis Alford; Carey Clark; Madison Smith; Jack Strubel; Jacob Siahaan; Stephen Warner

Poster No. 2206

The SER IV Pivot- CT Analysis Demonstrates External Rotation Drives MCS And LTS Increases In Unstable Ankle Fractures

Krysta Caudle; Jayanth Kumar; Ramiro Lopez; Cole Herbel; Glenn Shi; Edward Haupt

Poster No. 2207

Withdrawn

Poster No. 2208

Impact Of Local Vancomycin On Postoperative Outcomes In Ankle Arthrodesis: A Propensity-matched Cohort Study

Avani A. Chopra; Abhiram Dawar; Jonathan Lopez; Tuckerman Jones; Sheldon Lin; Michael Aynardi

Poster No. 2209

Three Distinct Outcome Trajectories Following Arthroscopic Microfracture With Bmac For Osteochondral Lesions Of The Talus: Analysis Of Midterm Results

Rachit Saggarr; Eva Heidinger; Warren Austin; Abdulganeey Olawin; Joseph Mullen; Akeem Williams; Kenzo Cotton; Garcia Findlay; Lauren Lewis; MaCalus Hogan

Poster No. 2210

Screw Insertion Order And Angulation: A Critical Interaction For Improved Compression In Plating

Leah Buch; Christopher Gross; Danny Scott; Shannon King; James Johnson; Samuel Adams; David Safranski

Poster No. 2210A

Radiographic Anatomy Of The Deltoid Ligament: A Cadaveric Study

Ruth Simpson; Alexander David; Shepherd Stahel; Vinod Panchbhavi

Poster No. 2211

Does Timing Of Hindfoot Reconstruction Before Or After Primary Total Knee Arthroplasty Impact Reoperation Rates?

Ramiro Lopez; Nicholas Dohse; Joseph Larwa; Alex Moses; Cole Herbel; Cameron K. Ledford; Edward Haupt



LATE BREAKING POSTERS

Poster No. 2212

Addressing The High Frequency Of Unnoticed Screw Stripping With Nitinol

Shannon King; James Johnson; Greg Berlet; David Safranski

Poster No. 2213

Biomechanical Evaluation Of Various Screw Constructs For Proximal Phalanx Fracture Fixation

Mitch Daniel; Mariel McLaughlin; Humberto Cardona; Craig Dent; Miguel A. Diaz; Michael Doarn; Devin Collins

Poster No. 2214

Augmented Reality Navigation In Complex Hip Surgery: A Multi-Center Case Series

E. Brandon Strong; Hania Shahzad; Ian Tuznik; Benjamin Allis; Gavin Pereira

Poster No. 2215

Capsular Management Methods For Hip Arthroscopy: A Systematic Review

Brandon J. Allen; Jeffrey S. Mun; Rachel L. Poutre; Srish S. Chenna; Kieran S. Dowley; Stephen M. Gillinov; Bilal Siddiq; Nathan J. Cherian; Christopher T. Eberlin; Scott D. Martin

Poster No. 2216

Revision For Dislocation And All-causes Following Primary Total Hip Replacement Using 36-mm Versus 32-mm Femoral Heads On Polyethylene Liners: A Systematic Review And Meta-analysis

Muhamed Farhan-Alanie; Mina Hussein; Daniel Gallacher; Peter Wall; Michael Blankstein

Poster No. 2217

Non-surgical Knee Biomechanics After Unilateral Total Knee Arthroplasty Are Linked To Long-term Changes In Cartilage Composition

Rupsa Bhattacharjee; Jesse Christensen; Victor Cheuy; Richard Souza; Michael Bade; Cory Christiansen; Jennifer Stevens-Lapsley

Poster No. 2218

Comparing Outcomes Of Direct Superior Versus Posterior Approach For Total Hip Arthroplasty

Jackson Stone; Derek Yocum; Adam Cien

Poster No. 2219

The Effect Of Different BMI Groups On Patient-reported Outcome Following Primary Total Hip Arthroplasty: A Retrospective Cross-sectional Study.

Roham Borazjani; Danielle DeMoes; Stefan Kreuzer

Poster No. 2220



LATE BREAKING POSTERS

Five-year Outcomes Of Total Stabilized Vs. Posterior Stabilized Inserts In Revision Total Knee Arthroplasty: Influence Of Insert Type And Activity Level On Function And Pain

Emily Hampp; Sarah Shi; Marissa Puccio; Yogesh Mittal; David Jacofsky; Kirby Hitt

Poster No. 2221

Comparing Cemented And Uncemented Intramedullary Stems In A Contemporary Revision Total Knee Arthroplasty System: A Mid-term Clinical And Radiographic Analysis

Emily Hampp; Sarah Shi; Marissa Puccio; Lorie Gardner; Kirby Hitt; David Jacofsky

Poster No. 2222

Factors Associated With Home Discharge In Patients With Hip Fracture

Yuta Koshiba; Toshihiro Sano; Norio Yamanaka

Poster No. 2223

The Effect Of Local Antimicrobials On Ph Of The Post-Surgical Joint Environment

Rachel M. Butler; Thomas P. Schaer; Asia Winslow; Megan Seraydarian; Caleb Durst; Christopher Snyder; Antonia Chen; Noreen J. Hickok

Poster No. 2224

Does The Type Of Knee Dressing Impact Infection Rates Of Primary Total Knee Arthroplasty?: A Retrospective Review

Morgan Pierce

Poster No. 2225

Antibiotic Regimens For Single-stage Revision Periprosthetic Joint Infections

Carter D. Bernal; Shannon Tse; Janae Rasmussen; Zachary Lum

Poster No. 2226

Bone Cement Thermal Reduction: Effects On The Early Mechanical Characteristics And Microstructure

Alireza Mirahmadi; Pooya Hosseini-Monfared; Mehrdad Farrokhi; Seyed Morteza Kazemi; Kaveh Momenzadeh; Ara Nazarian

Poster No. 2227

Wear Of Highly Crosslinked UHMWPE Liners Of Different Thicknesses

Amit Parikh

Poster No. 2228

Association Between The Coronal Plain Alignment Of The Knee And Trochlear Groove Wear: A Retrospective Study.



LATE BREAKING POSTERS

Roham Borazjani; Danielle DeMoes; Stefan Kreuzer

Poster No. 2229

Experimental Hip Simulation Of A Novel Hip Replacement With Uni-Directional Articulations

Nicholas Cooper; Simon Mifsud; John Shapland; Ruth K. Wilcox; Sophie Williams

Poster No. 2230

Effect Of Sagittal Alignment Of Peri-stem Bone Reaction In Total Hip Arthroplasty Using The Zweymuller Stem

Kenichiro Doi; Fumihiro Yoshimura; Koichi Kinoshita; Hajime Seo; Taiki Matsunaga; Hideaki Hideshima; Takuaki Yamamoto

Poster No. 2231

Low Bone Mineral Density Correlates To An Increased Risk Of Bone Failure Under TKA Tibial Implants

Clarisse Zigan; Peter Sculco; Cynthia Kahlenberg; Joseph Lipman; Timothy M Wright; David Mayman; Jonathan Vigdorchik; Eytan Debbi; Fernando Quevedo Gonzalez

Poster No. 2232

The Effect Of Kinematics On Postoperative Clinical Outcomes In Bicruciate-retaining Total Knee Arthroplasty

Kenichi Kono; Tomofumi Kage; Hiroshi Inui; Takaharu Yamazaki; Shuji Taketomi; Ryota Yamagami; Takahiro Arakawa; Ryo Murakami; Takashi Kobayashi; Tomoki Murakami; Masashi Tamaki; Shoji Konda; Teruya Ishibashi; Tetsuya Tomita; Sakae Tanaka

Poster No. 2233

Robotic-Assisted Total Knee Arthroplasty Is Associated With Decreased Revision Rates Compared To Manual Total Knee Arthroplasty At Two-Years

Mary Jane McConnell; Bailey J. Ross; Thomas L. Bradbury; Jordan Murphy; Courtney Levit; George N. Guild

Poster No. 2234

Robotic Reaming Improves Initial Acetabular Cup Stability

Enrico M Forlenza; Robert Burnett; Alejandro A. Espinoza Orias; Vasili Karas

Poster No. 2235

A Deep Learning Tool For Minimum Joint Space Width Calculation On Anteroposterior Knee Radiographs

Miguel M. Girod; Kellen L. Mulford; Elizabeth Kaji; Austin F. Grove; Sami Saniei; Hilal Maradit-Kremer; Matthew P. Abdel; Michael J. Taunton; Cody C. Wyles



LATE BREAKING POSTERS

Poster No. 2236

High-Fidelity Modeling Required For Reliable RF Heating Assessments In Bone

Courtney A. Petersen; Sara G. Moshage; Andrew D. Dillon; Eleanor L. Brightbill; Peyton L. Delgorio; William M. Torres; Derek T. Holyoak; Ryan L. Siskey

Poster No. 2237

Longitudinal Assessment Of Trans-endplate Diffusion In A Goat Model Of Intervertebral Disc Degeneration

Agathe Guillemet; Leslie Brewer; Harrah Newman; Sarah Gullbrand; Dawn Elliott; Thomas Schaer

Poster No. 2238

Radiography-informed Machine Learning Model To Predict The Onset Of Knee Osteoarthritis

Teemu A.T. Nurmirinta; Mikael J. Turunen; Jussi Tohka; Mika E. Mononen; Joni M.A. Kuronen; Antti Voss; Tomi Nissinen; Sami P. Väänänen; Rami K. Korhonen; Mimmi K. Liukkonen

Poster No. 2239

Correlation Between Radiomic Features And Clinical Grading Of Patellar Tendon Ultrasound Images

Georgina Flynn-Smith; Sarah Crimmins; Stella Manges; Albert Kozar; Vincent Wang

Poster No. 2240

Incidence Of Necrotizing Fasciitis In The United States From 2005 To 2020: NSQIP Analysis

David Ahn; Varoon Phondge; Pushti Shah; Suhas Parise; Amanda Azer; Michael Vosbikian; Irfan Ahmed

Poster No. 2241

Mapping Of Bacterial Biofilm Of Trauma & Arthroplasty Hardware Explanted For Septic & Aseptic Indications.

Daniel Schlatterer, D.O, M.S.

Poster No. 2242

Characterizing Sitaflaxacin's Bactericidal And Structural Effects On Staphylococcal Abscess Communities In Vitro

Levy A. Sominsky; Karen De Mesy-Bentley; Youliang Ren; Gowri Muthukrishnan; Chao Xie; Edward M. Schwarz

Poster No. 2243

Cellular Immunotherapy To Reduce Infection And Promote Retention Of Bone Anchored Limbs

Lynn Pezzanite; Jacob Singer; Zoe Williams; Steven Dow; Kirk McGilvray; Jeremiah Easley; Renata Impastato; Kylie Shaw; Mohamed Awad; Jason Stoneback



LATE BREAKING POSTERS

Poster No. 2244

Reprogramming Nucleus Pulposus Cells Into Notochordal Phenotypes Via Foxa2 Activation-disc Regeneration Applications

Sajjad Ashraf; Aaryn Montgomery Song; Campbell Thom; Evan Kotler; Byron Chan; Alena Zelinka; Paul Santerre; Rita Kandel

Poster No. 2245

Transgenic Conversion Of Omega-6 To Omega-3 Fatty Acids Via Fat-1 Ameliorates Obesity-related Intervertebral Disc Degeneration

Nina (Shirley) Tang; Kristin L. Lenz; Emma Shen; Mohammed Kuziez; Farshid Guilak; Arin Oestreich

Poster No. 2246

Impact Of Chronic Alcohol Consumption On Intervertebral Disc Health

Biplab Chatterjee; Madeleine D Gordon; Tushar Singh; Neil Romesh; Samantha M Yeligar; Svenja Illien-Junger

Poster No. 2247

Effects Of Intervertebral Disc Health, Endplate Degeneration And Solute Molecular Weight On Trans-endplate Diffusion

Brianna S. Orozco; Sarah E. Gullbrand

Poster No. 2248

Transcriptomic Heterogeneity And Post-Traumatic Osteoarthritis-Associated Early Molecular Changes In Mouse Subchondral Endplate Osteoblasts Using Single-cell RNA-seq

Yaxia Zhang; Andy Z. Wang; Matthew B. Greenblatt

Poster No. 2249

Synovial Fluid Mitochondrial DNA At The Time Of Anterior Cruciate Ligament Injury Correlates With Long-Term Articular Cartilage Health

Lindsay A. Seewald; Isabella G. Sabino; Denise Kim; Cale A. Jacobs; Christian Latterman; Michelle L. Delco

Poster No. 2250

A Statistical Shape-function Model Of The Osteoarthritic Knee To Predict Joint Mechanics

Kalin Gibbons; Vahid Malbouby; Clare Fitzpatrick; Ethan Cooper; Amanda Ive

Poster No. 2251

Gait Predictors Of Ultrasonographic Measures Of Patellofemoral Cartilage Thickness In Individuals With Knee Osteoarthritis



LATE BREAKING POSTERS

Steven A. Garcia; Shraddha Sudhir; Nikou Nikoumanesh; Joseph Lupa; Maeve Gobeyn; Kharma Foucher; Lindsay Slater-Hannigan

Poster No. 2252

Gene Expression Of An Intraarticular Mouse Model Of Knee Contracture

Nils Meissner; Mason Carstens; Matthew Weintraub; Joaquin Sanchez-Sotelo; Daniel Berry; Mark Morrey; Roman Thaler; Matthew Abdel

Poster No. 2253

Tibial Tubercle Osteotomy Fixation Techniques - A Comparative Analysis Of 4.5mm Screws Vs. A Novel Method Using 3.5mm Screws And A Plate

Jennifer D. Kaminker; Christopher Fenelon; Quang Le; PAKPOOM RUANGSOMBOON; Sebastian Tomescu; Angela Atinga; David Wasserstein

Poster No. 2254

Macroscopic And Microstructural Anatomy Of The Ovine Medial Meniscus Anterior Root And Its Relation To Adjacent Structures Of The Tibial Plateau

Marta Carretero-Hernández; Wei Liu; Yin Zhang; Matthias Brockmeyer; Magali Cucchiari; Henning Madry

Poster No. 2255

Meniscal Extrusion Measurements Using Radial Multiplanar Reconstructions: Reliability And Trends Across Patient Groups

Ike Vayansky; Faysal Altahawi; Ahmet Hakan Ok; Richard Lartey; William Holden; Nancy Obuchowski; Anish Ghodadra; Xiaojuan Li; Carl Winalski

Poster No. 2256

Two-year Patient-reported Outcomes Are Predictive Of Mid- To Long-term Outcomes In Meniscal Allograft Transplantation

Yusuf Mufti; Jared Sachs; Edouard Augustin; Chloe Franzia; Nicholas Lemme; Andrew Bi; Adam Yanke; Brian Cole

Poster No. 2257

Lateral Meniscus Allograft Transplantation With Knotless All-suture Anchor Root Fixation Restores Knee Joint Kinematics In A Cadaveric Model

Benjamin L. Smith; James L. Pace; Taichi Komatsu; Shota Hoshika; Victor Hung; Michelle H. McGarry; Jim C. Hsu; Thay Q. Lee

Poster No. 2258



LATE BREAKING POSTERS

Does Immune Hypersensitivity Influence Clinically Significant Outcome Improvement And Graft Failure Rates After Meniscal Allograft Transplantation Of The Knee?

Brian J. Cole; Jared P. Sachs; Yusuf N. Mufti; Chloe H. Franzia; Andrew Bi

Poster No. 2259

Development Of An Ex Vivo Osteoarthritic Knee Model: Assessing Osteochondral/Synovium Cross-talk

Grace McDermott; Joseph Snuggs; Derek Jackson; Mark Wilkinson; Christine Le Maitre

Poster No. 2260

Serum Lipids And Complement Factors Define The Systemic Osteoarthritis Profile In Male Mice

Hope Welhaven; Bethany Andoko; Reyna Villa; Kelsey Collins

Poster No. 2261

Automatic Identification Of Reverse Shoulder Arthroplasty Prosthesis Models On Shoulder Radiographs Using Artificial Intelligence

Linjun Yang; Austin F. Grove; Elizabeth S. Kaji; Sami Saniei; Miguel Girod-Hoffman; Erick M. Marigi; Joaquin Sanchez-Sotelo; John W. Sperling

Poster No. 2262

Trends Of Rheumatoid Arthritis In Orthopaedic Upper Extremity Procedures Following Changes In Management Guidelines

Rohan Singh; Tariq Radwan; Michael Vosbikian; Irfan Ahmed

Poster No. 2263

Quantitative Polyethylene Wear Analysis And Scapular Notching In Reverse Total Shoulder Arthroplasty

Gabriel Landi; Andrew Holte; John-Erik Bell; Douglas Van Citters

Poster No. 2264

Can The Flexed Elbow Valgus External Rotation (fever) View Mri Eliminate The Need For An Mr Arthrogram Or Dynamic Stress Ultrasound In Athletes With Ulnar Collateral Ligament Injuries Of The Elbow? A Prospective Study Of Professional And Varsity Athletes

Herbert Stride; Vehniah Tjong; Mark Plantz; Stephen Gryzlo

Poster No. 2265

Tear Size And Quantitative Mri Predicts Mechanical Properties Of Torn Supraspinatus Tendons

Mason J. Garcia; Gabriel Landi; Alberto Lalli; Giovanni Intermesoli; Daniela Caro; Umile Longo; Ara Nazarian



LATE BREAKING POSTERS

Poster No. 2266

Remote Monitoring For Delivering Physical Therapy To Socioeconomically Disadvantaged Groups

Kanwar Partap Parhar; Yousef Shishani; Abigail Berns; Reuben Gobezie; Patrick Denard

Poster No. 2267

Hybrid Human Dermal Allograft And Knotless All-suture Anchor Acromioclavicular Joint Reconstruction Restores Translational And Rotational Stability

Jim C. Hsu; Genevieve M. Fraipont; Michelle H. McGarry; Victor T. Hung; Brittany Glaeser; Jonathan M. Salandra; Gregory J. Adamson; Thay Q. Lee

Poster No. 2268

Elucidating The Jnk Signaling Pathway In Neonatal Muscle Growth And Neuromuscular Contractures

Daniela Barrios; Albaraa Tarabishi; Madelyn Gordon; Sophia Conte; Kritton Shay-Winkler; Qingnian Goh; Roger Cornwall

Poster No. 2269

Electrical Stimulation Of MXene Scaffolds For Musculoskeletal Regeneration

Aleyna La Croix; Emma Kerino; Sreejith Panicker; Jewelina Durant; Anand Tiwari; William Scheideler; Katherine Hixon

Poster No. 2270

Assessing Vertebral Metabolism In Lumbar Degenerative Scoliosis Through Deep Learning And Fdg Pet Imaging

Mattia Perrone; John Martin

Poster No. 2271

Application Of Artificial Intelligence And 3d Printing In Surgical Planning For Transforaminal Lumbar Interbody Fusion

Meng-huang Wu; Anh Tuan Bui; Ching-Yu Lee; Tsung-Jen Huang; Tung Thanh Hoang; Pei-I Tsai; Ching-Chi Hsu; Hao-Chiang Shao; Tani Joway

Poster No. 2272

Precision Phenotyping Of Canine Spine Disease Using Unsupervised Learning

Alexander Negron Price; Feini Qu; John Martin

Poster No. 2273

Characterisation Of Vertebral Bone Marrow Mesenchymal Stem Cell Populations In Patients With Pre-Adolescent Idiopathic Scoliosis

Avelino Ferreira; Patrick Kiely; Ciara M. Murphy



LATE BREAKING POSTERS

Poster No. 2274

Evaluating AI In Spinal Cord Injury Management: A Comparative Analysis Of Chatgpt-4o And Google Gemini Against American College Of Surgeons Best Practices Guidelines For Spine Injury

Alexander Yu; Albert Li; Wasil Ahmed; Michael Saturno; Samuel Cho

Poster No. 2275

Active And Passive Gliding Properties Of The Thoracolumbar Fascia In Individuals With Low Back Pain

Georgina Flynn-Smith; David Risov; Nicole Fremarek; Matthew Chung; Jacob Barnett; Jaeda Mattis; Allie Reagan; Faheem Farooq; P. Gunnar Brolinson; Albert Kozar; Vincent Wang

Poster No. 2276

In-silico Investigation Into The Effects Of Cement / Hydrogel Stiffness And Volume On The Biomechanics Of The Lumbar Spine.

Robert D. Johnston; Ciara M. Murphy

Poster No. 2277

Viscoelastic And Failure Properties Of Spinal Ligaments In Yorkshire Piglet Induced Scoliosis

Dogerno J. Norceide; Christian D'Andrea; Mattan Orbach; Sriram Balasubramanian

Poster No. 2278

Posterior Spinal Fusion Outcomes In Adolescent Idiopathic Scoliosis Patients With Attention-Deficit/Hyperactivity Disorder (ADHD): ADHD Type Makes A Difference

Alexandros F. Pappajohn; Om B. Jahagirdar; Anthony E. Seddio; Jonathan N. Grauer

Poster No. 2279

The Role Of Generative Artificial Intelligence In Deciding Fusion Treatment Of Lumbar Degeneration: A Comparative Analysis And Narrative Review

Taha Taka; Christopher E. Collins; Andrew Miner; Isaac Overfield; David Shin; Olumide Danisa

Poster No. 2280

Unmasking Immune Landscape And Key Biomarkers In Tendinopathy Through Bioinformatic Data Mining

Weizhe Zhang; Yongxin Mai; Lei Wang; Omar Selim; Elameen Adam; Ichiro Tsukamoto; Margaret Brosig; Lawrence Berglund; Lauri Louwagie; Ramona Reisdorf; Chunfeng Zhao

Poster No. 2281

Fak Plays A Crucial Role In Load Induced Hierarchical Fiber Formation In Engineered Ligaments

Akshay Bhatt; Leia Troop; Jenny Puetzer



LATE BREAKING POSTERS

Poster No. 2282

Aging Alters The Intrinsic Ability Of Tendons To Clear Damaged Matrix Following Microdamage

Matthew T. Lim; Anthony N. Aggouras; Jeroen Eyckmans; Brianne K. Connizzo

Poster No. 2283

Piezo1 Loss Of Function Reveals Less Scx Expressing Cells In Tendon After Injury Concurrent With Improved Structural And Functional Recovery

Nicole A. Chittim; Maja Bollhalder; Maya Ben-Yehuda Greenwald; Greta Moschini; Jess G. Snedeker

Poster No. 2284

Neonatal T Cells Induce Unique Tendon Cell Proliferation, Migration And Phenotypic Plasticity

Giulia Crosio; Emily King; Ella McGovern; Alice Huang

Poster No. 2284A

Utilizing Fantasy Points To Evaluate Professional Athlete Performance Post Achilles Tendon Rupture

Mazen Zamzam; Arthur Saroyan; Imran Bitar; Luke George; Robert Dean; Joseph Guettler

Poster No. 2285

Epigenetic Crosstalk Between Tenocytes And Chondrocytes In Inflammatory Shoulder Degeneration

Felicia R. Pinto; Tyler Blanch; Su Chin Heo

Poster No. 2286

Gli1+ Enthesis Stem Cell Sheets For Tendon-to-Bone Repair

Andrew Luzzi; Ismael Bouso; Yidan Chen; Min Hao; Younan Xia; Stavros Thomopoulos

Poster No. 2287

Structural And Functional Adaptations Of The Rat Achilles Tendon To Long-term Passive Loading

Jonathon Blank; Eve Gibson; Mark Tarazi; Cassidy Landis; Lou Soslowsky; Josh Baxter

Poster No. 2288

Reduced Hindlimb Loading Following Sciatic Nerve Resection Is Detrimental To Achilles Tendon Mechanics And Lower Hindlimb Bone Morphometry In Wild-Type And Tendon-Targeted Collagen XII Knockout Mice

Michael S. DiStefano; Talayah A. Johnson; Nathaniel A. Dyment; Lou J. Soslowsky

Poster No. 2289

Collagen V Deficiency In Mouse Supraspinatus Tendon Does Not Affect Strain-induced Collagen Fibril Deformation

Jeremy Eekhoff; Stephanie Weiss; Lou Soslowsky



LATE BREAKING POSTERS

Poster No. 2290

Do Physical Or Imaging Changes Explain The Effectiveness Of Progressive Tendon Loading Exercises? A Causal Mediation Analysis Of Athletes With Patellar Tendinopathy

Jie Deng; Jos Runhaar; Stephan J. Breda; Edwin HG Oei; Denise Eygendaal; Robert-Jan de Vos

Poster No. 2291

Effect Of Losartan Sustained-release Nanofibers On Tendon Adhesion

Shintaro Mukohara; Kohei Yamaura; Sather Nicholas; Haruki Nishimura; Kiminari Kataoka; Keisuke Nakayama; Shelby Yuan; Chelsea Bahney; Marc Philippon; Samuel I Stupp; Johnny Huard

Poster No. 2292

Every Other Day Of Electrical Muscle Stimulation Leads Hypertrophy Without Inhibition Of Tendon Healing

Moe Yoneno; Koyo Nogi; Takanori Ito; Takanori Kokubun

Poster No. 2293

Treatment Of Acute Supraspinatus Tendon Injury With An MRL-informed Protein Panel Restores Structure

Ellen G. Garner; Nelly Andarawis-Puri

Poster No. 2294

3d Collagen Nanohydroxyapatite Scaffold Coculture Systems Provide Mechanistic Insights Into Prostate Cancer Bone Metastasis

Nezar Kamal; Aamir Hameed; Ciara M. Murphy; Caroline M. Curtin

Poster No. 2295

Time To Diagnose Soft Tissue Tumors: A Comparison Of Biopsy Techniques

Benjamin Coffey; Janie Swanson; Dean Langman; Jamie Romeiser; Timothy Damron

Poster No. 2296

Longitudinal Single-cell Rna Sequencing Of Equine Synovial Fluid Following Experimental Cartilage Injury Reveals Expansion Of Regulatory Th17 Yd Tcells

Lynn Pezzanite; Dylan Ammons; Lyndah Chow; Zoe Williams; Laurie Goodrich; Steven Dow; Jason Stoneback

Poster No. 2297

Orphan Receptor Gpr68 Modulates Calcium Signaling And Apoptosis In Osteoarthritic Chondrocytes Under Acidic Stress



LATE BREAKING POSTERS

Colette Hyde; William N. Martin; Adam Yung; Bhakti Patel; Ryan Taffe; Hicham Drissi; Thanh Doan; Mohd Nazir Khan

Poster No. 2298

Delivery Of Raav-Induced Sox9 And TGF-B Overexpression Enhances The Reparative Functions Of Human Bone Marrow-Derived Mesenchymal Stromal Cells In A Hyaluronic Acid (F4)/Alginate Hydrogel

Dan Wang; Jagadeesh Venkatesan; Gertrud Schmitt; Ebrar Sahin; Riccardo Beninatto; Devis Galesso; Henning Madry; Magali Cucchiarini; Wei Liu

Monday, February 10, 2025

10:00 AM - 7:00 PM

Room #North Hall A-C

PS2-181 Late Breaking Poster Session 2

Poster No. 2299

Optimizing And Prototyping A Combination Construct For Implant Support In Osseointegration

Adelaide L. Cagle; E. Lois Szulc; J. C. Flaggert; Yowis Arias; Annika Nikhar; I. Leah Gitajn; Katherine R. Hixon

Poster No. 2300

Wear Behavior Of Porous Therapeutic UHMWPE

Nicoletta Inverardi; Vincentius J. Suhardi; Orhun K. Muratoglu; Ebru Oral

Poster No. 2301

A Comparative Evaluation Of The Stem Cell Osteogenic Response On Porous Titanium And PEEK

Andrea Vera Martinez; Anna Reza; Jeremy Mercuri

Poster No. 2302

Assessing Additively Manufactured Gyroid Structures For Use In Intervertebral Disc Prosthetics: Feasibility Insights

Michael Seidenstuecker; Valentin Gross; Leandro Hippel; Sergej Zankovic; Bernd Rolaufts

Poster No. 2303

Elastin Peptide-functionalized Hydrogels Support Collagen Production By Bovine Annulus Fibrosus (AF) Cells But Are Not Conducive To Cell Proliferation Or Spreading In The Absence Of Adhesive Peptides: Implications For Cell-instructive Biomaterials For Af Repair.

Sabrina Delva



LATE BREAKING POSTERS

Poster No. 2304

Whole Blood And Platelet-Rich Plasma Similarly Stimulate Fibroblast Proliferation In 3D Matrices: Optimizing In Vitro Models For ACL Repair

Saleh Al Jundi; Lily Del Valle; Andrew Castro; Martha M. Murray; Benedikt L. Proffen

Poster No. 2305

Force Balances At Cell Boundaries Modulate Stem Cell Mechanoadaptation

Vina DL Putra; Kristopher Kilian; Melissa L. Knothe Tate

Poster No. 2306

Enhancing Implant Survivability: An Innovative Synergistic Approach Of 3D Metal Printing And 3D Bioprinting

Marzieh Ebrahimi Dashti; Ahamd Kermanpur; Mahshid Kharaziha; Mareeswari Paramasivan; Mohammad Fazle Alam; Mark Barba; Mathew Mathew

Poster No. 2307

Mechanical And Diffusivity Properties Of Hydrogel Matrix Used In An In Vitro System That Is Physiologically Relevant In The Context Of Peripheral Pain

Benjamin M. Gane; Rebecca A. Wachs

Poster No. 2308

Reversing The Impact Of Microgravity On Engineered Cartilage Tissue In Space

Ian Sands; Anne Yau; Trystin Cote; Maxwell Landolina; Wuxia Zhang; Yupeng Chen

Poster No. 2309

Nanofiber May Outperform Acellular Dermal Matrix In Cell Adhesion And Proliferation To Treat Osteochondral Defects

Chloe Heiting; Brian Li; Pavit Suri; Haixiang Liang; Daniel Grande

Poster No. 2310

Understanding The Effect Of Scaffold Geometry On Local Cellular Strains In Triply Periodic Minimal Surface-based Biomimetic Composite Systems For Cartilage Tissue Engineering.

Yashveer Soni; Boyuan Liu; Laurel Stefani; Virginia Ferguson; Robert McLeod; Stephanie Bryant

Poster No. 2311

Using Quercetin To Prevent Post-Radiotherapy Bone Fragility In A Murine Model

Jessica A. Stering; Brittany A. Simone; Megan E. Oest

Poster No. 2312



LATE BREAKING POSTERS

Metformin Does Not Protect Against Bone Loss Or Mechanical Deficiencies In A Streptozotocin-induced Mouse Model Of Diabetes

Amanda Wagner; Dyann Segvich; Alexa Plotkin; Joseph Wallace

Poster No. 2313

Characterizing Hip And Knee Osteoarthritis In Fibrous Dysplasia, A Rare Metabolic Bone Disease

Steven M. Munoz; Babak Saboury; Alison M. Boyce

Poster No. 2314

Effect Of Depletion Of Developmentally Regulated GTP Binding Protein 2 On Osteoblastic Differentiation And Bone Microstructure

Jae Hyup Lee; Yuan-Zhe Jin; Woo Sun Wang; Minjoon Cho

Poster No. 2315

Impact Of Glucocorticoid Receptor-mediated Signaling In Osteoblasts Varies Across Differentiation Stages

Colby Gross; Husam Eldin Bensreti; Meghan McGee-Lawrence

Poster No. 2316

Fatigue Injury In The Proximal Sesamoid Bones Of Thoroughbred Racehorses Is Associated With Palmar Osteochondral Disease In The Condyles Of The Third Metacarpal Bone

Elleana J. Thom; Soroush Irandoust; Corinne R. Henak; Peter Muir

Poster No. 2317

Effect Of Magnetohydrodynamics Device-induced Fluid Flow On Bone Regeneration In A Rat Femoral Defect

Eyerusalem A. Gebreyesus; Kylie Williams; Robert Guldborg; Ghee Ong

Poster No. 2318

Histological Assessment Of Patellar Osteochondral Autografts And Allografts After Graft Failure

Tomer Korabelnikov; Sama Abdulmalik; Ryan Bell; Rohan R. Patel; Raghunandan Nayak; Sangamesh G. Kumbar; Cory M. Edgar

Poster No. 2319

The Design And Manufacture Of An Adjustable Plate Used In Bone Fractures

Amir Hossein Saveh; Seyed Ahmad Niknam; Mohammad Esmail Lotfi Rezvande; Ali Kiapour

Poster No. 2320



LATE BREAKING POSTERS

A Comparison Of The Biological Effect In Bone Samples Of A Miniature Ultrasonic Cutting Device Using Two Different Cutting Blades

Nisreen Mohammed Al-Namnam; Steph Collishaw; Xuan Li; Margaret Lucas; Hamish Simpson

Poster No. 2321

Surgical Treatment Of Hiv-infected Patients With Traumatic Fractures: A Retrospective Study On Bone Healing Time And Wound Infection Management

Changhuan Liu; Xin Wang; Wang Zhang; Xue Fang; Wei Tan; Xiaqing Yang; Zhe Xie

Poster No. 2322

Cervical Cancer Cell Sensitivity To Culture Substrate

Tara A. Carney; Brittany A. Simone; Megan E. Oest

Poster No. 2323

Pronounced Impairment Of B Cell Differentiation During Bone Regeneration Of Aged And Immune-experienced Mice

Mireille Ngokingha Tchouto; Christian Bucher; Ann-Kathrin Mess; Simon Haas; Katharina Schmidt-Bleek; Georg Duda; Dieter Beule; Miha Milek

Poster No. 2324

Histologic Evaluation And Gene Expression In An Experimental Model Of Bone Marrow Lesions In The Rat Femoral Condyle

Holly L. Stewart; Katie Sikes; Scott Korte; Chris Kawcak; Jeremiah Easley

Poster No. 2325

Injuries And Hospitalizations Associated With Playing Pickleball From 2020 To 2022: A National Database Study

Calvin Wang; Ryan Cheng; Jay Moran; Billy I. Kim; Marshall S. Yuan; Connor J. O'Leary; Joshua S. Dines; Brian M. Katt; Andrew Jimenez

Poster No. 2326

Using Strain Gauges To Detect Simulated Fracture Healing In A Femoral Fracture Model

Ginelle Maldonado; Gerardo Figueroa Romero; Robert Childers; David Gonzales; Matthew Halanski; David S. Margolis

Poster No. 2327

Detection Of Trabecular Bone Microstructure Abnormality Using A Qct-based Deep Learning Model

Pengwei Xiao; Hossein Akherati; Xiaodu Wang



LATE BREAKING POSTERS

Poster No. 2328

Process Validation For Mimicry Of Skeletal Segment Spatially Variate Anisotropy

Katie R. Geary Zilevicius; Benjamin S. Hezrony; Philip J. Brown

Poster No. 2329

A Model Of Progressive Pseudorheumatoid Arthropathy Of Childhood (PPAC) In Sheep

Nereida Ramirez; Catrina Silveira; Giulia Montagna; Josephine Nwokedi; Dana Gaddy; Raine Lunde-Young; Sherman Kirby; Alyssa Flack; Shannon Huggins; Edgar Montoya; Mark Westhusin; Jane Pryor; Charles Long; Matthew Warman; Larry Suva; April Craft

Poster No. 2330

Acid Sensing G-protein Coupled Receptor Gpr68 Regulates Cartilage Catabolism And Synovial Inflammation During OA Progression

William N. Martin; Colette Hyde; Adam Yung; Bhakti Patel; Samir Chihab; Hicham Drissi; Mohd Nazir Khan

Poster No. 2331

PRMT5 Deficiency Under Low Se Status Exuberates Cartilage ECM Degradation By Hif1 α Inhibition

Mengyao Sun; Shemin Lu

Poster No. 2332

Uncovering Synovium Phenotypes In Ankle OA: Integration Of Histopathology And Patient Data Using Multivariate Statistics And Machine Learning

Michael A. David; Nanxi Guo; Julia Matthias; Kenneth J. Hunt; Fan Zhang

Poster No. 2333

Sex-specific Transcriptional Profiles In Osteoarthritic Cartilage Reveal Enhanced Immune Response In Females

Aysegul Atasoy-Zeybek; Christopher V. Nagelli; Katy L. Lydon; Daniel B. F. Saris; Christopher H. Evans

Poster No. 2334

Modeling The Synovium On A Chip For Studying The Interactions Between Lymphatic Vasculature And Synoviocytes In Rheumatoid Arthritis

Samantha Kraus

Poster No. 2335

Activation Of Sirt6 Regulates Chondrogenic Differentiation And Restricts Endochondral Ossification

Matheus Moreira Perez; Eirene Choi; Abu Mansalay; Autumn Melvage; Amber Slaweski; Alzbeta Chabronova; Mandy Peffers; Theresa Freeman; John Collins



LATE BREAKING POSTERS

Poster No. 2336

Generation Of An In Vitro Cartilage Aging Model Using Human Sera From Old Donors

Sophie Hines; Hang Lin

Poster No. 2337

Sorting Of Senescent Chondrocytes Based On P16 Expression For Transcriptomic Analysis

Jack R. Felkner; Jacqueline Shine; Garrett A. Sessions; Alexander J. Knights; Tristan Maerz; Brian O. Diekman

Poster No. 2338

Targeted Knockdown Of Non-muscle Myosin II To Mitigate Synovial Cell Mechanoactivation And Fibrosis After Joint Injury

Elizabeth Bernstein; Grey Hallstrom; Sung Yeon Kim; Rachel Flaugh; Carla Scanzello; Liane Miller; Robert Mauck; Nathaniel Dymment

Poster No. 2339

Mast Cell Deficiency Alters The Synovial Transcriptome In Post-traumatic Osteoarthritis

Abigail R. Loucks; Henry Dai; Michael Newton; Tristan Maerz; Aimee Colbath

Poster No. 2340

In Vitro Models For Studying The Contributions Of Endothelial Cells, Extracellular Matrix, And Synoviocytes To Synovial Transport

Matthew J. Pellicore; Leyla E. Selman; Gerard A. Ateshian; Clark T. Hung

Poster No. 2341

Measuring Patellar Cartilage Deformations Utilizing Automated Segmentation From Knee MR Scans

Jefferson R. Bercaw; Patrick X. Bradley; Christopher C. Otap; Lauren N. Heckelman; Krystal S. Tamayo; Kwadwo A. Owusu-Akyaw; Roarke W. Horstmeyer; Charles E. Spritzer; Louis E. DeFrate

Poster No. 2342

The Crucial Role Of The Capsuloligamentous Complex And The Long Head Of The Biceps Brachii Tendon In A Modified Rat Model Of Cuff Tear Arthropathy

Kohei Uekama; Tomohiro Iuchi; Toshiro Ijuin; Hiroki Tawaratsumida; Takayuki Ide; Yusuke Masuda; Shingo Maeda; Noboru Taniguchi

Poster No. 2343

Tunable Nanoparticle Properties Impact SiRNA Delivery To Articular Chondroprogenitor Cells

Phillip A. Hernandez; Kenneth J. Weekes; Robert E. Guldberg; Danielle S.W. Benoit



LATE BREAKING POSTERS

Poster No. 2344

Investigating The Role Of IL-36RA On Human Articular Cartilage Homeostasis In Osteoarthritis And Post-traumatic Osteoarthritis Models

Pranav K. Mishra; Sai Rama Krishna Meka; Michael Kluppel; Arnavaz Hakimiyan; Susanna Chubinskaya; Markus Wimmer; Anna Spagnoli

Poster No. 2345

FDA-approved Drugs Stimulate Lubricin In Vitro: A 3D Phenotypic Screen For Disease-Modifying Osteoarthritis Drugs

Mckenzie Brandt; Janapriya Vijayakumar; Thomas Kean

Poster No. 2346

The Chondrogenic Differentiation Potential Of MSCs Is Not Improved By Expansion With TGF- β 1 In A Clinically Relevant In Vitro Model

Elena Della Bella; Maja Schittler; Guoliang Chen; Lauma Ievina; Franziska Breulmann; Martin Stoddart

Poster No. 2347

A Retrospective Review Of Chondroplasty Outcomes Of The Patellofemoral Joint

Zachary R. Oppenheim; Edouard Augustin; Thomas E. Moran; Brian J. Cole; Adam B. Yanke

Poster No. 2348

Therapeutic Benefits Of Raav-mediated Tgf- β Overexpression In Human Bone Marrow-derived Mesenchymal Stromal Cells Via Vector Delivery In Novel Hydrogels For Cartilage Repair

Jagadeesh K. Venkatesan; Tuan Ngoc Nguyen; Véronique Miggoney; Patrick Orth; Henning Madry; Magali Cucchiari

Poster No. 2349

Withdrawn

Poster No. 2350

Raav-mediated Delivery Of Sox9 And Tgf- β Genes Guided By Photopolymerizable Hyaluronic Acid Hydrogels Enhances The Biological Activities In Human Bone Marrow-derived Mesenchymal Stromal Cells

Dan Wang; Wei Liu; Jagadeesh Venkatesan; Gertrud Schmitt; Riccardo Beninatto; Devis Galesso; Henning Madry; Magali Cucchiari

Poster No. 2351

A Machine Learning-based Risk Calculator Model For Predicting Outcomes In Achilles Tendon Repair



LATE BREAKING POSTERS

Wedam Nyaaba; Majd Mzeihem; Kristi T. Nguyen

Poster No. 2352

High Risk Pediatric Orthopedic Surgeries: Identifying Procedures With The Highest Rate Of Adverse Outcomes

Emil Varas; Kristine Hanson; Emmanouil Grigoriou; Anthony Stans; William Shaughnessy; Todd Milbrandt; Annalise Larson

Poster No. 2353

Disease-modifying Antirheumatic Drug Use Is Associated With Declining Incidence Of Upper Cervical Fusion And Reduced 2-year Reoperation Rates In Patients With Rheumatoid Arthritis

Wesley Day; Gwyneth C. Maloy; Anthony E. Seddio; Michael J. Gouzoulis; Alexandros F. Pappajohn; Daniel R. Rubio; Arya G. Varthi; Mitchell S. Fourman; Rushabh H. Doshi; Sahir S. Jabbouri; Jonathan N. Grauer

Poster No. 2354

Peripheral Nerve Injury Patterns In U.S. Emergency Departments: A Decade-long Analysis Of High-risk Demographics And Nerve-specific Trends

Christoph A. Schroen; Niklas H. Koehne; Auston R. Locke; PAUL J. CAGLE; Michael R. Hausman

Poster No. 2355

Validation Of Telephone Administration Of The HOOS-JR And KOOS-JR Joint Replacement Specific Patient Reported Outcomes Measures

Henry B. Somerby; Allina Nocon; Ananya Alleyne; David Mayman; Stephen Lyman; Thomas Sculco

Poster No. 2356

Parental Experience And Outcomes Of Single Event Multilevel Surgery In Patients With Cerebral Palsy

Naief Alghnime; Ahmed Eltayeb; Raseel Alotaibi

Poster No. 2357

Evaluating The Predictive Role Of Neutrophil-to-lymphocyte Ratio And Platelet-to-white Blood Cell Ratio In Postoperative Delirium Among Elderly Patients With Hip Fractures

Wang Zhang; Xin Wang; Xue Fang; Changhuan Liu; Lekai Zhu; Wei Tan; Xiaqing Yang; Zheng Wang; Zhe Xie

Poster No. 2358

Impact Of Built Environment On Long-term Outcomes Following Arthroscopic Hip Surgery

Srish Chenna; Jeffrey Mun; Rachel Poutre; Brandon Allen; Stephen Gillinov; Bilal Siddiq; Nathan Cherian; Christopher Eberlin; Michael Kucharik; Scott Martin



LATE BREAKING POSTERS

Poster No. 2359

Assessing The Effects Of Environmental Burden On Long-term Outcomes After Hip Arthroscopy Surgery

Srish Chenna; Jeffrey Mun; Brandon Allen; Rachel Poutre; Stephen Gillinov; Bilal Siddiq; Nathan Cherian; Christopher Eberlin; Michael Kucharik; Scott Martin

Poster No. 2360

Measurement Of Socioeconomic Deprivation In Orthopaedic Trauma A Scoping Review

Edith Ginika Otalike; Sarah Abdunnabi; Andrew Firth; Nana-Ama Tiwaa-Boteng; Farjana Ahktar; Emil H. Scheimitsch; Joel J. Gagnier

Poster No. 2361

Management Of Intertrochanteric Fractures And Associated Complications: An International Comparison

Collin J. Freking; Michael Braman; Laura Jackson; Archie Heddings

Poster No. 2362

Bridging The Communication Gap In Emergency Care: How Information Sheets Enhance Satisfaction For Patients With Distal Radius Fractures

Amr Mansour; Boaz Granot; Assil Mahamid; Mohammad HY; Amani Tatar; fairuz jayyusi; Eyal Behrbalk

Poster No. 2363

Continuous And Objective Monitoring Of Fracture Healing Progression Using The Ao Fracture Monitor - Preliminary Evidence From The First-in-human Investigation

Manuela Ernst; Jan Barcik; Markus Windolf; Jan Buschbaum; Michael J. Raschke; Benedikt J. Braun

Poster No. 2364

Pitching Under Pressure: The MLB Pitch Clock'S Influence On Performance And Health

David Ahn; Christian Kim; Tuckerman Jones; Ashley Castan; Gnaneswar Chundi; Abhiram Dawar; Irfan Ahmed; Michael Vosbikian

Poster No. 2365

The Benefits And Challenges Of Comprehensive Physical Examination And Patient-reported Outcome Assessments For Children With Brachial Plexus Birth Injury

Jenny M. Dorich; Kristen Davidge; Amelia Brawner; Roger Cornwall

Poster No. 2366

Patient Reported Outcomes In Athletes With Jones Fractures: Minimal Improvement In Pain Beyond 6 Months



LATE BREAKING POSTERS

Abdulganeey Olawin; Rachit Saggar; Joseph Mullen; Warren Austin; Eva Heidinger; Kenzo Cotton; Garcia Findlay; MaCalus Hogan

Poster No. 2367

Patient Perceptions Of Innovative Technology For Shoulder Arthroplasty

Lana M. Smith; Elizabeth Chan; Aghdas Movassaghi; Justin T. Childers; Benjamin T. Lack; Garrett R. Jackson; Vani Sabesan

Poster No. 2368

Arthroscopy Vs. Open Arthrotomy In The Management Of Septic Wrist: A Retrospective Study Of Surgical Management

Steven M. Munoz; Ariana Shaari; Michael M. Vosbikian; Irfan Ahmed

Poster No. 2368A

Effects Of Sick Cell Anemia On Postoperative Outcomes In Patients Undergoing Laminectomy

Mousa Payinkay; Faisal Elali; Samer Mahmoud; Alex La Poche; Rushani Cameron; Neil Shah; Carl Paulino

Poster No. 2369

How Socioeconomic Status Contributes To Access And Outcomes Of Rotator Cuff Tear Care: A Systematic Review

Dallas Bennett; Mathew Mendoza; Cesar Ramirez; Michael Freidl MD; Hussein Elkousy MD

Poster No. 2370

Frailty Is Mischaracterized In Spine Surgery Literature: A Systematic Review Of Frailty Indices

Alexander Yu; Neerav Kumar; Grace Xu; Rami Abuqubo; Danyal Quraishi; Izzet Akosman; Kyra Kwok; Ibrahim Hussain; Noel Akioyamen; Rafael De la Garza Ramos; Ananth Eleswarapu; Reza Yassari; Mitchell S. Fourman

Poster No. 2371

Comparison Of Distribution- And Anchor-based Estimates Of Minimal Important Differences For Patient-reported Outcome Measures In Patients With Knee Issues

Christos Mousoulis; Andrew Firth; Edith Otalike; Alanna Marson; Joel Gagnier

Poster No. 2372

Chatgpt Is A Comprehensive Education Tool For Patients With Patellar Tendinopathy, But It Currently Lacks Accuracy≪ For < And ≫ For >Readability

Jie Deng; Lun Li; Jelle J. Oosterhof; Peter Malliaras; Karin M Silbernagel; Stephan Breda; Denise Eygendaal; Edwin HG Oei; Robert-Jan de Vos



LATE BREAKING POSTERS

Poster No. 2373

Withdrawn

Poster No. 2374

Biomechanics Of Stress Fractures: The Fifth Metatarsal Case

Wolfram Grün; Enrico Pozzessere; Emily Luo; Pierre-Henri Vermorel; Cesar de Cesar Netto; Francois Lintz

Poster No. 2374A

Assessment Of First-ray Deformity In Hv: Exploring The Value Of 3d-printed Models Using Wbct

Enrico Pozzessere; Wolfram Grün; Francois LINTZ; Cesar de Cesar Netto; Pierre-Henri Vermorel; Antoine Acker; Erik Jesus Hanuco Casas; Emily Luo

Poster No. 2375

Evaluation Of A Novel Three-dimensional Assessment To Detect Lisfranc Joint Complex Instability

Grayson M. Talaski; Wolfram Grun; Emily J. Luo; Enrico Pozzessere; Pierre-Henri Vermorel; Aaron Therien; Albert T. Anastasio; Conor N. O'Neill; Francois LINTZ; Cesar de Cesar Netto

Poster No. 2376

An Evaluation Of Functional Outcomes Following Sesamoidectomy: A Preliminary Study

Warren Austin; Rachit Sagar; Joseph Mullen; Abdulganeey Olawin; Akeem Williams; Eva Heidinger; Lauren Lewis; MaCalus Hogan

Poster No. 2377

Withdrawn

Poster No. 2378

Complication Rates In Open Ankle Arthrodesis With Autologous Tissue Substitute Versus Non-autologous Tissue Substitute: A Comparative Analysis

Jonathan Lopez; Matthew Montani; Arnaav Walia; Abhiram Dawar; Tuckerman Jones; Daniella Ogilvie; Gnaneswar Chundi; Avani Chopra; Sheldon Lin

Poster No. 2379

Comparative Analysis Of Complication Rates In Tibiototalcaneal Fusion For Osteoarthritis Vs. Traumatic Fractures

Abhiram Dawar; Gnaneswar Chundi; David Ahn; Tuckerman Jones; Avani A. Chopra; Jonathan R. Lopez; Matthew Montani; Sheldon S. Lin

Poster No. 2380



LATE BREAKING POSTERS

When Does Complex Ankle Replacement Or Fusion Need To Be Staged? Examining Risk Factors For Reoperation Based On Ankle Surgery Complexity And Adjunctive Procedures

Ramiro Lopez; Cole Herbel; Edward Haupt

Poster No. 2381

The Functional Outcome Of Dorsal Bridging Plate Fixation Of Lisfranc Injury

khalid Siddig Abdalla Mohamed; Mohammed Zaidan Mohammed M. Saeed; Ruairí MacNiocaill; Wisal Elryah; Swetha Ganesh; Wad Hisham Abdulla

Poster No. 2382

Are Surgeons Using Wide Awake Local Anesthesia For Single Flexor Tendon Repair? An Analysis Of 38,934 Patients Using A National Healthcare Database

Hayden Anz; Jacob Siahaan; Sage Copling; Dean Smith

Poster No. 2383

MOPS-N Preservation Improves Functional Recovery In Rodents With Peripheral Nerve Reconstruction

Julia A.V. Nuelle; Bryce T. Fletcher; Chantelle C. Bozynski; Anna N. Sullentrop; Angela Atkinson; Madeline Mueller; Aaron M. Stoker; James L. Cook

Poster No. 2384

Transfusion Rates Following Proximal Femur Fractures: Cephalomedullary Nailing And Hemiarthroplasty

Drew B. Krumm; Caleb Inman; Laura Krech; Alex Case; Clayton B. Foster; Jeremy Mormol; Steffen Pounders; Nolan Rossman; Elizabeth Steensma; Gable B. Moffitt

Poster No. 2385

Targeted Drug Delivery And Mechanical Reinforcement In A Piglet Model Of Legg-calve-perthes Disease: Enhancing Bone Healing And Preventing Femoral Head Collapse

Emil Varas; Harry Kim; Christopher Nagelli; Kishore Rajendran; Todd Milbrandt; Emmanouil Grigoriou

Poster No. 2386

Follow-up Appointment Attendance Correlates With Patient Reported Outcomes

Brandon J. Allen; Jeffrey S. Mun; Rachel L. Poutre; Srish S. Chenna; Stephen M. Gillinov; Bilal S. Siddiq; Nathan J. Cherian; Christopher T. Eberlin; Scott D. Martin

Poster No. 2387

A Multimodal Assessment Of Biochemical And Structural Properties Across The Acetabular Chondrolabral Junction



LATE BREAKING POSTERS

Julia P. Hochstatter; Harish Kesavan; Jennifer L. Wright; Zeeshan Khan; Steven P. Mell; Deborah J. Hall; Jorge Chahla; Catherine Yuh

Poster No. 2388

Identifying Risk Factors For Patient Dissatisfaction Following Total Knee Arthroplasty In An Ambulatory Surgery Center

Natalie L. Gresham; George N. Guild; Mary Jane J. McConnell; Alex Bradham; Thomas L. Bradbury Jr.; Brandon H. Naylor; Farideh Najafi

Poster No. 2389

Does Achieving MCID At 1 Year In KOOS, JR. Predict Satisfaction Following TKA?

Alex Bradham; Natalie Gresham; Alexis Alva; Joseph Schwab; George N. Guild; Mary Jane McConnell; Thomas Bradbury

Poster No. 2390

Examining The Impact Of Dementia On 1-year Mortality Rates Following Total Hip Arthroplasty

George Asrian; Ryan Terrany

Poster No. 2391

How Do Functional Activities Prioritized By Patients Evolve Over Time After Hip Or Knee Arthroplasty?

Stéphane Poitras; Motahareh Karimijashni; Paul Beaulé

Poster No. 2392

Trochlear Groove Planning Attributes With Robotic-Assisted Tka: Predictors Of Outcomes

Azhar Ali; Emily Hampp; Paul Jacob; Robert Marchand; Arthur Malkani; Kirby Hitt

Poster No. 2393

Measuring Satisfaction Of The "unhappy Knee": A Systematic Review

Mark Youssef; Himani Kolli; Allina Nocon; Peter Sculco

Poster No. 2394

Does Surgical Treatment Of Varicose Veins Prior To Total Knee Arthroplasty Decrease Rates Of Postoperative Venous Thromboembolism? A Matched Cohort Study

Mary Jane McConnell; Bailey Ross; Jordan Murphy; George Guild; Brandon Naylor; Thomas Bradbury

Poster No. 2395

Myocardial Infarction Within One Year Of Total Hip Arthroplasty Increases Medical And Surgical Complications In A Time-dependent Manner



LATE BREAKING POSTERS

Alejandro M. Holle; Sayi Boddu; Jens Verhey; Paul Van Schuyver; David Deckey; Joshua Bingham; Zachary Christopher

Poster No. 2396

Outcomes And Treatment Of Controversial Single-stage Revisions: Culture Negative And Fungal Periprosthetic Joint Infections

Carter D. Bernal; Shannon Tse; Janae Rasmussen; Zachary C. Lum

Poster No. 2397

Virtual Metallographic Sections Show Astm F1854'S Mean Coating Thickness Is A Biased Estimator Of True Thickness

Aline Elquist; Vivek Pawar

Poster No. 2398

Torsional Stability Testing Of Broaches For Hip Arthroplasty In Foam Femurs

Erik Woodard; David Rister

Poster No. 2399

Symmetric Versus Asymmetric Tibial Components: A Systematic Review of Comparative Studies

Bassam I. Haddad; Alaa Tarazi; Raha Alzoubi; Mahmmud S. Alqawasmi; Abdullah Ammar; Zinah Kalare

Poster No. 2400

In Vitro Evaluation Of Hemiarthroplasty Bearing Materials: A Scoping Review

Victoria P. Marino; Francesca DeVecchi; Takayuki Koya; Landon Begin; Douglas Moore; J J Trey Crisco; Markus Wimmer

Poster No. 2401

Torsional Stability Testing Of Stems For Hip Arthroplasty In Foam Femurs

Erik Woodard; David Rister

Poster No. 2402

Virtual Range Of Constraint: Finite Element Analysis For Evaluating Constraint Characteristics Of TKA Per ASTM F1223 Standard

Ata BabazadehNaseri; Azhar Ali; Ananth Gopalakrishnan; Gregory Pepe; Cheryl Liu

Poster No. 2403

Alterations In Knee Joint Stability Following Medial Collateral Ligament (MCL) Release In Mechanically Aligned Posterior-substituting (PS) Total Knee Arthroplasty (TKA)

Jun Seo Kim; Hyeon Su Bae; Dai-Soon Kwak; In Jun Koh; Dohyung Lim



LATE BREAKING POSTERS

Poster No. 2404

Evaluating Intraoperative Dynamic Hip-Knee-Ankle (dHKA) Angle Under Controlled Load During Navigated Total Knee Arthroplasty

Prudhvi Tej Chinimilli; Laurent Angibaud; Amaury Jung; James Huddleston

Poster No. 2405

Evaluating The Efficacy And Safety Of Robotic-Assisted Total Knee Arthroplasty In Orthopedic Resident Training

Jacob Becker; Samuel Zverev; Timur Seckin; Brandon Ogilvie; Christina Moawad; Jan A. Koenig

Poster No. 2406

Influence Of Robotic Versus Manual Technology And Surgical Technique For Achieving Sagittal Targets In Total Knee Arthroplasty Of A Single Implant Design

Miguel M. Girod; Kellen L. Mulford; Elizabeth Kaji; Austin F. Grove; Sami Saniei; Marisa N. Ulrich; Michael J. Taunton; Charles P. Hannon; Robert T. Trousdale; Kevin I. Perry; Cody C. Wyles

Poster No. 2407

Surgeon Intra-operative Confidence With Software Updated For Robotic-assisted Revision Total Hip Arthroplasty Compared To Manual Revision Procedure

Melanie Caba; Bradley Nolan

Poster No. 2408

Pipeline For MRI Automatic Segmentation And Generation Of A 3d Model Of The Femoral Head Using Machine Learning

Benjamin A. Rodriguez Romo; Juan F. Vivanco; Alejandro A. Espinoza Orias; Shane J. Nho; Miguel Carrasco

Poster No. 2409

In Vivo Glenohumeral Kinematics Of Superior Capsule Reconstruction, Relationship Between Kinematics And Graft Condition

Hiroshige Hamada; Norimasa Takahashi

Poster No. 2410

Three-dimensional Analysis Of Hoxa13 Expression In The Embryonic Limb Using Open-top Light-sheet Microscopy

Catherine Nguyen; Qinghua Han; Jonathan T.C. Liu; Feini Qu

Poster No. 2411



LATE BREAKING POSTERS

Quantification Of Mechanical And Acoustic Properties Of Tendinopathic Murine Patellar Tendons Using Novel High-frequency Quantitative Ultrasound

Hiroataka Iura; Cameron Hoerig; Yuki Suzuki; Matthew Covello; Krishna Pedaprolu; Sam Green; Chia-Hung Hung; Daniel M. Markowitz; Hugo Stern; Camila B. Carballo; Scott A. Rodeo; Jonathan Mamou; Claire D. Eliasberg

Poster No. 2412

High-frequency Ultrasound Imaging Of Cartilage-bone Interface Remodeling Ex Vivo

Akshay Charan; Parag V. Chitnis; Caroline Hoemann

Poster No. 2413

Do Implant Material Properties Influence Bacterial Burden In A Mouse Model Of Periprosthetic Joint Infection?

Jun Oike; Adrienn Markovics; Julia Fischer; Michael Godoy; Robin Pourzal; Markus Wimmer; John L. Hamilton

Poster No. 2414

Upper Extremity Necrotizing Fasciitis: Risk Factors For Mortality And Amputation

David Ahn; Varoon Phondge; Suhas Parise; Pushti Shah; Amanda Azer; Michael Vosbikian; Irfan Ahmed

Poster No. 2415

Effects Of Halicin On Small Colony Variants Of S. Aureus

Akira Morita; Allison Wintring; Joash Suryavanshi; Roman Natoli; Ed Greenfield

Poster No. 2416

Triggered Release Of Ampicillin From Metallic Implant Coating Designed For Combating Polymicrobial Periprosthetic Infections

Feiyang Chen; Jordan Skelly; Jie Song

Poster No. 2417

Effect Of Antimicrobial Stewardship Team Intervention On The Treatment Of Pyogenic Spondylitis

Toshihiro Sano

Poster No. 2418

Relationship Between Post-operative Patient Reported Outcome Measures And The Secretome Of Intervertebral Discs

Grace S. Brentlinger; Jacob Kramer; Abigail Baumann; Kayla Burkle; Theodore Choma; Don Moore; James Cook; Aaron Stoker



LATE BREAKING POSTERS

Poster No. 2419

Notochordal And Mesendoderm Progenitor Cells As Potential Cell Sources For Disc Degeneration-associated Low Back Pain

Joseph W. Snuggs; Shaghayegh Basatvat; Josette van Maanen; Markus Templin; Marianna Tryfonidou; Christine Le Maitre

Poster No. 2420

Exploring Trpc6 As A Potential Therapeutic Target In Discogenic Chronic Back Pain

Janitri Venkatachala Babu; Aleksandra Sadowska; Addisu Mesfin; Varun Puvanesarajah; Karin Wuertz

Poster No. 2421

Anti-inflammatory And Anti-cell Senescence Effects Of Platelet-rich Plasma (prp)-derived Exosomes On Human Intervertebral Disc Cells

Kento Watanabe; Koyo Ohara; Yo Suzuki; Yusuke Togo; Norihiko Takegami; Tatsuhiko Fujiwara; Koji Akeda; Masahiro Hasegawa

Poster No. 2422

The Development Of Nanoparticle-loaded Microparticles As Intra-articular Drug Delivery System For Osteoarthritis Treatment

Diling Zhang; Qiushi Liang; zhiliang cheng

Poster No. 2423

Relationship Between Preoperative Tegner Activity Scale And Pre- And Postoperative Muscle Strength In Patients Undergoing Medial Open Wedge Distal Tibial Tuberosity Osteotomy

Shogo Kurokawa; Shu Watanabe; Ryota Shimozono; Takahiro Yamashita; Daisuke Araki

Poster No. 2424

Withdrawn

Poster No. 2425

Robustness And Bilateral Symmetry Of Hop Landing Kinematics In Healthy Persons

John D. Holtgrewe; Crystal J. Murray; Dominique A. Barnes; Janine Molino; Braden C. Fleming; Jillian E. Beveridge

Poster No. 2426

Effects Of Postpartum Postural And Gait Changes On The Future Microstructure Of The Surface Layer Of The Knee Joint Cartilage

Michiaki Sato



LATE BREAKING POSTERS

Poster No. 2427

Validation Of A New Joint Stiffness Measuring Device In A Mouse Model Of Contracture

Mason Carstens; Nils Meissner; Matthew Weintraub; Ashley Payne; Mark Morrey; Daniel Berry; Joaquin Sanchez-Sotelo; Roman Thaler; Matthew Abdel

Poster No. 2428

Transcriptome-informed In Vitro Modeling Of Proteoglycan Accumulation In The Non-degenerative Human Discoid Meniscus

John C. Bradford; Susana P. Simmonds Bohorquez; Katherine L. Meinhold; Ronald Y. Kwon; Jenny L. Robinson

Poster No. 2429

Modulating Human Meniscal Cell Phenotype Via Matrix Adhesion And Stiffness

Kyley Burkey; Susana Simmonds Bohorquez; Adi Pucha; Jay Patel; Jennifer Robinson

Poster No. 2430

Development Of A Rabbit Model Of Meniscus Repair And Post-traumatic Osteoarthritis

Allison Robinson; Pranav Rastogi; Kevin Betsch; Dawn Chasse; Navjot Rehal; A'nn Kelly; Devon Anderson; Maureane Hoffman; Jocelyn Wittstein; Samuel Adams; Amy McNulty

Poster No. 2431

Characterizing Knee-specific Contact Mechanic Phenotypes On The Lateral Tibial Plateau During Simulated Gait

Megh Prajapati; Kalle Chastain; Russell Warren; Suzanne Maher; Tony Chen

Poster No. 2432

Characterization Of The Bone Marrow Adipose Metabolome In Response To Sex And Aging

Hunter J. Hasskamp; Garrett M. Orlando; Connor Devine; Kenna Brown; Ron June; Chelsea Heveran; Stephen A. Martin

Poster No. 2433

Peripheral Arterial Pathology And Osteoarthritis Of The Knee: Us Examination Of Arterial Wall Stiffness, Thickness, And Flow Characteristics

Jon Olansen; Minglang Yin; Janine Molino; Thomas Carruthers; Derek Jenkins; George Karniadakis; Roy Aaron

Poster No. 2434

Effect Of Bone Density And Lesser Tuberosity Osteotomy On Micromotion In Stemmed And Stemless Shoulder Arthroplasty Humeral Implants: A Biomechanical Study



LATE BREAKING POSTERS

Dylan N. Greif; Patrick Castle; Andrew Rodenhouse; Natnael Ayalew; Sandeep Mannava; Hani Awad; Ilya Voloshin

Poster No. 2435

Ai-based Risk Calculator Model For Predicting Outcomes In Shoulder Arthroplasty

Majd Mzeihem; Wedam Nyaaba; James Oosten; Vennela Challagondla; Mark Gonzalez; Farid Amirouche; Benjamin Goldberg

Poster No. 2436

Automated Assessment Of Postoperative Glenosphere And Pivot Point Position On Radiographs Using Artificial Intelligence After Reverse Shoulder Arthroplasty

Linjun Yang; Elizabeth S. Kaji; Austin F. Grove; Rodrigo de Marinis; Ausberto Velasquez Garcia; Marisa N. Ulrich; Erick M. Marigi; Joaquin Sanchez-Sotelo

Poster No. 2437

Experimental Simulation Of The Natural Shoulder Joint

Sophie Hutchinson; Peter Culmer; Claire Brockett; Dan Henderson; Paul Cowling; Sophie Williams

Poster No. 2438

The Development Of A Patient-reported Functional Outcome Measure For Proximal Humerus Fracture Patients

Hiba G. Elhassan; Emil Schemitsch; Joel Gagnier

Poster No. 2439

Quality And Educational Value Analysis Of Material Related To Lateral Epicondylitis On TikTok

David Ahn; Caroline Preston; Christian Kim; Judy-Mae Lima; Amanda Azer; Teren Yedikian; Irfan Ahmed; Michael Vosbikian

Poster No. 2440

Effect Of Bodpuo Or Plus Procedure On Intra-articular Contact Mechanics Of Cadaveric Canine Elbows With Experimentally Induced Negative Radioulnar Incongruence

Anna Lia Sullivan; Nathaniel Ordway; Ursula Krotscheck; Massimo Petazzoni; Selena Tinga

Poster No. 2441

Development Of An In Vivo Muscle-tendon Loading Measurement Device For A Small Animal Model

Patrick D. Hinkle; Fuad Al Hasan Bin Enam; Koyal Garg; Alex Reiter

Poster No. 2442

Fiber Type Compositions Of The Different Subregions Of The Infraspinatus Muscle



LATE BREAKING POSTERS

Kyosuke Hoshikawa; Marcus Zavala; Amanda Lugo; Takuma Yuri; Nariyuki Mura; Philip Jacobs; Hugo Giambini

Poster No. 2443

Evaluating The Performance Of Chatgpt In Identifying Key Parameters From Scoliosis Radiographs

Nathaniel Hunter; Madison Smith; Rohini Vanodia; Jacob Siahaan; Timothy Borden; Shiraz Younas; Lindsay Crawford; Surya Mundluru

Poster No. 2444

A Novel Targeted Model Of Congenital Scoliosis Using Anatomically-guided Electroporation In The Developing Chicken Embryo

Jacob Jordan; Andrea Ketschek; Gianluca Gallo; Jason Anari; Brian Snyder; Thomas Schaer; Patrick Cahill

Poster No. 2445

Loss Of Gli1 Causes Congenital Vertebral Synostosis In Mouse Spine

Andrew Hallmark; Harshtih Alluri; Ravij Mehta; Nidhi Mahadevan; Chitra Dahia

Poster No. 2446

Enhanced Compression Across The Sacroiliac Joint In Unilateral Apical Pelvic Ring Injuries Using External Fixators With Oblique Orientation And Shorter Distance To The Sacroiliac Joint: A Finite Element Study

Nahir Habet; Shangcheng Wang; Ryan Serbin; Kerry Danelson; Kevin Phelps

Poster No. 2447

Adolescent Idiopathic Scoliosis Impairs Reactive Balance: A Prospective Motion Analysis Study

Ria Paradkar; Christina Regan; Kathie Bernhardt; Kenton Kaufman; Todd Milbrandt; Annalise Larson

Poster No. 2448

Biomechanical Impact Of An Expandable Spinal Implant On Structural Restoration Of Vertebra With Compression Fracture

Hyeon Su Bae; Hyung-Youl Park; Kyeong-Joo Yoo; Jun-Seok Lee; Dohyung Lim

Poster No. 2449

Assessment Of Structural Stability In Additively Manufactured Open-Type Pedicle Screws With Bone-Mimetic Porous Architecture For Multi-Level Lumbar Interbody Fusion

Junsu Bae; Hyeon Su Bae; Hae Won Choi; Byung-Jou Lee; Dohyung Lim

Poster No. 2450

Preliminary Wear Testing Of A Novel, Motion-preserving, Lumbar Compliant Interbody Device



LATE BREAKING POSTERS

Andrew Thomson; Tyler Peterson; Daniel Orr; Anna Jensen; Ron Anderson; Anton E. Bowden

Poster No. 2451

Structure-function Shifts In Tendon Pathology Following Menopause Induction In An Aged Murine Model

Ben E. Peterson; Gabrielle Gilmer; Jenna Galloway; Fabrisia Ambrosio

Poster No. 2452

A Molecular Optogenetic Toolkit For The In Vivo Control Of Fgf And Tgf-beta Superfamily Signaling In Zebrafish

Leanne E. Iannucci; Selvaraj M.T. Velanganni; Allison J. Saul; William K. Anderson; Rogers W. Katherine

Poster No. 2453

Identification Of Novel Transcription Factors For Developing Tendons

Abinaya Anbuchelvan

Poster No. 2454

Longitudinal Assessment Of Knee Joint Translation In A Murine Model Of Anterior Cruciate Ligament Reconstruction

Yuki Suzuki; Lauren Simonian; Chia-Hung Hung; Paula Mai Phuong Trinh; Wataru Morita; Julia S. Retzky; Matthew Covello; Hirotaka Iura; Yuki Okazaki; Alexander Piacentini; Cristina Baron; Claire D. Eliasberg; Tony Chen; Camila B. Carballo; Scott A. Rodeo

Poster No. 2455

Impaired Mobility Following Mechanically Induced Overuse Injury In A Murine Achilles Tendinopathy Model

Alex Stigall; Devin Denkers; Hailey Brown; Emily Van Zeeland; Adam Chicco; Kelly Santangelo; Drew Koch; Katie Sikes

Poster No. 2456

Withdrawn

Poster No. 2457

Fluid Clearance And Lymphatic Function Are Impaired After Achilles Tendon Injury

Jarod M. Forer; Kaitlyn Link; Bella Yannello; Michael E. Hahn; Nick J. Willett

Poster No. 2458

Eccentric Muscle Loading Induces Positive Alterations To The Transcriptome In A Murine Model Of Tendinopathy



LATE BREAKING POSTERS

Dylan C. Easley; Bruno C. Menarim; Robert W. Grange; Gunnar P. Brolinson; Vincent M. Wang; Linda A. Dahlgren

Poster No. 2459

Sub-failure Fatigue-protective Properties Of Elastin In Functionally Distinct Murine Tendons

Shawn N. Pavey; Nathan Xu; Spencer P. Lake

Poster No. 2460

Achilles Tendon Impingement Produces Spatial Patterns Of Aggrecan Turnover And Alters Matrix Micromechanics

Brian C. Wise; Whasil Lee; Mark R. Buckley

Poster No. 2461

Collagen Fibrils From High-Stress Tendons Show Significant Resistance To MMP-1 Degradation Compared To Fibrils From Low-Stress Tendons—Results From A Population-Based Study

Kelsey Y. Gsell; Laurent Kreplak; Samuel P. Veres

Poster No. 2462

The Human Medial Collateral Ligament Is Stiffer Than The Other Knee Ligaments During Fast And Slow Actions

Adam Kositsky; Anahita Gheisari; Ville-Pauli Karjalainen; Vesa Virtanen; Ervin Nippolainen; Heikki Kröger; Juha Töyräs; Simo Saarakkala; Isaac O. Afara; Rami K. Korhonen; Mikko A. J. Finnilä

Poster No. 2463

Kash-disrupted Nuclear Mechanosensation In Tendon

Brian T. Penney; Jordan T. Daw; Calvin L. Jones; Jonathan Netter; Karsen Krebbs; Skyler Kichak; Taylor G. Izzard; Gunes Uzer; Sophia Theodossiou

Poster No. 2464

Orantinib As A Candidate Drug For Adult Tendon Regeneration

Elaine A. Nagahara; Angela Montero; Deepak Kaji; Kristen Howell; Alexander Lachmann; Avi Ma'ayan; Alice H. Huang

Poster No. 2465

Effects Of Conservative Treatment On Neuromuscular Coordination After Anterior Cruciate Ligament Injury: Neurophysiological And Motor Function Assessment In A Rat Model

Shion Masuda; Momoko Nagai-Tanima; Nohara Daiki; Toyota Misa; Hayashi Kazuhiro; Aoyama Tomoki

Poster No. 2466



LATE BREAKING POSTERS

Hyperbaric Oxygen Increases Tenocyte Metabolism

Afton Limberg; Jay C. Buckey Jr.; Katherine Hixon; Douglas Van Citters

Poster No. 2467

A Study To Assess The Utility Of MDM2/CDK4 Immunohistochemistry Of A Tru-cut Biopsy To Differentiate Between Benign Lipomas And Atypical Lipomatous Tumor/well-differentiated Liposarcoma ("ALT/WDLS")

Laura N. Palma; Christopher Curtiss; Kayla Sweeney; Rana Naous; Timothy Damron